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## List of Supported Instruments

**Chromeleon 7**

**Chromatography Data System**

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## 1 Introduction

This document lists all instruments/modules that Chromeleon 7 currently supports. The following information is included:

- **Manufacturer – System/Family:** Lists the manufacturer and the name of the instrument system or family.
- **Type:** Shows the type of module (e.g. Pump, Photodiode Array Detector).
- **Model:** Provides the model number of the instrument or module.
- **Firmware:** Displays the required firmware version (depending on module, check *Chromeleon Online Help* for additional information).
  - For Thermo Scientific equipment generally, the firmware version is shipped on the installation media with the current Chromeleon version listed.
  - For third party equipment; the firmware listed is usually the version used to test the driver and as such is considered the minimum firmware requirement for Chromeleon. However, this does not necessarily imply that earlier versions of firmware are incompatible but that some limitations in functionality may be observed when using older firmware. In general, newer firmware versions are expected to work.
- **Interface Type:** Describes the type of connection used between the instrument and the PC.
- **Instrument Class:** Displays the License Class required to control the instrument in Chromeleon 7.
- **Options Required:** Displays additional licenses required to fully control the instrument and shows whether an analog-digital data converter (e.g., UCI, A2D) is required for data acquisition (important for third-party detectors).

| License                            | Abbreviation | Description  |
|------------------------------------|--------------|--|
| Instrument Class 1                 | 1            | License enabling control of Thermo Scientific Instruments – included in the Instrument Controller license                    |
| Instrument Class 2                 | 2            | License enabling control of third-party GCs  |
| Instrument Class 3                 | 3            | License enabling control of third-party LCs  |
| 3D Data Acquisition                | 3D           | License that enables recording 3D data e.g. from Photodiode Array Detectors  |
| Universal Chromatography Interface | UCI          | Device to convert analog signals to digital signals. Also provides RS232 ports and relays.                                   |
| Analog to Digital Converter        | A2D          | Device to convert analog signals to digital signals. It can also be used as a remote injection device and to provide relays. |
| GC-MS Control                      | GC-MS        | License enabling control of GC-MS devices  |
| LC-MS Control                      | LC-MS        | License enabling control of LC-MS and IC-MS devices  |
| Fraction Collection                | FC           | License enabling Fraction Collection   |

- **Required Chromeleon Version:** Displays the minimum version required to control the Instrument. If a Service Release (SR) or Maintenance Update (MU) is required, the SR or MU number is mentioned in the table.
  - + Indicates the minimum recommended version (an earlier version/SR/MU may support the device, but the recommended version adds significantly better support).
- **Operating Systems:** Displays the compatible operating systems for each module.

| Operating System            | Abbreviation      | Description                 |
|-----------------------------|-------------------|-----------------------------|
| <b>Windows 8.1 (64 bit)</b> | 8.1 <sup>64</sup> | Professional or Enterprise* |
| <b>Windows 10 (64 bit)</b>  | 10 <sup>64</sup>  | Professional or Enterprise* |

\*Because the incremental features of the Enterprise edition are not relevant to Chromeleon, Thermo Fisher Scientific Inc. does not expect any problems to occur when using Chromeleon with the different Windows Enterprise versions.

**Notes:**

- Microsoft ended support for the Windows 7 Operating System on 14 January, 2020. Accordingly, with the release of Chromeleon 7.2.10 MUa, official support for or Windows 7 has been deprecated. However, for legacy reasons some devices in the tables below still list Windows 7 support. Those listings do not imply any official support for control under Windows 7.
  - Some older and uncommon instrument modules do not list support for either Windows 8.1 or Windows 10. Based on the extensive validation on Windows 7 in the past it is anticipated, but not guaranteed, that these drivers will function correctly with Windows 10.
- **247 Instrument Controller:** Displays the model of 247 Instrument Controller and firmware version on which this instrument is supported.

| Category        | Abbreviation | Description                          |
|-----------------|--------------|--------------------------------------|
| <b>Model</b>    | TDS5         | 247 Instrument Controller TDS5 model |
| <b>Firmware</b> | WES7         | Windows Embedded Standard 7 (64 bit) |
| <b>Firmware</b> | 10           | Windows LTSC 10 (1809)               |

**Note:** Changes to this document since the previous release of Chromeleon 7 are highlighted in yellow.

**Caution:** Consult the *Chromeleon Instrument Configuration Manager Help* for full details on licensing, cabling, and other requirements for control and data acquisition, supported functions, and limitations.

## 2 Thermo Scientific Devices Supported by Chromeleon 7

| Manufacturer - System / Family   | Type   | Model    | Firmware | Interface Type             | Instrument Class | Options Required | Required Chromeleon Version | Operating Systems  | 247 Instrument Controller |
|--|--|----------|----------|----------------------------|------------------|------------------|-----------------------------|--|---------------------------|
| <b>Thermo Scientific Dionex ASE</b>  | Accelerated Solvent Extraction Systems                       |          |          |                            |                  |                  |                             |  |                           |
| <b>Dionex – ASE 350</b>  | ASE System   | ASE-350  | 3.3.0    | USB 2.0                    | 1                |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |
| <b>Thermo Scientific Dionex ICS Autosamplers and Accessories</b>                     | IC Autosamplers  |          |          |                            |                  |                  |                             |  |                           |
| <b>Dionex – AS</b>   | IC Autosampler   | AS       | 2.30     | USB 1.1                    | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – AS-HV</b>  | IC Autosampler (high-volume)                                 | AS-HV    | -        | RS232                      | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – AS-DV</b>  | IC Autosampler (displacement volume)                         | AS-DV    | 1.6.0    | USB 1.1                    | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – AS-AP</b>  | IC Autosampler (advanced performance) and Fraction Collector | AS-AP    | 1.9.0    | USB 1.1 & self-powered hub | 1                | FC               | 7.2 SR1                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – AS-AP</b>  | Conductivity/pH Meter  | AS-AP    | 1.0.0    | USB 1.1                    | 1                | AS-AP            | 7.1 DU0b                    | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Thermo Scientific Dionex ICS Standalone Detectors and Temperature Compartment</b> | IC Detectors and Temperature Compartment                     |          |          |                            |                  |                  |                             |  |                           |
| <b>Dionex – PDA</b>  | Photodiode Array Detector                                    | PDA      | 3.0.0    | USB 1.1                    | 1                | 3D               | 7.0 SR1                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – PDA-100U</b>   | Photodiode Array Detector                                    | PDA-100U | 3.0.0    | USB 1.1                    | 1                | 3D               | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |

| Manufacturer - System / Family      | Type                         | Model    | Firmware | Interface Type             | Instrument Class | Options Required | Required Chromeleon Version | Operating Systems  | 247 Instrument Controller |
|-------------------------------------|------------------------------|----------|----------|----------------------------|------------------|------------------|-----------------------------|--|---------------------------|
| <b>Dionex – VWD</b>                 | Variable Wavelength Detector | VWD      | 1.60     | USB 1.1                    | 1                |                  | 7.2 SR1                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – TC</b>                  | Thermal Compartment          | TC       | 2.04.01  | USB                        | 1                |                  | 7.0 SR1                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Thermo Scientific Dionex ICS</b> | <b>Compact IC Systems</b>    |          |          |                            |                  |                  |                             |  |                           |
| <b>Dionex – ERC 10</b>              | Controller                   | ERC-10   | 1.0.0    | USB 1.1                    | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |
| <b>Dionex – ICS 600</b>             | IC System                    | ICS-600  | 3.0.0    | USB 1.1                    | 1                |                  | 7.1 SR1 MUa                 | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – ICS 900</b>             | IC System                    | ICS 900  | 3.0.0    | USB 1.1                    | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |
| <b>Dionex – ICS 1000</b>            | IC System                    | ICS 1000 | 3.1.0    | USB 1.1 & self-powered hub | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |
| <b>Dionex – ICS 1500</b>            | IC System                    | ICS 1500 | 3.1.0    | USB 1.1 & self-powered hub | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – ICS 2000</b>            | IC System                    | ICS 2000 | 3.1.0    | USB 1.1 & self-powered hub | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – ICS 1100</b>            | IC System                    | ICS 1100 | 1.3.0    | USB 1.1 & self-powered hub | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |
| <b>Dionex – ICS 1600</b>            | IC System                    | ICS 1600 | 1.1.0    | USB 1.1 & self-powered hub | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – ICS 2100</b>            | IC System                    | ICS 2100 | 1.3.0    | USB 1.1 & self-powered hub | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – ICS 4000</b>            | IC System                    | ICS 4000 | 1.1.0    | USB 1.1 & self-powered hub | 1                |                  | 7.1 SR2 MUa                 | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – Easion</b>              | IC System                    | Easion   | 1.0.0    | USB 1.1                    | 1                |                  | 7.2.10 MUa                  | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |

| Manufacturer - System / Family                  | Type                       | Model                                   | Firmware | Interface Type             | Instrument Class | Options Required | Required Chromeleon Version | Operating Systems  | 247 Instrument Controller |
|---|----------------------------|---|----------|----------------------------|------------------|------------------|-----------------------------|--|---------------------------|
| <b>Dionex – Aquion</b>                          | IC System                  | Aquion                                  | 3.1.0    | USB 1.1 & self-powered hub | 1                |                  | 7.2 SR4                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – Aquion</b>                          | IC System                  | Aquion RFIC                             | 3.1.0    | USB 1.1 & self-powered hub | 1                |                  | 7.2.9 DUa                   | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – Integriion</b>                      | IC System                  | Integriion HPIC Pump (Wellness)         | 6.2.0    | USB 1.1 & self-powered hub | 1                |                  | 7.2 SR4                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – Integriion</b>                      | IC System                  | Integriion HPIC System                  | 1.7.0    | USB 2.0 & self-powered hub | 1                |                  | 7.2 SR4                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Thermo Scientific Dionex ICS-3000</b>        | Modular IC System          |   |          |                            |                  |                  |                             |  |                           |
| <b>Dionex – ICS 3000</b>                        | Chromatography Compartment | DC Detector/ Chromatography Compartment | 2.6.0    | USB 2.0 & self-powered hub | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – ICS 3000</b>                        | Conductivity Detector      | DC:CD                                   | 2.6.0    | USB 2.0 & self-powered hub | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – ICS 3000</b>                        | Electrochemical Detector   | DC:ED-DC Amp                            | 2.6.0    | USB 2.0 & self-powered hub | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – ICS 3000</b>                        | Electrochemical Detector   | DC:ED-Int Amp                           | 2.6.0    | USB 2.0 & self-powered hub | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – ICS 3000</b>                        | Pump                       | DP Dual Pump                            | 6.1.0    | USB 1.1 & self-powered hub | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – ICS 3000</b>                        | Pump                       | SP Single Pump                          | 6.1.0    | USB 1.1 & self-powered hub | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – ICS 3000</b>                        | Eluent Generator           | EG Eluent Generator                     | 1.4.0    | USB 2.0 & self-powered hub | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Thermo Scientific Dionex ICS-5000(5000+)</b> | Modular IC System          |   |          |                            |                  |                  |                             |  |                           |



| Manufacturer - System / Family           | Type                       | Model                                    | Firmware | Interface Type             | Instrument Class | Options Required | Required Chromeleon Version | Operating Systems  | 247 Instrument Controller |
|--|----------------------------|--|----------|----------------------------|------------------|------------------|-----------------------------|--|---------------------------|
| <b>Dionex – ICS 5000</b>                 | Chromatography Compartment | DC Detector / Chromatography Compartment | 2.1.0    | USB 2.0 & self-powered hub | 1                |                  | 7.0 SR1                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – ICS 5000</b>                 | Conductivity Detector      | DC:CD                                    | 2.1.0    | USB 2.0 & self-powered hub | 1                |                  | 7.0 SR1                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – ICS 5000</b>                 | Electrochemical Detector   | DC:ED-DC Amp                             | 2.1.0    | USB 2.0 & self-powered hub | 1                |                  | 7.0 SR1                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – ICS 5000</b>                 | Pump                       | DP Dual Pump                             | 7.0.0    | USB 1.1 & self-powered hub | 1                |                  | 7.0 SR1                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – ICS 5000</b>                 | Pump                       | SP Single Pump                           | 7.0.0    | USB 1.1 & self-powered hub | 1                |                  | 7.0 SR1                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – ICS-5000</b>                 | Eluent Generator           | EG Eluent Generator                      | 2.1.0    | USB 2.0 & self-powered hub | 1                |                  | 7.0 SR1                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Thermo Scientific Dionex ICS-6000</b> | Modular IC System          |  |          |                            |                  |                  |                             |  |                           |
| <b>Dionex – ICS-6000</b>                 | Chromatography Compartment | DC Detector / Chromatography Compartment | 1.2.0    | USB 2.0 & self-powered hub | 1                |                  | 7.2.7                       | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – ICS-6000</b>                 | Conductivity Detector      | DC:CD                                    | 1.2.0    | USB 2.0 & self-powered hub | 1                |                  | 7.2.7                       | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – ICS-6000</b>                 | Electrochemical Detector   | DC:ED-DC Amp                             | 1.2.0    | USB 2.0 & self-powered hub | 1                |                  | 7.2.7                       | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – ICS-6000</b>                 | Electrochemical Detector   | DC:ED-Int Amp                            | 1.2.0    | USB 2.0 & self-powered hub | 1                |                  | 7.2.7                       | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – ICS-6000</b>                 | Consumables Device Monitor | CDM                                      | 4.0.0    | USB 2.0 & self-powered hub | 1                |                  | 7.2.7                       | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – ICS-6000</b>                 | Pump                       | DP Dual Pump                             | 7.0.0    | USB 1.1 & self-powered hub | 1                |                  | 7.2.7                       | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |

| Manufacturer - System / Family                | Type   | Model               | Firmware | Interface Type             | Instrument Class | Options Required | Required Chromeleon Version | Operating Systems  | 247 Instrument Controller |
|---|--|---------------------|----------|----------------------------|------------------|------------------|-----------------------------|--|---------------------------|
| <b>Dionex – ICS-6000</b>                      | Pump   | SP Single Pump      | 7.0.0    | USB 1.1 & self-powered hub | 1                |                  | 7.2.7                       | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – ICS-6000</b>                      | Eluent Generator                                 | EG Eluent Generator | 1.1.0    | USB 2.0 & self-powered hub | 1                |                  | 7.2.7                       | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Thermo Scientific Dionex Integral</b>      |  |                     |          |                            |                  |                  |                             |  |                           |
| <b>Dionex - Stream Selector</b>               | Stream Selector                                  | SS                  | 1.0.0    | USB 1.1 & self-powered hub | 1                |                  | 7.2.9                       | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – Sample Preparer</b>               | Sample Preparer                                  | SP                  | 1.0.0    | USB 1.1 & self-powered hub | 1                |                  | 7.2.9                       | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Thermo Scientific Dionex UltiMate 3000</b> | Pumps – 1 <sup>st</sup> Generation               |                     |          |                            |                  |                  |                             |  |                           |
| <b>Dionex – UltiMate 3000</b>                 | Dual Analytical Pump, ternary                    | DGP-3600A           | 3.05     | USB 1.1 & self-powered hub | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – UltiMate 3000</b>                 | Dual Analytical Pump, ternary Biocompatible      | DGP-3600AB          | 3.05     | USB 1.1 & self-powered hub | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – UltiMate 3000</b>                 | Dual Nano/Cap/Micro Pump, ternary,               | DGP-3600M           | 3.05     | USB 1.1 & self-powered hub | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – UltiMate 3000</b>                 | Dual Nano/Cap/Micro Pump, ternary, Biocompatible | DGP-3600MB          | 3.43     | USB 1.1 & self-powered hub | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – UltiMate 3000</b>                 | Analytical Pump, binary                          | HPG-3200A           | 3.05     | USB 1.1 & self-powered hub | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – UltiMate 3000</b>                 | Dual Nano/Cap/Micro Pump, ternary                | HPG-3200M           | 3.05     | USB 1.1 & self-powered hub | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – UltiMate 3000</b>                 | Semiprep Pump, binary                            | HPG-3200P           | 3.05     | USB 1.1 & self-powered hub | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |

| Manufacturer - System / Family                | Type  | Model      | Firmware | Interface Type             | Instrument Class | Options Required | Required Chromeleon Version | Operating Systems  | 247 Instrument Controller |
|---|---|------------|----------|----------------------------|------------------|------------------|-----------------------------|--|---------------------------|
| Dionex – UltiMate 3000                        | Analytical Pump, binary                         | HPG-3400A  | 3.05     | USB 1.1 & self-powered hub | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Dionex – UltiMate 3000                        | Nano/Cap/Micro Pump, binary                     | HPG-3400M  | 3.05     | USB 1.1 & self-powered hub | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Dionex – UltiMate 3000                        | Analytical Pump, isocratic                      | ISO-3100A  | 3.05     | USB 1.1 & self-powered hub | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Dionex – UltiMate 3000                        | Nano/Cap/Micro Pump, ternary                    | LPG-3300   | 3.05     | USB 1.1 & self-powered hub | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Dionex – UltiMate 3000                        | Nano/Cap/Micro Pump, ternary                    | LPG-3300M  | 3.05     | USB 1.1 & self-powered hub | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Dionex – UltiMate 3000                        | Analytical Pump, quaternary                     | LPG-3400A  | 3.05     | USB 1.1 & self-powered hub | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Dionex – UltiMate 3000                        | Analytical Pump, quaternary Biocompatible       | LPG-3400AB | 3.05     | USB 1.1 & self-powered hub | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Dionex – UltiMate 3000                        | Nano/Cap/Micro Pump, quaternary                 | LPG-3400M  | 3.05     | USB 1.1 & self-powered hub | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Dionex – UltiMate 3000                        | Nano/Cap/Micro Pump, quaternary Biocompatible   | LPG-3400BM | 3.43     | USB 1.1 & self-powered hub | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Dionex – UltiMate 3000                        | Dual Nano/Cap/Micro Pump, ternary               | LPG-3600   | 3.05     | USB 1.1 & self-powered hub | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Thermo Scientific Dionex UltiMate 3000</b> | Pumps – 2 <sup>nd</sup> Generation              |            |          |                            |                  |                  |                             |  |                           |
| Dionex – UltiMate 3000                        | Dual Nano/Cap/Micro Pump, ternary Biocompatible | DGP-3600BM | 3.45     | USB 2.0 & self-powered hub | 1                |                  | 7.0 SR1                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |

| Manufacturer - System / Family | Type   | Model      | Firmware | Interface Type             | Instrument Class | Options Required | Required Chromeleon Version | Operating Systems  | 247 Instrument Controller |
|--------------------------------|--|------------|----------|----------------------------|------------------|------------------|-----------------------------|--|---------------------------|
| <b>Dionex – UltiMate 3000</b>  | Dual Rapid Separation Pump, ternary                                      | DGP-3600RS | 3.45     | USB 2.0 & self-powered hub | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – UltiMate 3000</b>  | Dual Nano/Cap/Micro Pump, ternary Biocompatible, extended pressure range | DGP-3600BM | 3.45     | USB 2.0 & self-powered hub | 1                |                  | 7.1 DU0b                    | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – UltiMate 3000</b>  | Dual Analytical Pump, ternary  | DGP-3600SD | 3.45     | USB 2.0 & self-powered hub | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – UltiMate 3000</b>  | Semi-prep Pump, Binary, Biocompatible                                    | HPG-3200BX | 3.45     | USB 2.0 & self-powered hub | 1                |                  | 7.1DU0b                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – UltiMate 3000</b>  | Rapid Separation Pump, binary  | HPG-3200RS | 3.45     | USB 2.0 & self-powered hub | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – UltiMate 3000</b>  | Analytical Pump, binary  | HPG-3200SD | 3.45     | USB 2.0 & self-powered hub | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – UltiMate 3000</b>  | Rapid Separation Pump, quaternary  | HPG-3400RS | 3.45     | USB 2.0 & self-powered hub | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – UltiMate 3000</b>  | Analytical Pump, quaternary  | HPG-3400SD | 3.45     | USB 2.0 & self-powered hub | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – UltiMate 3000</b>  | Micro Pump, Isocratic, Biocompatible                                     | ISO-3100BM | 3.45     | USB 2.0 & self-powered hub | 1                |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – UltiMate 3000</b>  | Analytical Pump, isocratic   | ISO-3100SD | 3.45     | USB 2.0 & self-powered hub | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – UltiMate 3000</b>  | Nano/Cap/Micro Pump, quaternary Biocompatible                            | LPG-3400BM | 3.45     | USB 2.0 & self-powered hub | 1                |                  | 7.0 SR1                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |

| Manufacturer - System / Family | Type   | Model       | Firmware | Interface Type             | Instrument Class | Options Required | Required Chromeleon Version | Operating Systems  | 247 Instrument Controller |
|--------------------------------|--|-------------|----------|----------------------------|------------------|------------------|-----------------------------|--|---------------------------|
| <b>Dionex – UltiMate 3000</b>  | Nano/Cap/Micro Pump, quaternary Biocompatible, extended pressure range             | LPG-3400BM  | 3.45     | USB 2.0 & self-powered hub | 1                |                  | 7.1DU0b                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – UltiMate 3000</b>  | Rapid Separation Pump, quaternary  | LPG-3400RS  | 3.45     | USB 2.0 & self-powered hub | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – UltiMate 3000</b>  | Analytical Pump quaternary   | LPG-3400SD  | 3.45     | USB 2.0 & self-powered hub | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – UltiMate 3000</b>  | 1250 bar Rapid Separation Analytical Pump, quaternary                              | LPG-3400XRS | 5.7      | USB 2.0                    | 1                |                  | 7.1 SR2                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |
| <b>Dionex – UltiMate 3000</b>  | Nano/Cap Pump, Binary  | NCP-3200RS  | 1.44     | USB 2.0 & self-powered hub | 1                |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – UltiMate 3000</b>  | Nano Pump, Cap Loading Pump, Column Oven   | NCS-3500RS  | 1.44     | USB 2.0 & self-powered hub | 1                |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – UltiMate 3000</b>  | Nano Pump, Cap Loading Pump, Column Oven, extended pressure range for loading pump | NCS-3500RS  | 1.44     | USB 2.0 & self-powered hub | 1                |                  | 7.1DU0b                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – UltiMate 3000</b>  | Autosampler Column Compartment   | ACC-3000    | 4.14     | USB 1.1 & self-powered hub | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – UltiMate 3000</b>  | Autosampler Column Compartment, Thermostatted                                      | ACC-3000T   | 4.14     | USB 1.1 & self-powered hub | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – UltiMate 3000</b>  | Fraction Collector   | AFC-3000    | 1.03     | USB 1.1 & self-powered hub | 1                | FC               | 7.2 SR1                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |

| Manufacturer - System / Family | Type  | Model                   | Firmware | Interface Type             | Instrument Class | Options Required | Required Chromeleon Version | Operating Systems  | 247 Instrument Controller |
|--------------------------------|---|-------------------------|----------|----------------------------|------------------|------------------|-----------------------------|--|---------------------------|
| <b>Dionex – UltiMate 3000</b>  | Nano/Cap/Micro Pulled Loop WP Autosampler                                       | WPS-3000PL NANO, CAP    | 4.14     | USB 1.1 & self-powered hub | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – UltiMate 3000</b>  | Nano/Cap/Micro Pulled Loop WP Autosampler, Thermostatted                        | WPS-3000TPL NANO, CAP   | 4.14     | USB 1.1 & self-powered hub | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – UltiMate 3000</b>  | Nano/Cap/Micro Pulled Loop WP Autosampler, Biocompatible                        | WPS-3000BPL NANO, CAP   | 4.14     | USB 1.1 & self-powered hub | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – UltiMate 3000</b>  | Nano/Cap/Micro Pulled Loop WP Autosampler, Thermostatted, Biocompatible         | WPS-3000TBPL NANO, CAP  | 4.14     | USB 1.1 & self-powered hub | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – UltiMate 3000</b>  | Analytical Pulled Loop WP Autosampler, Thermostatted, Biocompatible             | WPS-3000TBPL ANALYTICAL | 4.14     | USB 1.1 & self-powered hub | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – UltiMate 3000</b>  | Pulled Loop WP Autosampler and Fraction Collector, Thermostatted, Biocompatible | WPS-3000TBFC ANALYTICAL | 4.14     | USB 1.1 & self-powered hub | 1                | FC               | 7.2 SR1                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – UltiMate 3000</b>  | Pulled Loop WP Autosampler and Fraction Collector, Thermostatted, Biocompatible | WPS-3000TFC ANALYTICAL  | 4.14     | USB 1.1 & self-powered hub | 1                | FC               | 7.2 SR1                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – UltiMate 3000</b>  | Analytical Split Loop WP Autosampler  | WPS-3000SL ANALYTICAL   | 4.14     | USB 1.1 & self-powered hub | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – UltiMate 3000</b>  | Analytical Split Loop WP Autosampler, Thermostatted                             | WPS-3000TSL ANALYTICAL  | 4.14     | USB 1.1 & self-powered hub | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |

| Manufacturer - System / Family | Type  | Model                   | Firmware | Interface Type             | Instrument Class | Options Required | Required Chromeleon Version | Operating Systems  | 247 Instrument Controller |
|--------------------------------|---|-------------------------|----------|----------------------------|------------------|------------------|-----------------------------|--|---------------------------|
| <b>Dionex – UltiMate 3000</b>  | Analytical Split Loop WP Autosampler, Thermostatted, Biocompatible        | WPS-3000TBSL ANALYTICAL | 4.14     | USB 1.1 & self-powered hub | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – UltiMate 3000</b>  | Micro Split Loop WP Autosampler   | WPS-3000SL MICRO        | 4.14     | USB 1.1 & self-powered hub | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – UltiMate 3000</b>  | Micro Split Loop WP Autosampler, Thermostatted                            | WPS-3000TSL MICRO       | 4.14     | USB 1.1 & self-powered hub | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – UltiMate 3000</b>  | Semi-preparative Split Loop WP Autosampler                                | WPS-3000SL SEMIPREP     | 4.14     | USB 1.1 & self-powered hub | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – UltiMate 3000</b>  | Semi-preparative Split Loop WP Autosampler, Thermostatted                 | WPS-3000TSL SEMIPREP    | 4.14     | USB 1.1 & self-powered hub | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – UltiMate 3000</b>  | Rapid Separation (Split Loop) WP Autosampler                              | WPS-3000RS              | 4.14     | USB 1.1                    | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – UltiMate 3000</b>  | Biocompatible Rapid Separation (Split Loop) WP Autosampler, Thermostatted | WPS-3000TBRS            | 4.14     | USB 1.1                    | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – UltiMate 3000</b>  | Rapid Separation (Split Loop) WP Autosampler, Thermostatted               | WPS-3000TRS             | 4.14     | USB 1.1                    | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – UltiMate 3000</b>  | 1250 bar Rapid Separation (Split Loop) WP Autosampler, Thermostatted      | WPS-3000TXRS            | 4.14     | USB 1.1                    | 1                |                  | 7.1 SR2                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – UltiMate 3000</b>  | LC Autosampler  | OAS-3000 TXRS           | 4.15     | LAN (Default), RS232       | 1                |                  | 7.1 SR2                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |

| Manufacturer - System / Family                    | Type                           | Model      | Firmware | Interface Type             | Instrument Class | Options Required | Required Chromeleon Version | Operating Systems  | 247 Instrument Controller |
|---|--------------------------------|------------|----------|----------------------------|------------------|------------------|-----------------------------|--|---------------------------|
| <b>Thermo Scientific<br/>Dionex UltiMate 3000</b> | Flow Managers and Column Ovens |            |          |                            |                  |                  |                             |  |                           |
| <b>Dionex – UltiMate 3000</b>                     | Nano/Cap/Micro LC Flow Manager | FLM-3100   | 2.41     | USB 1.1                    | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – UltiMate 3000</b>                     | Nano/Cap/Micro LC Flow Manager | FLM-3200   | 2.41     | USB 1.1                    | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – UltiMate 3000</b>                     | Nano/Cap/Micro LC Flow Manager | FLM-3300   | 2.41     | USB 1.1                    | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – UltiMate 3000</b>                     | Column Oven / Thermostat       | TCC-3000   | 2.41     | USB 1.1                    | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – UltiMate 3000</b>                     | Column Oven / Thermostat       | TCC-3100   | 2.41     | USB 1.1                    | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – UltiMate 3000</b>                     | Column Oven / Thermostat       | TCC-3200   | 2.41     | USB 1.1                    | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – UltiMate 3000</b>                     | Column Oven / Thermostat       | TCC-3000SD | 1.32     | USB 1.1                    | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – UltiMate 3000</b>                     | Column Oven / Thermostat       | TCC-3000RS | 1.32     | USB 1.1                    | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Thermo Scientific<br/>Dionex UltiMate 3000</b> | Detectors                      |            |          |                            |                  |                  |                             |  |                           |
| <b>Dionex – UltiMate 3000</b>                     | Variable Wavelength Detector   | VWD-3100   | 4.10     | USB 1.1                    | 1                |                  | 7.1 DU0a+                   | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – UltiMate 3000</b>                     | Variable Wavelength Detector   | VWD-3400RS | 4.10     | USB 1.1                    | 1                |                  | 7.1 DU0a+                   | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex – UltiMate 3000</b>                     | Photodiode Array Detector      | DAD-3000   | 2.61     | USB 2.0 & self-powered hub | 1                | 3D               | 7.1 DU0a+                   | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |



| Manufacturer - System / Family         | Type                      | Model      | Firmware               | Interface Type             | Instrument Class | Options Required | Required Chromeleon Version | Operating Systems  | 247 Instrument Controller |
|--|---------------------------|------------|------------------------|----------------------------|------------------|------------------|-----------------------------|--|---------------------------|
| Dionex – UltiMate 3000                 | Photodiode Array Detector | DAD-3000RS | 2.61                   | USB 2.0 & self-powered hub | 1                | 3D               | 7.1 DU0a+                   | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Dionex – UltiMate 3000                 | Photodiode Array Detector | PDA-3000   | 3.0.0                  | USB 1.1                    | 1                | 3D               | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Dionex – UltiMate 3000                 | Multi Wavelength Detector | MWD-3000   | 2.61                   | USB 2.0 & self-powered hub | 1                |                  | 7.1 DU0a+                   | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Dionex – UltiMate 3000                 | Multi Wavelength Detector | MWD-3000RS | 2.61                   | USB 2.0 & self-powered hub | 1                |                  | 7.1 DU0a+                   | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Dionex – UltiMate 3000                 | Fluorescence Detector     | FLD-3100   | 1.45                   | USB 2.0                    | 1                | 3D               | 7.0 SR1                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Dionex – UltiMate 3000                 | Fluorescence Detector     | FLD-3400RS | 1.45                   | USB 2.0                    | 1                | 3D               | 7.0 SR1                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Dionex – UltiMate 3000                 | pH & Conductivity Monitor | PCM-3000   | 2.30 DAD/MWD, 3.50 VWD | USB 2.0 (via detector)     | 1                |                  | 7.1 DU0a                    | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Dionex – UltiMate 3000                 | Electrochemical Detector  | ECD-3000RS | 1.10                   | USB                        | 1                |                  | 7.1 SR2 MUa                 | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Thermo Scientific Dionex Summit</b> | Detectors and Valves      |            |                        |                            |                  |                  |                             |  |                           |
| Dionex – Summit                        | Pump                      | P680       | 2.66                   | USB                        | 1                |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |
| Dionex – Summit                        | LC Autosampler            | ASI-100    | 1.22                   | RS232                      | 1                |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |
| Dionex – Summit                        | LC Autosampler            | GINA 50    | 3.0                    | RS232                      | 1                |                  | 7.1 SR1                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |
| Dionex – Summit                        | LC Autosampler            | GINA 50T   | 3.0                    | RS232                      | 1                |                  | 7.1 SR1                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |

| Manufacturer - System / Family          | Type                        | Model                        | Firmware  | Interface Type | Instrument Class | Options Required | Required Chromeleon Version | Operating Systems  | 247 Instrument Controller |
|---|-----------------------------|------------------------------|-----------|----------------|------------------|------------------|-----------------------------|--|---------------------------|
| <b>Dionex – Summit</b>                  | UV Detector                 | UVD170U                      | 1.10      | USB            | 1                |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |
| <b>Dionex – Summit</b>                  | Photodiode Array Detector   | UVD340U                      | 1.10      | USB            | 1                | 3D               | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |
| <b>Dionex – Summit</b>                  | Column Oven / Thermostat    | TCC-100                      | 1.04      | USB            | 1                |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |
| <b>Dionex – Summit</b>                  | Fluorescence Detector       | RF-2000                      | 9.8B      | RS232          | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |
| <b>Dionex – Summit</b>                  | Refractive Index Detector   | RI-101                       | 1.19/1.09 | RS232          | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |
| <b>Dionex – Summit</b>                  | Valve Module                | Dionex External MSV          | -         | RS232          | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |
| <b>Thermo Scientific<br/>Dionex ESA</b> | Specialty Pumps / Detectors |                              |           |                |                  |                  |                             |  |                           |
| <b>Dionex / ESA</b>                     | Isocratic Pump              | 584 and 582                  | 584 V1.01 | RS232          | 1                |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |
| <b>Dionex / ESA</b>                     | Charged Aerosol Detector    | Corona                       | 1.25      | USB            | 1                |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |
| <b>Dionex / ESA</b>                     | Charged Aerosol Detector    | Corona Plus                  | 1.25      | USB            | 1                |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |
| <b>Dionex / ESA</b>                     | Charged Aerosol Detector    | Corona Ultra                 | 1.04      | USB            | 1                |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |
| <b>Dionex / ESA [15]</b>                | Charged Aerosol Detector    | Corona Ultra RS              | 2.02      | USB            | 1                |                  | 7.1 SR1                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Dionex / ESA [15]</b>                | Charged Aerosol Detector    | Corona Veo RS, Corona Veo SD | 1.12      | USB            | 1                |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |

| Manufacturer - System / Family       | Type                       | Model          | Firmware | Interface Type       | Instrument Class | Options Required | Required Chromeleon Version | Operating Systems  | 247 Instrument Controller |
|--------------------------------------|----------------------------|----------------|----------|----------------------|------------------|------------------|-----------------------------|--|---------------------------|
| <b>Dionex / ESA</b>                  | Electrochemical Detector   | Coulochem III  | 3.12     | USB                  | 1                |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |
| <b>Thermo Scientific Dionex</b>      | Miscellaneous              |                |          |                      |                  |                  |                             |  |                           |
| <b>Dionex – Sharable Interfaces</b>  | A/D and RS232 interface    | UCI-50         | 3.03     | USB                  | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |
| <b>Dionex – Sharable Interfaces</b>  | A/D and RS232 interface    | UCI-100        | 3.03     | USB                  | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |
| <b>Dionex – Miscellaneous</b>        | Pump, sample loading       | AXP, AXP-MS    |          | RS232                | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |
| <b>Dionex – General Purpose</b>      | Remote Inject              |                |          | port in other driver | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |
| <b>Dionex – General Purpose</b>      | Assigned Relays and Inputs |                |          | port in other driver | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |
| <b>Dionex – General Purpose</b>      | Analog Signal Channel      |                |          | port in other driver | 1                |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |
| <b>Thermo Scientific GC Samplers</b> | Gas Chromatography         |                |          |                      |                  |                  |                             |  |                           |
| <b>Thermo Scientific – AS2000</b>    | GC Autosampler             | AS2000         | -        | RS232                | 1                |                  | 7.1 DU0b                    | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |
| <b>Thermo Scientific – HS2000</b>    | GC Headspace Autosampler   | HS850, HS2000  | -        | RS232                | 1                |                  | 7.2 SR4                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |
| <b>Thermo Scientific – AI/AS3000</b> | GC Autosampler             | AS3000, AI3000 | 3.05     | RS232                | 1                |                  | 7.1 SR2 MUB                 | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |
| <b>Thermo Scientific – AI/AS1310</b> | GC Autosampler             | AS1310, AI1310 | 3.05     | RS232                | 1                |                  | 7.1 SR2 MUB                 | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |
| <b>Thermo Scientific – AI/AS1310</b> | GC Autosampler             | AS1310, AI1310 | 3.07     | RS232                | 1                |                  | 7.2.8                       | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |

| Manufacturer - System / Family           | Type                        | Model   | Firmware | Interface Type | Instrument Class | Options Required | Required Chromeleon Version | Operating Systems  | 247 Instrument Controller |
|--|-----------------------------|---|----------|----------------|------------------|------------------|-----------------------------|--|---------------------------|
| <b>Thermo Scientific – AI/AS1310</b>     | GC Autosampler              | AS1310, AI1310  | 3.08     | RS232          | 1                |                  | 7.2.10                      | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup>                     | TDS5 (WES7, 10)           |
| <b>Thermo Scientific FOCUS GC</b>        | Gas Chromatography          |   |          |                |                  |                  |                             |  |                           |
| <b>Thermo Scientific – FOCUS GC</b>      | Gas Chromatograph           | FOCUS GC  | 2.15     | RS232          | 1                |                  | 7.1 DU0b                    | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10) [23]      |
| <b>Thermo Scientific – FOCUS GC</b>      | GC Detector                 | Flame Ionization Detector (FID)                       | 2.15     | (via GC)       | 1                |                  | 7.1 DU0b                    | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10) [23]      |
| <b>Thermo Scientific – FOCUS GC</b>      | GC Detector                 | Thermal Conductivity Detector (TCD)                   | 2.15     | (via GC)       | 1                |                  | 7.1 DU0b                    | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10) [23]      |
| <b>Thermo Scientific – FOCUS GC</b>      | GC Inlet                    | Split/Splitless                                       | 2.15     | (via GC)       | 1                |                  | 7.1 DU0b                    | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10) [23]      |
| <b>Thermo Scientific TRACE 2000 GC</b>   | Gas Chromatography          |   |          |                |                  |                  |                             |  |                           |
| <b>Thermo Scientific – TRACE 2000 GC</b> | Gas Chromatograph           | Trace 2000  | 4.01     | RS232; LAN     | 1                |                  | 7.1 DU0b                    | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |
| <b>Thermo Scientific – TRACE 2000 GC</b> | GC Inlet                    | Split/Splitless                                       |          | (via GC)       | 1                |                  | 7.1 DU0b                    | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |
| <b>Thermo Scientific – TRACE 2000 GC</b> | GC Inlet                    | Purged/Packed column injector (PPKD)                  |          | (via GC)       | 1                |                  | 7.1 DU0b                    | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |
| <b>Thermo Scientific – TRACE 2000 GC</b> | Electronic pressure control | Electronic pressure control of column gas flow (DPFC) | 2.02     | (via GC)       | 1                |                  | 7.1 DU0b                    | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |

| Manufacturer - System / Family            | Type               | Model  | Firmware | Interface Type | Instrument Class | Options Required | Required Chromeleon Version | Operating Systems                                     | 247 Instrument Controller |
|---|--------------------|--|----------|----------------|------------------|------------------|-----------------------------|---|---------------------------|
| <b>Thermo Scientific – TRACE 2000 GC</b>  | GC Detector        | Flame Ionization Detector (FID)                |          | (via GC)       | 1                |                  | 7.1 DU0b                    | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> | TDS5 (WES7)               |
| <b>Thermo Scientific – TRACE 2000 GC</b>  | GC Detector        | Thermal Conductivity Detector (TCD)            |          | (via GC)       | 1                |                  | 7.1 DU0b                    | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> | TDS5 (WES7)               |
| <b>Thermo Scientific TRACE GC Ultra</b>   | Gas Chromatography |  |          |                |                  |                  |                             |   |                           |
| <b>Thermo Scientific - TRACE GC Ultra</b> | Gas Chromatograph  | TRACE GC Ultra                                 | -        | RS232          | 1                |                  | 7.1 DU0b                    | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> | TDS5 (WES7)               |
| <b>Thermo Scientific - TRACE GC Ultra</b> | Gas Chromatograph  | TRACE GC Ultra                                 | -        | LAN            | 1                |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> | TDS5 (WES7)               |
| <b>Thermo Scientific - TRACE GC Ultra</b> | Gas Chromatograph  | TRACE GC Ultra with Ultrafast Oven option      | -        | RS232          | 1                |                  | 7.1 DU0b                    | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> | TDS5 (WES7)               |
| <b>Thermo Scientific - TRACE GC Ultra</b> | Gas Chromatograph  | TRACE GC Ultra with Ultrafast Oven option      | -        | LAN            | 1                |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> | TDS5 (WES7)               |
| <b>Thermo Scientific - TRACE GC Ultra</b> | GC Detector        | Autoranging Flame Ionization Detector (FID-ar) | -        | (via GC)       | 1                |                  | 7.2 SR1                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> | TDS5 (WES7)               |
| <b>Thermo Scientific - TRACE GC Ultra</b> | GC Detector        | Flame Ionization Detector (FID)                | -        | (via GC)       | 1                |                  | 7.1 DU0b                    | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> | TDS5 (WES7)               |
| <b>Thermo Scientific - TRACE GC Ultra</b> | GC Detector        | Thermal Conductivity Detector (TCD)            | -        | (via GC)       | 1                |                  | 7.1 DU0b                    | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> | TDS5 (WES7)               |
| <b>Thermo Scientific - TRACE GC Ultra</b> | GC Detector        | Nitrogen Phosphorous Detector (NPD)            | -        | (via GC)       | 1                |                  | 7.1 DU0b                    | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> | TDS5 (WES7)               |

| Manufacturer - System / Family     | Type        | Model                                       | Firmware | Interface Type | Instrument Class | Options Required | Required Chromeleon Version | Operating Systems                                     | 247 Instrument Controller |
|------------------------------------|-------------|---|----------|----------------|------------------|------------------|-----------------------------|---|---------------------------|
| Thermo Scientific - TRACE GC Ultra | GC Detector | Flame Photometric Detector (FPD)            | -        | (via GC)       | 1                |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> | TDS5 (WES7)               |
| Thermo Scientific - TRACE GC Ultra | GC Detector | Electron Capture Detector (ECD)             | -        | (via GC)       | 1                |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> | TDS5 (WES7)               |
| Thermo Scientific - TRACE GC Ultra | GC Detector | Pulse Discharge Detector (PDD)              | -        | (via GC)       | 1                |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> | TDS5 (WES7)               |
| Thermo Scientific - TRACE GC Ultra | GC Detector | Photoionization Detector (PID)              | -        | (via GC)       | 1                |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> | TDS5 (WES7)               |
| Thermo Scientific - TRACE GC Ultra | GC Detector | Other detectors                             | -        | (via GC)       | 1                |                  | 7.1 DU0b                    | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> | TDS5 (WES7)               |
| Thermo Scientific - TRACE GC Ultra | GC Inlet    | Split/Splitless                             | -        | (via GC)       | 1                |                  | 7.1 DU0b                    | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> | TDS5 (WES7)               |
| Thermo Scientific - TRACE GC Ultra | GC Inlet    | Purged/Packed Column (PPKD)                 | -        | (via GC)       | 1                |                  | 7.1 DU0b                    | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> | TDS5 (WES7)               |
| Thermo Scientific - TRACE GC Ultra | GC Inlet    | Packed Column (PKD)                         | -        | (via GC)       | 1                |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> | TDS5 (WES7)               |
| Thermo Scientific - TRACE GC Ultra | GC Inlet    | On Column Inlet (OCI)                       | -        | (via GC)       | 1                |                  | 7.1 DU0b                    | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> | TDS5 (WES7)               |
| Thermo Scientific - TRACE GC Ultra | GC Inlet    | Large Volume On Column Inlet (LVOCI)        | -        | (via GC)       | 1                |                  | 7.1 DU0b                    | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> | TDS5 (WES7)               |
| Thermo Scientific - TRACE GC Ultra | GC Inlet    | Programmable Temperature Vaporization (PTV) | -        | (via GC)       | 1                |                  | 7.1 DU0b                    | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> | TDS5 (WES7)               |
| Thermo Scientific - TRACE GC Ultra | Valves      | Valves, including Gas Sampling Valve (GSV)  | -        | (via GC)       | 1                |                  | 7.1 DU0b                    | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> | TDS5 (WES7)               |

| Manufacturer - System / Family         | Type                  | Model                 | Firmware    | Interface Type | Instrument Class | Options Required | Required Chromeleon Version | Operating Systems  | 247 Instrument Controller |
|--|-----------------------|-----------------------|-------------|----------------|------------------|------------------|-----------------------------|--|---------------------------|
| Thermo Scientific - TRACE GC Ultra     | Aux Oven              | Aux Oven              | -           | (via GC)       | 1                |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |
| Thermo Scientific - TRACE GC Ultra     | Aux Temperature Zones | Aux Temperature Zones | -           | (via GC)       | 1                |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |
| <b>Thermo Scientific TRACE 1110 GC</b> | Gas Chromatography    |                       |             |                |                  |                  |                             |  |                           |
| Thermo Scientific - TRACE 1110 GC      | GC Oven               | TRACE 1110            | M1.14/L1.09 | (via GC)       | 1                |                  | 7.2 SR3                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Thermo Scientific - TRACE 1110 GC      | GC Main               | TRACE 1110            | M1.14/L1.09 | USB            | 1                |                  | 7.2 SR3                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Thermo Scientific - TRACE 1110 GC      | GC Inlet              | Capillary (CAP)       | M1.14/L1.09 | (via GC)       | 1                |                  | 7.2 SR3                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Thermo Scientific - TRACE 1110 GC      | GC Inlet              | Capillary (CAP) (EPC) | M1.14/L1.09 | (via GC)       | 1                |                  | 7.2 SR3                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Thermo Scientific - TRACE 1110 GC      | GC Inlet              | Packed                | M1.14/L1.09 | (via GC)       | 1                |                  | 7.2 SR3                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Thermo Scientific - TRACE 1110 GC      | GC Inlet              | Packed (EPC)          | M1.14/L1.09 | (via GC)       | 1                |                  | 7.2 SR3                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Thermo Scientific - TRACE 1110 GC      | GC Inlet              | PTV                   | M1.14/L1.09 | (via GC)       | 1                |                  | 7.2 SR4                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Thermo Scientific - TRACE 1110 GC      | GC Inlet              | PTV (EPC)             | M1.14/L1.09 | (via GC)       | 1                |                  | 7.2 SR4                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Thermo Scientific - TRACE 1110 GC      | GC Detector           | TCD                   | M1.14/L1.09 | (via GC)       | 1                |                  | 7.2 SR3                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Thermo Scientific - TRACE 1110 GC      | GC Detector           | TCD (EPC)             | M1.14/L1.09 | (via GC)       | 1                |                  | 7.2 SR3                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |

| Manufacturer - System / Family    | Type         | Model                        | Firmware    | Interface Type | Instrument Class | Options Required | Required Chromeleon Version | Operating Systems  | 247 Instrument Controller |
|-----------------------------------|--------------|------------------------------|-------------|----------------|------------------|------------------|-----------------------------|--|---------------------------|
| Thermo Scientific - TRACE 1110 GC | GC Detector  | FID                          | M1.14/L1.09 | (via GC)       | 1                |                  | 7.2 SR3                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Thermo Scientific - TRACE 1110 GC | GC Detector  | FID (EPC)                    | M1.14/L1.09 | (via GC)       | 1                |                  | 7.2 SR3                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Thermo Scientific - TRACE 1110 GC | GC Detector  | ECD                          | M1.14/L1.09 | (via GC)       | 1                |                  | 7.2 SR4                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Thermo Scientific - TRACE 1110 GC | GC Detector  | ECD (EPC)                    | M1.14/L1.09 | (via GC)       | 1                |                  | 7.2 SR4                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Thermo Scientific - TRACE 1110 GC | GC Detector  | NPD                          | M1.14/L1.09 | (via GC)       | 1                |                  | 7.2 SR4                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Thermo Scientific - TRACE 1110 GC | GC Detector  | NPD (EPC)                    | M1.14/L1.09 | (via GC)       | 1                |                  | 7.2 SR4                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Thermo Scientific - TRACE 1110 GC | GC Detector  | FPD                          | M1.14/L1.09 | (via GC)       | 1                |                  | 7.2 SR4                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Thermo Scientific - TRACE 1110 GC | GC Detector  | FPD (EPC)                    | M1.14/L1.09 | (via GC)       | 1                |                  | 7.2 SR4                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Thermo Scientific - TRACE 1110 GC | GC Detector  | PID                          | M1.14/L1.09 | (via GC)       | 1                |                  | 7.2 SR4 MUB                 | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Thermo Scientific - TRACE 1110 GC | GC Detector  | PID (EPC)                    | M1.14/L1.09 | (via GC)       | 1                |                  | 7.2 SR4 MUB                 | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Thermo Scientific - TRACE 1110 GC | GC Detector  | DID                          | M1.14/L1.09 | (via GC)       | 1                |                  | 7.2 SR4 MUB                 | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Thermo Scientific - TRACE 1110 GC | GC Auxiliary | Auxiliary Temperature Module | M1.14/L1.09 | (via GC)       | 1                |                  | 7.2 SR3                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Thermo Scientific - TRACE 1110 GC | GC Auxiliary | Timed Event                  | M1.14/L1.09 | (via GC)       | 1                |                  | 7.2 SR3                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |



| Manufacturer - System / Family                                | Type                      | Model                                      | Firmware                     | Interface Type | Instrument Class | Options Required | Required Chromeleon Version | Operating Systems  | 247 Instrument Controller |
|---|---------------------------|--|------------------------------|----------------|------------------|------------------|-----------------------------|--|---------------------------|
| <b>Thermo Scientific - TRACE 1110 GC</b>                      | GC Auxiliary              | Methanizer                                 | M1.14/L1.09                  | (via GC)       | 1                |                  | 7.2 SR4 MUb                 | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Thermo Scientific - TRACE 1110 GC</b>                      | GC Auxiliary              | Methanizer (EPC)                           | M1.14/L1.09                  | (via GC)       | 1                |                  | 7.2 SR4 MUb                 | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Thermo Scientific - TRACE 1110 GC</b>                      | GC Auxiliary              | Valve Oven                                 | M1.14/L1.09                  | (via GC)       | 1                |                  | 7.2 SR4 MUb                 | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Thermo Scientific - TRACE 1110 GC</b>                      | GC Auxiliary              | Valve Oven(EPC)                            | M1.14/L1.09                  | (via GC)       | 1                |                  | 7.2 SR4 MUb                 | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Thermo Scientific - TRACE 1110 GC</b>                      | GC Oven Cryogenics Module | Cryogenics Module                          | M1.14/L1.09                  | (via GC)       | 1                |                  | 7.2 SR3                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Thermo Scientific TRACE 1300/1300E GC</b>                  | Gas Chromatography        |  |                              |                |                  |                  |                             |  |                           |
| <b>Thermo Scientific – TRACE 1300 Series (current driver)</b> | GC Main                   | TRACE1300 / 1310                           | 5.05; 1.18 (HMI); 1.03 (AOI) | LAN            | 1                |                  | 7.2 MUa                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Thermo Scientific – TRACE 1300 Series (current driver)</b> | GC Main                   | TRACE1300E                                 | 5.05; 1.18 (HMI); 1.03 (AOI) | LAN            | 1                |                  | 7.2 SR4 MUb                 | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Thermo Scientific – TRACE 1300 Series (current driver)</b> | GC Oven                   | TRACE1300 / 1310                           | 2.05                         | (via GC)       | 1                |                  | 7.2 MUa                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Thermo Scientific – TRACE 1300 Series (current driver)</b> | GC Auxiliary              | Auxiliary Oven                             | 1.02                         | (via GC)       | 1                |                  | 7.2 MUb                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Thermo Scientific – TRACE 1300 Series (current driver)</b> | GC Inlet                  | Split/Splitless with and without backflush | 2.02                         | (via GC)       | 1                |                  | 7.2 MUa                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |

| Manufacturer - System / Family                                | Type        | Model  | Firmware             | Interface Type | Instrument Class | Options Required | Required Chromeleon Version | Operating Systems  | 247 Instrument Controller |
|---|-------------|--|----------------------|----------------|------------------|------------------|-----------------------------|--|---------------------------|
| <b>Thermo Scientific – TRACE 1300 Series (current driver)</b> | GC Inlet    | Helium Saver Split/Splitless inlet                                     | 2.02                 | (via GC)       | 1                |                  | 7.2 MUB                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Thermo Scientific – TRACE 1300 Series (current driver)</b> | GC Inlet    | GSV Split/Splitless inlet  | 2.02                 | (via GC)       | 1                |                  | 7.2 MUB                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Thermo Scientific – TRACE 1300 Series (current driver)</b> | GC Inlet    | Programmable Temperature Vaporization (PTV) with and without backflush | 1.06                 | (via GC)       | 1                |                  | 7.2 MUa                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Thermo Scientific – TRACE 1300 Series (current driver)</b> | GC Detector | Flame Ionization Detector (FID)  | 1.08                 | (via GC)       | 1                |                  | 7.2 MUa                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Thermo Scientific – TRACE 1300 Series (current driver)</b> | GC Detector | Flame Ionization Detector (FID)<br>600 Hz                              | 5.06 <sup>[16]</sup> | (via GC)       | 1                |                  | 7.2.10                      | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Thermo Scientific – TRACE 1300 Series (current driver)</b> | GC Detector | Thermal Conductivity Detector (TCD)                                    | 1.09                 | (via GC)       | 1                |                  | 7.2 MUa                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Thermo Scientific – TRACE 1300 Series (current driver)</b> | GC Detector | Nitrogen Phosphorus Detector (NPD)                                     | 1.08                 | (via GC)       | 1                |                  | 7.2 MUa                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Thermo Scientific – TRACE 1300 Series (current driver)</b> | GC Detector | Electron Capture Detector (ECD)  | 1.07                 | (via GC)       | 1                |                  | 7.2 MUa                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Thermo Scientific – TRACE 1300 Series (current driver)</b> | GC Detector | Flame Photometric Detector (FPD)                                       | 1.06                 | (via GC)       | 1                |                  | 7.2 MUB                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Thermo Scientific – TRACE 1300 Series (current driver)</b> | GC Detector | Pulse Discharge Detector (PDD)   | 1.02                 | (via GC)       | 1                |                  | 7.2 SR2 MUa                 | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |

| Manufacturer - System / Family                                | Type                     | Model                                | Firmware | Interface Type | Instrument Class | Options Required | Required Chromeleon Version | Operating Systems  | 247 Instrument Controller |
|---|--------------------------|--------------------------------------|----------|----------------|------------------|------------------|-----------------------------|--|---------------------------|
| <b>Thermo Scientific – TRACE 1300 Series (current driver)</b> | GC Detector              | Generic Detector Interface (GDI)     | 1.03     | (via GC)       | 1                |                  | 7.2 SR2 MUa                 | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Thermo Scientific – TRACE 1300 Series (current driver)</b> | GC Auxiliary             | Auxiliary Carrier Module             | 1.04     | (via GC)       | 1                |                  | 7.2 MUa                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Thermo Scientific – TRACE 1300 Series (current driver)</b> | GC Auxiliary             | Auxiliary Gas Module for TRACE 1300E | 1.04     | (via GC)       | 1                |                  | 7.2 MUa                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Thermo Scientific – TRACE 1300 Series (current driver)</b> | GC Auxiliary             | Auxiliary Temperature Module         | 3.02     | (via GC)       | 1                |                  | 7.2 MUa                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Thermo Scientific TriPlus Autosampler Family</b>           | Gas Chromatography       |                                      |          |                |                  |                  |                             |  |                           |
| <b>Thermo Scientific – TriPlus Classic</b>                    | GC Autosampler           | TriPlus AS Classic                   | 2.02     | RS232          | 1                |                  | 7.1 SR1                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |
| <b>Thermo Scientific – TriPlus Classic</b>                    | GC Headspace Autosampler | TriPlus HS Classic                   | 2.02     | RS232          | 1                |                  | 7.1 SR1                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |
| <b>Thermo Scientific – TriPlus 100 LS</b>                     | GC Liquid Autosampler    | TriPlus 100 LS                       | 2.0      | LAN            | 1                |                  | 7.2 MUC                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |
| <b>Thermo Scientific – TriPlus 100 LS</b>                     | GC Liquid Autosampler    | TriPlus 100 LS                       | 2.0.1    | LAN            | 1                |                  | 7.2 SR2                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |
| <b>Thermo Scientific – TriPlus 100 LS</b>                     | GC Liquid Autosampler    | TriPlus 100 LS                       | 2.2      | LAN            | 1                |                  | 7.2 SR2 MUa                 | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Thermo Scientific – TriPlus 100 LS</b>                     | GC Liquid Autosampler    | TriPlus 100 LS                       | 2.4      | LAN            | 1                |                  | 7.2 SR5 MUa                 | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |

| Manufacturer - System / Family            | Type                     | Model          | Firmware                        | Interface Type | Instrument Class | Options Required | Required Chromeleon Version   | Operating Systems                                     | 247 Instrument Controller |
|---|--------------------------|----------------|---------------------------------|----------------|------------------|------------------|---|---|---------------------------|
| <b>Thermo Scientific – TriPlus 300 HS</b> | GC Headspace Autosampler | TriPlus 300 HS | 2001.4.x                        | LAN            | 1                |                  | 7.2, 7.2 Mua, 7.2 Mub, 7.2 Muc, 7.2 SR1, 7.2 SR1 Mua and 7.2 SR2 Only | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> | TDS5 (WES7)               |
| <b>Thermo Scientific – TriPlus 300 HS</b> | GC Headspace Autosampler | TriPlus 300 HS | 2001.9.0                        | LAN            | 1                |                  | 7.2 SR2 Mua, 7.2 SR3 and 7.2 SR3 Mua Only                             | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> | TDS5 (WES7)               |
| <b>Thermo Scientific – TriPlus 300 HS</b> | GC Headspace Autosampler | TriPlus 300 HS | 2001.9.4-E                      | LAN            | 1                |                  | 7.2 SR4   | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> | TDS5 (WES7)               |
| <b>Thermo Scientific – TriPlus 500 HS</b> | GC Headspace Autosampler | TriPlus 500 HS | Discovery FW 2.07<br>FW 1.00.01 | LAN            | 1                |                  | 7.2.9 DUa   | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup>  | TDS5 (WES7, 10)           |
| <b>Thermo Scientific – TriPlus RSH</b>    | GC Autosampler           | TriPlus RSH    | 1.4                             | LAN            | 1                |                  | 7.1 SR1 Mua through 7.1 SR2 Mua Only                                  | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> | TDS5 (WES7)               |
| <b>Thermo Scientific – TriPlus RSH</b>    | GC Autosampler           | TriPlus RSH    | 1.6                             | LAN            | 1                |                  | 7.1 SR2 Mub, 7.1 SR3, 7.2, and 7.2 Mua Only                           | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> | TDS5 (WES7)               |
| <b>Thermo Scientific – TriPlus RSH</b>    | GC Autosampler           | TriPlus RSH    | 2.0                             | LAN            | 1                |                  | 7.2 Mub, 7.2 Muc, 7.2 SR1 and 7.2 SR1 Mua Only                        | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> | TDS5 (WES7)               |

| Manufacturer - System / Family  | Type                                | Model       | Firmware   | Interface Type | Instrument Class | Options Required | Required Chromeleon Version | Operating Systems  | 247 Instrument Controller |
|---------------------------------|-------------------------------------|-------------|--|----------------|------------------|------------------|-----------------------------|--|---------------------------|
| Thermo Scientific – TriPlus RSH | GC Autosampler                      | TriPlus RSH | 2.0.1  | LAN            | 1                |                  | 7.2 SR2 Only                | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |
| Thermo Scientific – TriPlus RSH | GC Autosampler                      | TriPlus RSH | 2.2  | LAN            | 1                |                  | 7.2 SR2 MUa                 | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Thermo Scientific – TriPlus RSH | GC Autosampler                      | TriPlus RSH | 2.4.2  | LAN            | 1                |                  | 7.2 SR5 MUa                 | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Thermo Scientific</b>        | IC-MS                               |             |  |                |                  |                  |                             |  |                           |
| Thermo Scientific LC-MS         | Single Quadrupole Mass Spectrometer | MSQ Plus    | VI Driver 2.0 SP4 [11]   | USB            | 1                | LC-MS            | 7.2 SR1                     | 7 <sup>32</sup> , 10 <sup>64</sup>                                       |                           |
| Thermo Scientific IC-MS         | Single Quadrupole Mass Spectrometer | ISQ EC ICMS | Digital Board 230.72.99.28<br>Controller Interface FPGA 64;<br>Controller Interface MCU 19;<br>Lens Driver Base 21;<br>Lens Driver HV 3;<br>Pressure Controller 18;<br>Display Board 1; RF 9; Rod Driver 3 | LAN            | 1                | LC-MS            | 7.2.6                       | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup>                     |                           |

| Manufacturer - System / Family | Type                                | Model           | Firmware  | Interface Type | Instrument Class | Options Required | Required Chromeleon Version | Operating Systems                                    | 247 Instrument Controller |
|--------------------------------|-------------------------------------|-----------------|---|----------------|------------------|------------------|-----------------------------|--|---------------------------|
| <b>Thermo Scientific IC-MS</b> | Single Quadrupole Mass Spectrometer | ISQ EM ICMS     | Digital Board 230.72.99.28<br>Controller Interface<br>FPGA 64;<br>Controller Interface MCU 19;<br>Lens Driver Base 21;<br>Lens Driver HV 3;<br>Pressure Controller 18;<br>Display Board 1;<br>RF 9;<br>Rod Driver 3 | LAN            | 1                | LC-MS            | 7.2.9                       | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> |                           |
| <b>Thermo Scientific</b>       | LC-MS                               |                 |   |                |                  |                  |                             |  |                           |
| <b>Thermo Scientific LC-MS</b> | Single Quadrupole Mass Spectrometer | Vanquish ISQ EC | Digital Board 230.72.99.28<br>Controller Interface<br>FPGA 64;<br>Controller Interface MCU 19;<br>Lens Driver Base 21;<br>Lens Driver HV 3;<br>Pressure Controller 18;<br>Display Board 1;<br>RF 9;<br>Rod Driver 3 | LAN            | 1                | LC-MS            | 7.2.6                       | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> |                           |

| Manufacturer - System / Family  | Type                                | Model              | Firmware  | Interface Type | Instrument Class | Options Required | Required Chromeleon Version | Operating Systems                                     | 247 Instrument Controller |
|---------------------------------|-------------------------------------|--------------------|---|----------------|------------------|------------------|-----------------------------|---|---------------------------|
| <b>Thermo Scientific LC-MS</b>  | Single Quadrupole Mass Spectrometer | Vanquish ISQ EM    | Digital Board 230.72.99.28<br>Controller Interface<br>FPGA 64;<br>Controller Interface MCU 19;<br>Lens Driver Base 21;<br>Lens Driver HV 3;<br>Pressure Controller 18;<br>Display Board 1;<br>RF 9;<br>Rod Driver 3 | LAN            | 1                | LC-MS            | 7.2.9                       | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup>  |                           |
| <b>Thermo Scientific LC-MS</b>  | Single Quadrupole Mass Spectrometer | MSQ Plus           | VI Driver 2.0 SP4 [11]  | USB            | 1                | LC-MS            | 7.2 SR1                     | 7 <sup>32</sup> , 10 <sup>64</sup>                    |                           |
| <b>Thermo Scientific</b>        | Liquid Chromatography               |                    |   |                |                  |                  |                             |   |                           |
| <b>Thermo Scientific Accela</b> | Photodiode Array Detector           | Accela PDA (20 Hz) | ROM: 2.02, App: 0.01, Pic: 0.01, Instr: 2.02  | LAN            | 1                | 3D               | 7.1 SR2                     | 7 <sup>32</sup> , 7 <sup>64</sup>                     | TDS5 (WES7)               |
| <b>Thermo Scientific Accela</b> | Photodiode Array Detector           | Accela PDA (80 Hz) | ROM: 3.97, App: 0,01, Pic: 0.01, Instr: 3.97  | LAN            | 1                | 3D               | 7.1 SR2                     | 7 <sup>32</sup> , 7 <sup>64</sup>                     | TDS5 (WES7)               |
| <b>Thermo Scientific Accela</b> | LC Autosampler                      | Accela Autosampler | 2.15  | LAN            | 1                |                  | 7.1 SR2                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> | TDS5 (WES7)               |

| Manufacturer - System / Family           | Type                         | Model                   | Firmware                                     | Interface Type | Instrument Class | Options Required | Required Chromeleon Version | Operating Systems  | 247 Instrument Controller |
|--|------------------------------|-------------------------|--|----------------|------------------|------------------|-----------------------------|--|---------------------------|
| <b>Thermo Scientific Accela</b>          | LC Autosampler               | Accela Open Autosampler | 4.1.3  | RS232, LAN     | 1                |                  | 7.1 SR2                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Thermo Scientific Accela</b>          | Pump                         | Accela Pump (600 bar)   | 23.67e                                       | USB            | 1                |                  | 7.1 SR2                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Thermo Scientific Accela</b>          | Pump                         | Accela Pump (1000 bar)  | 12.52c                                       | USB            | 1                |                  | 7.1 SR2                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Thermo Scientific Accela</b>          | Pump                         | Accela Pump (1250 bar)  | 23.67f                                       | USB            | 1                |                  | 7.1 SR2                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Thermo Finnigan Surveyor Plus</b>     | Autosampler                  | Autosampler Plus [8]    | 2.15   | LAN            | 1                |                  | 7.1 SR2                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |
| <b>Thermo Finnigan Surveyor Plus</b>     | Pump                         | LC Pump Plus            | Pump 2.0, Adapter 2.00                       | LAN            | 1                |                  | 7.1 DU0b                    | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Thermo Finnigan Surveyor</b>          | UV Detector                  | UV/VIS Detector         | 3.12   | LAN            | 1                | UCI              | 7.1 DU0b                    | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |
| <b>Thermo Finnigan Surveyor Plus</b>     | UV Detector                  | UV/VIS Plus Detector    | Not available                                | LAN            | 1                | UCI              | 7.1 DU0b                    | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |
| <b>Thermo Finnigan Surveyor Plus</b>     | Photodiode Array Detector    | PDA Plus Detector       | ROM: 2.02, App: 0.01, Pic: 0.01, Instr: 2.02 | LAN            | 1                | 3D               | 7.1 DU0b                    | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |
| <b>Thermo Scientific - SpectraSYSTEM</b> | LC Autosampler               | AS3000, AS3500          | 3.31.30                                      | RS232          | 1                |                  | 7.1 DU0b                    | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |
| <b>Thermo Scientific – SpectraSYSTEM</b> | Binary Low-pressure Pump     | P2000                   | 3.03   | RS232          | 1                |                  | 7.1 DU0b                    | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |
| <b>Thermo Scientific – SpectraSYSTEM</b> | Quaternary Low-Pressure Pump | P4000                   | 4.04.40                                      | RS232          | 1                |                  | 7.1 DU0b                    | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |
| <b>Thermo Scientific – SpectraSYSTEM</b> | UV Detector                  | UV1000                  | 3.09   | RS232          | 1                | UCI              | 7.1 DU0b                    | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |



| Manufacturer - System / Family    | Type                      | Model  | Firmware           | Interface Type             | Instrument Class | Options Required | Required Chromeleon Version | Operating Systems  | 247 Instrument Controller |
|-----------------------------------|---------------------------|--|--------------------|----------------------------|------------------|------------------|-----------------------------|--|---------------------------|
| Thermo Scientific – SpectraSYSTEM | UV Detector               | UV2000                                       | 3.12               | RS232                      | 1                | UCI              | 7.1 DU0b                    | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |
| Thermo Scientific – SpectraSYSTEM | UV Detector               | UV3000                                       | Not available      | RS232                      | 1                |                  | 7.1 DU0b                    | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |
| Thermo Scientific – SpectraSYSTEM | Photodiode Array Detector | UV6000                                       | 1.4, 1.8, ROM: 0.2 | RS232                      | 1                | 3D               | 7.1 SR1                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |
| Thermo Scientific – SpectraSYSTEM | Fluorescence Detector     | FL2000                                       | 3.11               | RS232                      | 1                |                  | 7.1 SR1                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |
| Thermo Scientific – Modules       | Fraction Collector        | ASX-280-FC (VF-F11) [17]                     | 1.03               | USB 1.1 & self-powered hub | 1                | FC               | 7.2 SR5 MUD                 | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Thermo Scientific – Modules       | Fraction Collector        | ASX-280-FC (VF-F10) [17]<br>(Cooled Version) | 1.11               | USB 1.1 & self-powered hub | 1                | FC               | 7.2.10                      | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Thermo Scientific Vanquish        | Autosampler               | VH-A10-A [17]                                | 2.03               | USB                        | 1                |                  | 7.2 SR1 MUa                 | 8.1 <sup>64</sup> , 10 <sup>64</sup>                                     | TDS5 (WES7, 10)           |
| Thermo Scientific Vanquish        | Autosampler               | VF-A10-A [17]                                | 2.03               | USB                        | 1                |                  | 7.2 SR2 MUb                 | 8.1 <sup>64</sup> , 10 <sup>64</sup>                                     | TDS5 (WES7, 10)           |
| Thermo Scientific Vanquish        | Autosampler               | VH-A40-A [17]                                | 2.03               | USB                        | 1                |                  | 7.2.8                       | 8.1 <sup>64</sup> , 10 <sup>64</sup>                                     | TDS5 (WES7, 10)           |
| Thermo Scientific Vanquish        | Autosampler               | VF-A40-A [17]                                | 2.03               | USB                        | 1                |                  | 7.2.8                       | 8.1 <sup>64</sup> , 10 <sup>64</sup>                                     | TDS5 (WES7, 10)           |
| Thermo Scientific Vanquish        | Autosampler               | VC-A12-A [17]                                | 2.03               | USB                        | 1                |                  | 7.2.10 MUa                  | 10 <sup>64</sup>   | TDS5 (10)                 |
| Thermo Scientific Vanquish        | Autosampler               | VC-A13-A [17]                                | 2.03               | USB                        | 1                |                  | 7.2.10 MUa                  | 10 <sup>64</sup>   | TDS5 (10)                 |
| Thermo Scientific Vanquish        | Charger                   | VH-A90-A [17]                                | 1.12               | RS232 over USB             | 1                |                  | 7.2 SR1 MUa                 | 8.1 <sup>64</sup> , 10 <sup>64</sup>                                     | TDS5 (WES7, 10)           |
| Thermo Scientific Vanquish        | Binary Pump               | VH-P10-A [17]                                | 2.03               | USB                        | 1                |                  | 7.2 SR1 MUa                 | 8.1 <sup>64</sup> , 10 <sup>64</sup>                                     | TDS5 (WES7, 10)           |

| Manufacturer - System / Family | Type                         | Model         | Firmware | Interface Type | Instrument Class | Options Required | Required Chromeleon Version | Operating Systems                    | 247 Instrument Controller |
|--------------------------------|------------------------------|---------------|----------|----------------|------------------|------------------|-----------------------------|--------------------------------------|---------------------------|
| Thermo Scientific Vanquish     | Binary Pump                  | VF-P10-A [17] | 2.03     | USB            | 1                |                  | 7.2 SR4 MUb                 | 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Thermo Scientific Vanquish     | Binary Pump                  | VC-P10-A [17] | 2.03     | USB            | 1                |                  | 7.2.10 MUa                  | 10 <sup>64</sup>                     | TDS5 (10)                 |
| Thermo Scientific Vanquish     | Quaternary Pump              | VF-P20-A [17] | 2.03     | USB            | 1                |                  | 7.2 SR2 MUb                 | 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Thermo Scientific Vanquish     | Quaternary Pump              | VC-P20-A [17] | 2.03     | USB            | 1                |                  | 7.2.10 MUa                  | 10 <sup>64</sup>                     | TDS5 (10)                 |
| Thermo Scientific Vanquish     | Quaternary Pump              | VC-P21-A [17] | 2.03     | USB            | 1                |                  | 7.2.10 MUa                  | 10 <sup>64</sup>                     | TDS5 (10)                 |
| Thermo Scientific Vanquish     | Isocratic Pump               | VC-P40-A [17] | 2.03     | USB            | 1                |                  | 7.2.10 MUa                  | 10 <sup>64</sup>                     | TDS5 (10)                 |
| Thermo Scientific Vanquish     | Dual Pump                    | VF-P32-A [17] | 2.03     | USB            | 1                |                  | 7.2.8                       | 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Thermo Scientific Vanquish     | Dual Pump                    | VC-P32-A [17] | 2.03     | USB            | 1                |                  | 7.2.10 MUa                  | 10 <sup>64</sup>                     | TDS5 (10)                 |
| Thermo Scientific Vanquish     | Dual Pump                    | VC-P33-A [17] | 2.03     | USB            | 1                |                  | 7.2.10 MUa                  | 10 <sup>64</sup>                     | TDS5 (10)                 |
| Thermo Scientific Vanquish     | Column Compartment           | VH-C10-A [17] | 2.02     | USB            | 1                |                  | 7.2 SR1 MUa                 | 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Thermo Scientific Vanquish     | Column Compartment           | VC-C10-A [17] | 2.02     | USB            | 1                |                  | 7.2.10 MUa                  | 10 <sup>64</sup>                     | TDS5 (10)                 |
| Thermo Scientific Vanquish     | Diode Array Detector HL      | VH-D10-A [17] | 2.01     | USB            | 1                | 3D               | 7.2 SR1 MUa                 | 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Thermo Scientific Vanquish     | Diode Array Detector FG      | VF-D11-A [17] | 2.01     | USB            | 1                | 3D               | 7.2.8                       | 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Thermo Scientific Vanquish     | Diode Array Detector         | VC-D11-A [17] | 2.01     | USB            | 1                |                  | 7.2.10 MUa                  | 10 <sup>64</sup>                     | TDS5 (10)                 |
| Thermo Scientific Vanquish     | Multiple Wavelength Detector | VC-D12-A [17] | 2.01     | USB            | 1                |                  | 7.2.10 MUa                  | 10 <sup>64</sup>                     | TDS5 (10)                 |
| Thermo Scientific Vanquish     | Charged Aerosol Detector     | VH-D20-A [17] | 2.01     | USB            | 1                |                  | 7.2 SR2 MUa                 | 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Thermo Scientific Vanquish     | Charged Aerosol Detector     | VF-D20-A [17] | 2.01     | USB            | 1                |                  | 7.2 SR2 MUb                 | 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |

| Manufacturer - System / Family  | Type                                     | Model         | Firmware                     | Interface Type | Instrument Class | Options Required | Required Chromeleon Version | Operating Systems  | 247 Instrument Controller |
|---|--|---------------|------------------------------|----------------|------------------|------------------|-----------------------------|--|---------------------------|
| <b>Thermo Scientific Vanquish</b>                                     | Fluorescence Detector                    | VF-D50-A [17] | 2.01                         | USB            | 1                | 3D               | 7.2 SR2 MUb                 | 8.1 <sup>64</sup> , 10 <sup>64</sup>                                     | TDS5 (WES7, 10)           |
| <b>Thermo Scientific Vanquish</b>                                     | Fluorescence Detector                    | VF-D51-A [17] | 2.01                         | USB            | 1                | 3D               | 7.2 SR2 MUb                 | 8.1 <sup>64</sup> , 10 <sup>64</sup>                                     | TDS5 (WES7, 10)           |
| <b>Thermo Scientific Vanquish</b>                                     | Fluorescence Detector                    | VC-D50-A [17] | 2.01                         | USB            | 1                | 3D               | 7.2.10 MUa                  | 10 <sup>64</sup>   | TDS5 (10)                 |
| <b>Thermo Scientific Vanquish</b>                                     | Fluorescence Detector                    | VC-D51-A [17] | 2.01                         | USB            | 1                | 3D               | 7.2.10 MUa                  | 10 <sup>64</sup>   | TDS5 (10)                 |
| <b>Thermo Scientific Vanquish</b>                                     | Variable Wavelength Detector             | VF-D40-A [17] | 2.01                         | USB            | 1                |                  | 7.2 SR3 MUa                 | 8.1 <sup>64</sup> , 10 <sup>64</sup>                                     | TDS5 (WES7, 10)           |
| <b>Thermo Scientific Vanquish</b>                                     | Variable Wavelength Detector             | VC-D40-A [17] | 2.01                         | USB            | 1                |                  | 7.2.10 MUa                  | 10 <sup>64</sup>   | TDS5 (10)                 |
| <b>Thermo Scientific Vanquish</b>                                     | Solvent Monitor                          | n.a.          | 2.02                         | USB            | 1                |                  | 7.2.10 MUa                  | 10 <sup>64</sup>   | TDS5 (10)                 |
| <b>Thermo Scientific</b>  | Miscellaneous                            |               |                              |                |                  |                  |                             |  |                           |
| <b>Thermo Scientific – A2D Converter (Serial numbers 0 – 014999)</b>  | Analog to digital converter              | A2D           | Automatic download on demand | USB            | 1                |                  | 7.1 SR2                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Thermo Scientific – A2D Converter (Serial numbers &gt; 015000)</b> | Dual-Channel Analog to digital converter | A2D           | Automatic download on demand | USB            | 1                |                  | 7.2 SR4 MUa                 | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |

### 3 Thermo Scientific MS Support in Chromeleon 7

Drivers to control Thermo Scientific single quadrupole mass spectrometers are included in the Chromeleon distributable. Specific model and compatibility information is provided in Section 2, above.

Control of other Thermo Scientific mass spectrometers is provided by separately installed drivers. Customers with support contracts may access the following download locations for the current drivers as well as important information about model and version compatibility:

**Thermo Scientific Digital Science Support Resource Center**

<https://support.thermoinformatics.com/login.aspx>

**Thermo Scientific Life Sciences Mass Spectrometry Software Download and Licensing Portal**

<https://thermo.flexnetoperations.com/control/thmo/login>

If you do not have access to either of the above locations, please contact your local Thermo Scientific representative.

## 4 Third Party Devices Supported by Chromeleon 7

| Manufacturer - System / Family | Type              | Model                                   | Firmware | Interface Type | Inst. Class | Options Required  | Required Chromeleon Version | Operating Systems  | 247 Instrument Controller |
|--------------------------------|-------------------|---|----------|----------------|-------------|---|-----------------------------|--|---------------------------|
| <b>Agilent – 5890 GC</b>       | Gas Chromatograph | 5890 GC Series I, II, II Plus           | -        | RS232          | 2           | UCI required for Analogue acquisition, DICE card required for digital acquisition | 7.1 SR1                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |
| <b>Agilent – 5890 GC</b>       | GC Autosampler    | 7673                                    | -        | RS232          | 2           |   | 7.1 SR1                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |
| <b>Agilent – 6850 GC</b>       | Gas Chromatograph | 6850                                    | A.03.XX  | LAN            | 2           |   | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> [1], 8.1 <sup>64</sup>                 | TDS5 (WES7)               |
| <b>Agilent – 6850 GC</b>       | GC Autosampler    | 6850 ALS (22 and 27 vials), 7683, 7693A | -        | (via GC)       | 2           |   | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> [1], 8.1 <sup>64</sup>                 | TDS5 (WES7)               |
| <b>Agilent – 6850 GC</b>       | GC Inlet          | Split/Splitless (S/SL)                  | -        | (via GC)       | 2           |   | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> [1], 8.1 <sup>64</sup>                 | TDS5 (WES7)               |
| <b>Agilent – 6850 GC</b>       | GC Inlet          | Purged/Packed (PP)                      | -        | (via GC)       | 2           |   | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> [1], 8.1 <sup>64</sup>                 | TDS5 (WES7)               |
| <b>Agilent – 6850 GC</b>       | GC Detector       | Flame Ionization Detector (FID)         | -        | (via GC)       | 2           |   | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> [1], 8.1 <sup>64</sup>                 | TDS5 (WES7)               |
| <b>Agilent – 6850 GC</b>       | GC Detector       | Thermal Conductivity Detector (TCD)     | -        | (via GC)       | 2           |   | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> [1], 8.1 <sup>64</sup>                 | TDS5 (WES7)               |
| <b>Agilent – 6890 GC</b>       | Gas Chromatograph | 6890, 6890 Series II                    | A.03.XX  | LAN            | 2           |   | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent – 6890 GC</b>       | Gas Chromatograph | 6890N                                   | N.06.07  | LAN            | 2           |   | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |

| Manufacturer - System / Family | Type           | Model                                       | Firmware | Interface Type | Inst. Class | Options Required | Required Chromeleon Version | Operating Systems  | 247 Instrument Controller |
|--------------------------------|----------------|---|----------|----------------|-------------|------------------|-----------------------------|--|---------------------------|
| <b>Agilent – 6890 GC</b>       | GC Autosampler | 7673, 7683, 7693A                           | -        | (via GC)       | 2           |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent – 6890 GC</b>       | GC Autosampler | 7693A                                       | -        | (via GC)       | 2           |                  | 7.1 SR1                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent – 6890 GC</b>       | GC Inlet       | Split/Splitless (S/SL)                      | -        | (via GC)       | 2           |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent – 6890 GC</b>       | GC Inlet       | Purged/Packed (PP)                          | -        | (via GC)       | 2           |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent – 6890 GC</b>       | GC Inlet       | Cool On-Column (COC)                        | -        | (via GC)       | 2           |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent – 6890 GC</b>       | GC Inlet       | Programmable Temperature Vaporization (PTV) | -        | (via GC)       | 2           |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent – 6890 GC</b>       | GC Detector    | Flame Ionization Detector (FID)             | -        | (via GC)       | 2           |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent – 6890 GC</b>       | GC Detector    | Thermal Conductivity Detector (TCD)         | -        | (via GC)       | 2           |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent – 6890 GC</b>       | GC Detector    | Electron Capture Detector (ECD)             | -        | (via GC)       | 2           |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent – 6890 GC</b>       | GC Detector    | Nitrogen Phosphorus Detector (NPD)          | -        | (via GC)       | 2           |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent – 6890 GC</b>       | GC Detector    | Flame Photometric Detector (FPD)            | -        | (via GC)       | 2           |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent - 6890 GC</b>       | GC Detector    | Micro Electron Capture Detector (μ-ECD)     | -        | (via GC)       | 2           |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent - 6890 GC</b>       | GC Detector    | Other detectors                             | -        | (via GC)       | 2           |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |

| Manufacturer - System / Family | Type              | Model   | Firmware                            | Interface Type | Inst. Class | Options Required | Required Chromeleon Version | Operating Systems  | 247 Instrument Controller |
|--------------------------------|-------------------|---|-------------------------------------|----------------|-------------|------------------|-----------------------------|--|---------------------------|
| <b>Agilent - 7890 GC</b>       | Gas Chromatograph | 7890A   | A.01.10.3                           | LAN            | 2           |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent - 7890 GC</b>       | Gas Chromatograph | 7890B   | B.02.00                             | LAN            | 2           |                  | 7.2 MUa                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent - 7890 GC</b>       | Gas Chromatograph | 7890 - Timebase Sharing / Dual Operation, Timed Events                | A.01.10.3                           | LAN            | 2           |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent - 7890 GC</b>       | GC Autosampler    | 7683(B) Injector and tray   | -                                   | (via GC)       | 2           |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent - 7890 GC</b>       | GC Autosampler    | G7693A  | Min GC FW A.1.11                    | (via GC)       | 2           |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent - 7890 GC</b>       | GC Autosampler    | 7650A   | Min GC FW A.1.11; Min GC FW B.02.00 | LAN            | 2           |                  | 7.2 MUa                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent - 7890 GC</b>       | GC Inlet          | Cool On-Column (COC) with EPC   | -                                   | (via GC)       | 2           |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent - 7890 GC</b>       | GC Inlet          | Split/Splitless (S/SL) with EPC (standard pressure inlet version)     | -                                   | (via GC)       | 2           |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent - 7890 GC</b>       | GC Inlet          | Split/Splitless (S/SL) with 100 EPC (standard pressure inlet version) | -                                   | (via GC)       | 2           |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent - 7890 GC</b>       | GC Inlet          | Split/Splitless (S/SL) with 150 EPC (high pressure inlet version)     | -                                   | (via GC)       | 2           |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent - 7890 GC</b>       | GC Inlet          | Volatile Inlet (VI)   | -                                   | (via GC)       | 2           |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |

| Manufacturer - System / Family | Type                     | Model  | Firmware | Interface Type | Inst. Class | Options Required | Required Chromeleon Version | Operating Systems  | 247 Instrument Controller |
|--------------------------------|--------------------------|--|----------|----------------|-------------|------------------|-----------------------------|--|---------------------------|
| <b>Agilent - 7890 GC</b>       | GC Inlet                 | PTV inlet  | -        | (via GC)       | 2           |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent - 7890 GC</b>       | GC Inlet                 | Multi-mode Inlet (MMI) with EPC  | -        | (via GC)       | 2           |                  | 7.2.9                       | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent - 7890 GC</b>       | GC Inlet                 | Pressure Control Module (PCM)  | -        | (via GC)       | 2           |                  | 7.2.9                       | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent - 7890 GC</b>       | GC Detector              | Flame Ionization Detector (FID) with or without EPC  | -        | (via GC)       | 2           |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent - 7890 GC</b>       | GC Detector              | Thermal Conductivity Detector (TCD) with or without EPC  | -        | (via GC)       | 2           |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent - 7890 GC</b>       | GC Detector              | Micro Electron Capture Detector (uECD) with or without EPC   | -        | (via GC)       | 2           |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent - 7890 GC</b>       | GC Detector              | Nitrogen-Phosphorous Detector (NPD) with or without EPC  | -        | (via GC)       | 2           |                  | 7.2.9                       | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent - 7890 GC</b>       | GC Auxiliary             | Auxiliary pressure device (Aux EPC)  | -        | (via GC)       | 2           |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent - 7890 GC</b>       | GC Auxiliary             | Pressure Control Module (PCM)  | -        | (via GC)       | 2           |                  | 7.2.10                      | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent - 7890 GC</b>       | Valves                   | Gas sampling valves (GSV), multi-position valves, switching valves, remote start valves, other valves. | -        | (via GC)       | 2           |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent - G1888</b>         | GC Headspace Autosampler | G1888  | A.01.08  | LAN            | 2           |                  | 7.1 DU0a                    | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |



| Manufacturer - System / Family    | Type                           | Model                                     | Firmware     | Interface Type | Inst. Class | Options Required | Required Chromeleon Version | Operating Systems  | 247 Instrument Controller |
|-----------------------------------|--------------------------------|---|--------------|----------------|-------------|------------------|-----------------------------|--|---------------------------|
| <b>Agilent – 7697A</b>            | ICF - GC Headspace Autosampler | 7697A [4]                                 | See link [2] | LAN            | 2           |                  | 7.2 SR4                     | 7 <sup>32</sup> , 7 <sup>64</sup> [4], 10 <sup>64</sup> [3]                                  | TDS5 (10) [20]            |
| <b>Agilent Chromeleon Drivers</b> | HPLC systems                   |   |              |                |             |                  |                             |  |                           |
| <b>Agilent Chromeleon Drivers</b> | HPLC Pump                      | G1310A - 1100 Isocratic Pump              | A.06.10      | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent Chromeleon Drivers</b> | HPLC Pump                      | G1310B - 1260 Infinity Isocratic Pump     | A.06.32      | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent Chromeleon Drivers</b> | HPLC Pump                      | G1311A - 1100 Series Quaternary Pump      | A.06.10      | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent Chromeleon Drivers</b> | HPLC Pump                      | G1311B - 1260 Infinity Quaternary Pump    | A.06.32      | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent Chromeleon Drivers</b> | HPLC Pump                      | G1311C - 1260 Infinity Quaternary Pump VL | A.06.32      | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent Chromeleon Drivers</b> | HPLC Pump                      | G1312A - 1260 Infinity Binary Pump        | A.06.10      | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |

| Manufacturer - System / Family | Type      | Model                                   | Firmware | Interface Type | Inst. Class | Options Required | Required Chromeleon Version | Operating Systems  | 247 Instrument Controller |
|--------------------------------|-----------|---|----------|----------------|-------------|------------------|-----------------------------|--|---------------------------|
| Agilent Chromeleon Drivers     | HPLC Pump | G1312B - 1260 Infinity Binary Pump SL   | A.06.10  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Pump | G1312C - 1260 Infinity Binary Pump VL   | A.06.32  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Pump | G1361A - 1260 Infinity Preparative Pump | A.06.50  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Pump | G1376A - 1260 Infinity Capillary Pump   | A.06.10  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Pump | G2226A - 1260 Infinity Nanoflow Pump    | A.06.10  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Pump | G4204A - 1290 Quaternary Pump           | B.06.50  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Pump | G4220A - 1290 Infinity Binary Pump      | B.06.23  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Pump | G4220B - 1290 Infinity Binary Pump VL   | B.06.43  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |

| Manufacturer - System / Family | Type      | Model  | Firmware | Interface Type | Inst. Class | Options Required | Required Chromeleon Version | Operating Systems  | 247 Instrument Controller |
|--------------------------------|-----------|--|----------|----------------|-------------|------------------|-----------------------------|--|---------------------------|
| Agilent Chromeleon Drivers     | HPLC Pump | G4302A - 1260 Infinity SFC Binary Pump           | A.06.32  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Pump | G4782A - 1260 Infinity II SFC Binary Pump        | D.07.13  | LAN            | 3           |                  | 7.2.8                       | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Pump | G5611A - 1260 Infinity Bio-inert Quaternary Pump | A.06.32  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Pump | G7104A - 1290 Infinity II Flexible Pump          | B.06.71  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Pump | G7110B - 1260 Infinity II Isocratic Pump         | D.07.01  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Pump | G7111A - 1260 Infinity II Quaternary Pump        | D.07.01  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Pump | G7111B - 1260 Infinity II Quaternary Pump VL     | D.07.01  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Pump | G7112B - 1260 Infinity II Binary Pump            | D.07.01  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |

| Manufacturer - System / Family | Type         | Model   | Firmware | Interface Type | Inst. Class | Options Required | Required Chromeleon Version | Operating Systems  | 247 Instrument Controller |
|--------------------------------|--------------|---|----------|----------------|-------------|------------------|-----------------------------|--|---------------------------|
| Agilent Chromeleon Drivers     | HPLC Pump    | G7120A - 1290 Infinity II High Speed Pump           | B.06.71  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Pump    | G7161A - 1260 Infinity II Preparative Binary Pump   | D.07.20  | LAN            | 3           |                  | 7.2.8                       | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Pump    | G7161B - 1290 Infinity II Preparative Binary Pump   | D.07.20  | LAN            | 3           |                  | 7.2.8                       | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Pump    | G5654A - 1290 Infinity II Bio-Inert Quaternary Pump | D.07.01  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Pump    | G7104C - 1260 Infinity II Flexible Pump             | D.07.20  | LAN            | 3           |                  | 7.2.8                       | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Sampler | G1330A/B - Thermostat for Agilent Sampler           | N/A      | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Sampler | G1313A - 1100 Series Standard Autosampler           | A.06.10  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Sampler | G1329A - 1100 Series Standard Autosampler           | A.06.10  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |

| Manufacturer - System / Family | Type         | Model   | Firmware | Interface Type | Inst. Class | Options Required | Required Chromeleon Version | Operating Systems  | 247 Instrument Controller |
|--------------------------------|--------------|---|----------|----------------|-------------|------------------|-----------------------------|--|---------------------------|
| Agilent Chromeleon Drivers     | HPLC Sampler | G1329B - 1100 Series Standard Autosampler                 | A.06.10  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Sampler | G1367A - 1100 Series Well-plate Sampler                   | A.06.31  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Sampler | G1367B - 1200 Series High Performance Autosampler         | A.06.31  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Sampler | G1367C - 1200 Series High Performance Autosampler SL      | A.06.31  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Sampler | G1367D - 1200 Series High Performance Autosampler SL+     | A.06.31  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Sampler | G1367E - 1260 Infinity High Performance Autosampler       | A.06.32  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Sampler | G1377A - 1260 Infinity High Performance Micro Autosampler | A.06.12  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Sampler | G1389A - 1100 Series Micro Thermostatted Autosampler      | A.06.10  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |

| Manufacturer - System / Family | Type         | Model  | Firmware | Interface Type | Inst. Class | Options Required | Required Chromeleon Version | Operating Systems  | 247 Instrument Controller |
|--------------------------------|--------------|--|----------|----------------|-------------|------------------|-----------------------------|--|---------------------------|
| Agilent Chromeleon Drivers     | HPLC Sampler | G2258A - 1260 Infinity Dual-Loop Autosampler               | A.06.50  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Sampler | G2260A - 1260 Infinity Preparative Autosampler (High flow) | A.06.50  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Sampler | G4226A - 1290 Infinity Autosampler                         | A.06.31  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Sampler | G4303A - 1260 Infinity SFC standard autosampler            | A.06.54  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Sampler | G5667A - 1260 Infinity Bio-inert Autosampler               | A.06.32  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Sampler | G5668A - 1260 Infinity II Bio-inert Autosampler            | D.07.01  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Sampler | G7167A - 1260 Infinity II Multisampler                     | D.06.60  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Sampler | G7167B - 1290 Infinity II Multisampler                     | D.06.60  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |

| Manufacturer - System / Family | Type          | Model   | Firmware | Interface Type | Inst. Class | Options Required | Required Chromeleon Version | Operating Systems  | 247 Instrument Controller |
|--------------------------------|---------------|---|----------|----------------|-------------|------------------|-----------------------------|--|---------------------------|
| Agilent Chromeleon Drivers     | HPLC Sampler  | G7129A - 1260 Infinity II Vialsampler             | D.06.60  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Sampler  | G7129B - 1290 Infinity II Vialsampler             | D.06.60  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Sampler  | G7129C - 1260 Infinity II Vialsampler             | D.07.20  | LAN            | 3           |                  | 7.2.8                       | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Sampler  | G4767A - 1260 Infinity II SFC Multisampler        | D.07.13  | LAN            | 3           |                  | 7.2.8                       | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Detector | G1314A - 1100 Series Variable Wavelength Detector | A.06.10  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Detector | G1314B - 1200 Series Variable Wavelength Detector | A.06.10  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Detector | G1314C - 1200 Series Variable Wavelength Detector | A.06.10  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Detector | G1314D - 1200 Series Variable Wavelength Detector | B.06.32  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |

| Manufacturer - System / Family | Type          | Model   | Firmware | Interface Type | Inst. Class | Options Required | Required Chromeleon Version | Operating Systems  | 247 Instrument Controller |
|--------------------------------|---------------|---|----------|----------------|-------------|------------------|-----------------------------|--|---------------------------|
| Agilent Chromeleon Drivers     | HPLC Detector | G1314E - 1290 Infinity Variable Wavelength Detector | B.06.32  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Detector | G1314F - 1260 Infinity Variable Wavelength Detector | B.06.32  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Detector | G1315A - 1100 Series Diode Array Detector           | A.06.10  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Detector | G1315B - 1200 Series Diode Array Detector           | A.06.10  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Detector | G1315C - 1200 Series Diode Array Detector VL+       | B.06.30  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Detector | G1315D - 1200 Series Diode Array Detector VL        | B.06.30  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Detector | G1365A - 1100 Series Multiple Wavelength Detector   | A.06.10  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Detector | G1365B - 1100 Series Multiple Wavelength Detector   | A.06.10  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |



| Manufacturer - System / Family | Type          | Model  | Firmware | Interface Type | Inst. Class | Options Required | Required Chromeleon Version | Operating Systems  | 247 Instrument Controller |
|--------------------------------|---------------|--|----------|----------------|-------------|------------------|-----------------------------|--|---------------------------|
| Agilent Chromeleon Drivers     | HPLC Detector | G1365C - 1260 Infinity Multiple Wavelength Detector    | B.06.30  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Detector | G1365D - 1260 Infinity Multiple Wavelength Detector VL | B.06.30  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Detector | G1321A - 1100 Series Fluorescence Detector (FLD)       | A.06.10  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Detector | G1321B - 1260 Infinity Fluorescence Detector           | A.06.32  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Detector | G1321C - 1260 Infinity Fluorescence Detector           | A.06.54  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Detector | G1362A - 1260 Infinity Refractive Index Detector       | A.06.10  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Detector | G4212A - 1290 Infinity Diode Array Detector            | B.06.30  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Detector | G4212B - 1260 Infinity Diode Array Detector            | B.06.30  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |

| Manufacturer - System / Family | Type          | Model   | Firmware | Interface Type | Inst. Class | Options Required | Required Chromeleon Version | Operating Systems  | 247 Instrument Controller |
|--------------------------------|---------------|---|----------|----------------|-------------|------------------|-----------------------------|--|---------------------------|
| Agilent Chromeleon Drivers     | HPLC Detector | G7114A - 1260 Infinity II Variable Wavelength Detector  | D.07.01  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Detector | G7114B - 1290 Infinity II Variable Wavelength Detector  | D.06.70  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Detector | G7115A - 1260 Infinity II Diode Array Detector WR       | D.07.01  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Detector | G7117A - 1260 Infinity II Diode Array Detector WR       | D.06.70  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Detector | G7117B - 1290 Infinity II Diode Array Detector FS       | D.06.70  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Detector | G7117C - 1260 Infinity II Diode Array Detector HS       | D.07.01  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Detector | G7121A - 1260 Infinity II Fluorescence Detector         | D.07.01  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Detector | G7121B - 1260 Infinity II Fluorescence Spectra Detector | D.07.01  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |

| Manufacturer - System / Family | Type          | Model   | Firmware | Interface Type | Inst. Class | Options Required | Required Chromeleon Version | Operating Systems  | 247 Instrument Controller |
|--------------------------------|---------------|---|----------|----------------|-------------|------------------|-----------------------------|--|---------------------------|
| Agilent Chromeleon Drivers     | HPLC Detector | G7165A - 1260 Infinity II Multi Wavelength Detector             | D.07.01  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Detector | G4260A - 380-ELSD   | 25.00    | RS232          | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Detector | G4261A - 385-ELSD   | 25.00    | RS232          | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Detector | G4260B - 1260 Infinity Evaporative Light Scattering Detector    | 31.06    | RS232          | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Detector | G4261B - 1290 Infinity Evaporative Light Scattering Detector    | 31.06    | RS232 or LAN   | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Detector | G7102A - 1290 Infinity II Evaporative Light Scattering Detector | 31.06    | RS232 or LAN   | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Detector | G7162A - 1260 Infinity II Refractive Index Detector             | D.06.76  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | HPLC Detector | G7162B - 1290 Infinity II Refractive Index Detector             | D.06.76  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |

| Manufacturer - System / Family    | Type  | Model  | Firmware  | Interface Type | Inst. Class | Options Required | Required Chromeleon Version | Operating Systems  | 247 Instrument Controller |
|-----------------------------------|---|--|---|----------------|-------------|------------------|-----------------------------|--|---------------------------|
| <b>Agilent Chromeleon Drivers</b> | Column Compartment                            | G1316A - 1260 Infinity Thermostatted Column Compartment  | A.06.10   | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent Chromeleon Drivers</b> | Column Compartment                            | G1316B - 1200 Series Column Compartment SL   | A.06.10   | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent Chromeleon Drivers</b> | Column Compartment                            | G1316C - 1200 Series Thermostatted Column Compartment SL                                       | A.06.14   | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent Chromeleon Drivers</b> | Column Compartment                            | G7116A - 1260 Infinity II Multicolumn Thermostat   | D.07.01   | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent Chromeleon Drivers</b> | Column Compartment                            | G7116B - 1290 Infinity II Multicolumn Thermostat (Host with firmware B.06.75/D.06.75 required) | C.06.70   | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent Chromeleon Drivers</b> | Column Compartment / Valve Thermostat Cluster | G7130A - Integrated Column Compartment ICC   | C.06.76 / D.06.76 (Module)                      | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent Chromeleon Drivers</b> | Valve Thermostat Cluster                      | G7116B   | C.06.75 (Module); B.06.75/D.06.75 (Host Module) | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |

| Manufacturer - System / Family | Type                     | Model   | Firmware   | Interface Type | Inst. Class | Options Required | Required Chromeleon Version | Operating Systems   | 247 Instrument Controller |
|--------------------------------|--------------------------|---|--|----------------|-------------|------------------|-----------------------------|---|---------------------------|
| Agilent Chromeleon Drivers     | Valve Thermostat Cluster | G1170A  | C.06.75 (Module);<br>B.06.75/D.06.75 (Host Module) | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> ,<br>8.1 <sup>32</sup> ,<br>8.1 <sup>64</sup> ,<br>10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | Valve Thermostat Cluster | G1316C  | A.06.55 (Module)                                   | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> ,<br>8.1 <sup>32</sup> ,<br>8.1 <sup>64</sup> ,<br>10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | Valve Thermostat Cluster | G1316A/B  | A.06.10 (Module)                                   | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> ,<br>8.1 <sup>32</sup> ,<br>8.1 <sup>64</sup> ,<br>10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | Quick Change Valves      | G1157A - 1200 Series 2-Position/10-Port Valve                               | A.06.02  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> ,<br>8.1 <sup>32</sup> ,<br>8.1 <sup>64</sup> ,<br>10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | Quick Change Valves      | G1158A - 1200 Series 2-Position/6-Port Valve                                | A.06.02  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> ,<br>8.1 <sup>32</sup> ,<br>8.1 <sup>64</sup> ,<br>10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | Quick Change Valves      | G1158B - 1200 Series 2-Position/6-Port Valve (600bar)                       | A.06.02  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> ,<br>8.1 <sup>32</sup> ,<br>8.1 <sup>64</sup> ,<br>10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | Quick Change Valves      | G1159A - 1200 Series 6-Position Selection Valve                             | A.06.02  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> ,<br>8.1 <sup>32</sup> ,<br>8.1 <sup>64</sup> ,<br>10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Agilent Chromeleon Drivers     | Quick Change Valves      | G1160A - 1100 Series Multiple Purpose Switching Valve (12-Position/13-Port) | A.06.02  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> ,<br>8.1 <sup>32</sup> ,<br>8.1 <sup>64</sup> ,<br>10 <sup>64</sup> | TDS5 (WES7, 10)           |

| Manufacturer - System / Family    | Type                | Model  | Firmware | Interface Type | Inst. Class | Options Required | Required Chromeleon Version | Operating Systems  | 247 Instrument Controller |
|-----------------------------------|---------------------|--|----------|----------------|-------------|------------------|-----------------------------|--|---------------------------|
| <b>Agilent Chromeleon Drivers</b> | Quick Change Valves | G1162A - 1200 Series 2-Position/6-Port Micro Valve   | A.06.02  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent Chromeleon Drivers</b> | Quick Change Valves | G1163A - 1200 Series 2-Position/10-Port Micro Valve  | A.06.02  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent Chromeleon Drivers</b> | Quick Change Valves | G1170A - 1290 Infinity Valve Drive (Host required with firmware B.06.40/D.06.060)              | C.06.40  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent Chromeleon Drivers</b> | Other Modules       | G1390A - 1100 Series Universal Interface Box (UIB)   | A.06.02  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent Chromeleon Drivers</b> | Other Modules       | G1390B - 1200 Infinity Series Universal Interface Box II (Host required with B.06.53 firmware) | C.06.53  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent Chromeleon Drivers</b> | Other Modules       | G4227A - 1290 Infinity Flexible Cube (Host required with B.06.52 firmware)                     | C.06.52  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent Chromeleon Drivers</b> | Other Modules       | G4301A - 1260 Infinity Analytical SFC System   | A.03.07  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |

| Manufacturer - System / Family    | Type          | Model   | Firmware | Interface Type | Inst. Class | Options Required | Required Chromeleon Version | Operating Systems  | 247 Instrument Controller |
|-----------------------------------|---------------|---|----------|----------------|-------------|------------------|-----------------------------|--|---------------------------|
| <b>Agilent Chromeleon Drivers</b> | Other Modules | G7170B - 1290 Infinity II MS Flow Modulator (Host required with B.07.20 firmware) | C.07.20  | LAN            | 3           |                  | 7.2.8                       | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent Chromeleon Drivers</b> | LC Systems    | G4286A - 1120 Compact LC Isocratic  | B.06.50  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent Chromeleon Drivers</b> | LC Systems    | G4287A - 1120 Compact LC Isocratic with Oven and ALS                              | B.06.50  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent Chromeleon Drivers</b> | LC Systems    | G4287B - 1220 Infinity LC Isocratic, ALS, TCC, VWD, 600 bar                       | B.06.50  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent Chromeleon Drivers</b> | LC Systems    | G4288A - 1120 Compact LC Gradient   | B.06.50  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent Chromeleon Drivers</b> | LC Systems    | G4289A - 1120 Compact LC Gradient with Oven                                       | B.06.50  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent Chromeleon Drivers</b> | LC Systems    | G4289B - 1220 Infinity LC Gradient, ALS, TCC, VWD, 600 bar                        | B.06.50  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent Chromeleon Drivers</b> | LC Systems    | G4290A - 1120 Compact LC Gradient with oven and ALS                               | B.06.50  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |

| Manufacturer - System / Family    | Type                       | Model   | Firmware | Interface Type | Inst. Class | Options Required | Required Chromeleon Version | Operating Systems  | 247 Instrument Controller |
|-----------------------------------|----------------------------|---|----------|----------------|-------------|------------------|-----------------------------|--|---------------------------|
| <b>Agilent Chromeleon Drivers</b> | LC Systems                 | G4290B - 1220 Infinity LC Gradient, ALS, Man. Inj., TCC, VWD, 600 bar | B.06.50  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent Chromeleon Drivers</b> | LC Systems                 | G4292B - 1220 Infinity LC Isocratic, ALS, VWD, 600 bar                | B.06.50  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent Chromeleon Drivers</b> | LC Systems                 | G4293B - 1220 Infinity LC Gradient, ALS, VWD, 600 bar                 | B.06.50  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent Chromeleon Drivers</b> | LC Systems                 | G4294B - 1220 Infinity LC Gradient, ALS, TCC, DAD, 600 bar            | B.06.50  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent Chromeleon Drivers</b> | LC Systems                 | G4290C - 1220 Infinity LC System VL Gradient, ALS, TCC, VWD, 400 bar  | B.06.50  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent Chromeleon Drivers</b> | LC Systems                 | G4293C - 1220 Infinity LC System VL Gradient, ALS, VWD, 400 bar       | B.06.50  | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent Chromeleon Drivers</b> | Additional Driver Features | External Contacts Board G1351   | N/A      | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent Chromeleon Drivers</b> | Additional Driver Features | ISET G2197AA1   | N/A      | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |



| Manufacturer - System / Family    | Type                       | Model                                     | Firmware | Interface Type | Inst. Class | Options Required | Required Chromeleon Version | Operating Systems  | 247 Instrument Controller |
|-----------------------------------|----------------------------|---|----------|----------------|-------------|------------------|-----------------------------|--|---------------------------|
| <b>Agilent Chromeleon Drivers</b> | Additional Driver Features | ISET G2197AA II                           | N/A      | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent Chromeleon Drivers</b> | Additional Driver Features | ISET G2197AA III                          | N/A      | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent Chromeleon Drivers</b> | Additional Driver Features | ISET G2197AA IV                           | N/A      | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>32</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Agilent LC-ICF Drivers</b>     | HPLC systems [2]           |   |          |                |             |                  |                             |  |                           |
| <b>Agilent LC-ICF Drivers</b>     | HPLC Pump                  | G1310A - 1100 Isocratic Pump              | A.06.10  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3]                                     | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>     | HPLC Pump                  | G1310B - 1260 Infinity Isocratic Pump     | A.06.32  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3]                                     | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>     | HPLC Pump                  | G1311A - 1100 Series Quaternary Pump      | A.06.10  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3]                                     | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>     | HPLC Pump                  | G1311B - 1260 Infinity Quaternary Pump    | A.06.32  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3]                                     | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>     | HPLC Pump                  | G1311C - 1260 Infinity Quaternary Pump VL | A.06.32  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3]                                     | TDS5 (WES7, 10) [20]      |

| Manufacturer - System / Family | Type      | Model                                   | Firmware | Interface Type | Inst. Class | Options Required | Required Chromeleon Version | Operating Systems  | 247 Instrument Controller |
|--------------------------------|-----------|---|----------|----------------|-------------|------------------|-----------------------------|--|---------------------------|
| Agilent LC-ICF Drivers         | HPLC Pump | G1312A - 1260 Infinity Binary Pump      | A.06.10  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| Agilent LC-ICF Drivers         | HPLC Pump | G1312B - 1260 Infinity Binary Pump SL   | A.06.10  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| Agilent LC-ICF Drivers         | HPLC Pump | G1312C - 1260 Infinity Binary Pump VL   | A.06.32  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| Agilent LC-ICF Drivers         | HPLC Pump | G1361A - 1260 Infinity Preparative Pump | A.06.50  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| Agilent LC-ICF Drivers         | HPLC Pump | G1376A - 1260 Infinity Capillary Pump   | A.06.10  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| Agilent LC-ICF Drivers         | HPLC Pump | G2226A - 1260 Infinity Nanoflow Pump    | A.06.10  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| Agilent LC-ICF Drivers         | HPLC Pump | G4204A - 1290 Quaternary Pump           | B.06.50  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| Agilent LC-ICF Drivers         | HPLC Pump | G4220A - 1290 Infinity Binary Pump      | B.06.23  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| Agilent LC-ICF Drivers         | HPLC Pump | G4220B - 1290 Infinity Binary Pump VL   | B.06.43  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| Agilent LC-ICF Drivers         | HPLC Pump | G4302A - 1260 Infinity SFC Binary Pump  | A.06.32  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |

| Manufacturer - System / Family | Type      | Model   | Firmware | Interface Type | Inst. Class | Options Required | Required Chromeleon Version | Operating Systems  | 247 Instrument Controller |
|--------------------------------|-----------|---|----------|----------------|-------------|------------------|-----------------------------|--|---------------------------|
| Agilent LC-ICF Drivers         | HPLC Pump | G4782A - 1260 Infinity II SFC Binary Pump           | D.07.13  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| Agilent LC-ICF Drivers         | HPLC Pump | G5611A - 1260 Infinity Bio-inert Quaternary Pump    | A.06.32  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| Agilent LC-ICF Drivers         | HPLC Pump | G5654A - 1290 Infinity II Bio-Inert Quaternary Pump | D.07.01  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| Agilent LC-ICF Drivers         | HPLC Pump | G7104A - 1290 Infinity II Flexible Pump             | B.06.71  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| Agilent LC-ICF Drivers         | HPLC Pump | G7104C - 1260 Infinity II Flexible Pump             | D.07.20  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| Agilent LC-ICF Drivers         | HPLC Pump | G7110B - 1260 Infinity II Isocratic Pump            | D.07.01  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| Agilent LC-ICF Drivers         | HPLC Pump | G7111A - 1260 Infinity II Quaternary Pump           | D.07.01  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| Agilent LC-ICF Drivers         | HPLC Pump | G7111B - 1260 Infinity II Quaternary Pump VL        | D.07.01  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| Agilent LC-ICF Drivers         | HPLC Pump | G7112B - 1260 Infinity II Binary Pump               | D.07.01  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| Agilent LC-ICF Drivers         | HPLC Pump | G7120A - 1290 Infinity II High Speed Pump           | B.06.71  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |

| Manufacturer - System / Family | Type         | Model   | Firmware | Interface Type | Inst. Class | Options Required | Required Chromeleon Version | Operating Systems  | 247 Instrument Controller |
|--------------------------------|--------------|---|----------|----------------|-------------|------------------|-----------------------------|--|---------------------------|
| Agilent LC-ICF Drivers         | HPLC Pump    | G7161A - 1260 Infinity II Preparative Binary Pump     | D.07.20  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| Agilent LC-ICF Drivers         | HPLC Pump    | G7161B - 1290 Infinity II Preparative Binary Pump     | D.07.20  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| Agilent LC-ICF Drivers         | HPLC Sampler | G1313A - 1100 Series Standard Autosampler             | A.06.10  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| Agilent LC-ICF Drivers         | HPLC Sampler | G1329A - 1100 Series Standard Autosampler             | A.06.10  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| Agilent LC-ICF Drivers         | HPLC Sampler | G1329B - 1100 Series Standard Autosampler             | A.06.10  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| Agilent LC-ICF Drivers         | HPLC Sampler | G1367A - 1100 Series Well-plate Sampler               | A.06.31  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| Agilent LC-ICF Drivers         | HPLC Sampler | G1367B - 1200 Series High Performance Autosampler     | A.06.31  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| Agilent LC-ICF Drivers         | HPLC Sampler | G1367C - 1200 Series High Performance Autosampler SL  | A.06.31  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| Agilent LC-ICF Drivers         | HPLC Sampler | G1367D - 1200 Series High Performance Autosampler SL+ | A.06.31  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| Agilent LC-ICF Drivers         | HPLC Sampler | G1367E - 1260 Infinity High Performance Autosampler   | A.06.32  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |

| Manufacturer - System / Family | Type         | Model  | Firmware | Interface Type | Inst. Class | Options Required | Required Chromeleon Version | Operating Systems  | 247 Instrument Controller |
|--------------------------------|--------------|--|----------|----------------|-------------|------------------|-----------------------------|--|---------------------------|
| <b>Agilent LC-ICF Drivers</b>  | HPLC Sampler | G1377A - 1260 Infinity High Performance Micro Autosampler  | A.06.12  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | HPLC Sampler | G1389A - 1100 Series Micro Thermostatted Autosampler       | A.06.10  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | HPLC Sampler | G2258A - 1260 Infinity Dual-Loop Autosampler               | A.06.50  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | HPLC Sampler | G2260A - 1260 Infinity Preparative Autosampler (High flow) | A.06.50  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | HPLC Sampler | G4226A - 1290 Infinity Autosampler                         | A.06.31  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | HPLC Sampler | G4303A - 1260 Infinity SFC standard autosampler            | A.06.54  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | HPLC Sampler | G4767A - 1260 Infinity II SFC Multisampler                 | D.07.13  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | HPLC Sampler | G5667A - 1260 Infinity Bio-inert Autosampler               | A.06.32  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | HPLC Sampler | G5668A - 1260 Infinity II Bio-inert Autosampler            | D.07.13  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |

| Manufacturer - System / Family | Type          | Model   | Firmware | Interface Type | Inst. Class | Options Required | Required Chromeleon Version | Operating Systems  | 247 Instrument Controller |
|--------------------------------|---------------|---|----------|----------------|-------------|------------------|-----------------------------|--|---------------------------|
| <b>Agilent LC-ICF Drivers</b>  | HPLC Sampler  | G7167A - 1260 Infinity II Multisampler            | D.07.13  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | HPLC Sampler  | G7167B - 1290 Infinity II Multisampler            | D.07.13  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | HPLC Sampler  | G7129A - 1260 Infinity II Vialsampler             | D.06.76  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | HPLC Sampler  | G7129B - 1290 Infinity II Vialsampler             | D.06.76  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | HPLC Sampler  | G7129C - 1260 Infinity II Vialsampler             | D.07.20  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | HPLC Sampler  | G7157A - 1290 Infinity II Preparative Autosampler | D.07.01  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | HPLC Detector | G1314A - 1100 Series Variable Wavelength Detector | A.06.10  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | HPLC Detector | G1314B - 1200 Series Variable Wavelength Detector | A.06.10  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | HPLC Detector | G1314C - 1200 Series Variable Wavelength Detector | A.06.10  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | HPLC Detector | G1314D - 1200 Series Variable Wavelength Detector | B.06.32  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |

| Manufacturer - System / Family | Type          | Model  | Firmware | Interface Type | Inst. Class | Options Required | Required Chromeleon Version | Operating Systems  | 247 Instrument Controller |
|--------------------------------|---------------|--|----------|----------------|-------------|------------------|-----------------------------|--|---------------------------|
| <b>Agilent LC-ICF Drivers</b>  | HPLC Detector | G1314E - 1290 Infinity Variable Wavelength Detector    | B.06.32  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | HPLC Detector | G1314F - 1260 Infinity Variable Wavelength Detector    | B.06.32  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | HPLC Detector | G1315A - 1100 Series Diode Array Detector              | A.06.10  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | HPLC Detector | G1315B - 1200 Series Diode Array Detector              | A.06.10  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | HPLC Detector | G1315C - 1200 Series Diode Array Detector VL+          | B.06.30  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | HPLC Detector | G1315D - 1200 Series Diode Array Detector VL           | B.06.30  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | HPLC Detector | G1365A - 1100 Series Multiple Wavelength Detector      | A.06.10  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | HPLC Detector | G1365B - 1100 Series Multiple Wavelength Detector      | A.06.10  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | HPLC Detector | G1365C - 1260 Infinity Multiple Wavelength Detector    | B.06.30  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | HPLC Detector | G1365D - 1260 Infinity Multiple Wavelength Detector VL | B.06.30  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |

| Manufacturer - System / Family | Type          | Model  | Firmware | Interface Type | Inst. Class | Options Required | Required Chromeleon Version | Operating Systems  | 247 Instrument Controller |
|--------------------------------|---------------|--|----------|----------------|-------------|------------------|-----------------------------|--|---------------------------|
| <b>Agilent LC-ICF Drivers</b>  | HPLC Detector | G1321A - 1100 Series Fluorescence Detector (FLD)       | A.06.10  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | HPLC Detector | G1321B - 1260 Infinity Fluorescence Detector           | A.06.32  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | HPLC Detector | G1321C - 1260 Infinity Fluorescence Detector           | A.06.54  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | HPLC Detector | G1362A - 1260 Infinity Refractive Index Detector       | A.06.10  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | HPLC Detector | G4212A - 1290 Infinity Diode Array Detector            | B.06.57  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | HPLC Detector | G4212B - 1260 Infinity Diode Array Detector            | B.06.57  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | HPLC Detector | G7114A - 1260 Infinity II Variable Wavelength Detector | D.07.01  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | HPLC Detector | G7114B - 1290 Infinity II Variable Wavelength Detector | D.06.70  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | HPLC Detector | G7115A - 1260 Infinity II Diode Array Detector WR      | D.07.01  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | HPLC Detector | G7117A - 1260 Infinity II Diode Array Detector WR      | D.06.70  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |



| Manufacturer - System / Family | Type          | Model   | Firmware | Interface Type | Inst. Class | Options Required | Required Chromeleon Version | Operating Systems  | 247 Instrument Controller |
|--------------------------------|---------------|---|----------|----------------|-------------|------------------|-----------------------------|--|---------------------------|
| <b>Agilent LC-ICF Drivers</b>  | HPLC Detector | G7117B - 1290 Infinity II Diode Array Detector FS               | D.06.70  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | HPLC Detector | G7117C - 1260 Infinity II Diode Array Detector HS               | D.07.01  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | HPLC Detector | G7121A - 1260 Infinity II Fluorescence Detector                 | D.07.01  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | HPLC Detector | G7121B - 1260 Infinity II Fluorescence Spectra Detector         | D.07.01  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | HPLC Detector | G7165A - 1260 Infinity II Multi Wavelength Detector             | D.07.01  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | HPLC Detector | G4218A - 1260 Infinity Evaporative Light Scattering Detector    | 1.3      | RS232          | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | HPLC Detector | G4260B - 1260 Infinity Evaporative Light Scattering Detector    | 32.06    | RS232<br>LAN   | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | HPLC Detector | G4261B - 1290 Infinity Evaporative Light Scattering Detector    | 32.06    | RS232<br>LAN   | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | HPLC Detector | G7102A - 1290 Infinity II Evaporative Light Scattering Detector | 32.06    | RS232<br>LAN   | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | HPLC Detector | G7162A - 1260 Infinity II Refractive Index Detector             | D.06.76  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |

| Manufacturer - System / Family | Type                     | Model  | Firmware  | Interface Type | Inst. Class | Options Required | Required Chromeleon Version | Operating Systems  | 247 Instrument Controller |
|--------------------------------|--------------------------|--|---|----------------|-------------|------------------|-----------------------------|--|---------------------------|
| <b>Agilent LC-ICF Drivers</b>  | HPLC Detector            | G7162B - 1290 Infinity II Refractive Index Detector  | D.06.76   | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | Column Compartment       | G1316A - 1260 Infinity Thermostatted Column Compartment  | A.06.10   | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | Column Compartment       | G1316B - 1200 Series Column Compartment SL   | A.06.10   | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | Column Compartment       | G1316C - 1200 Series Thermostatted Column Compartment SL                                       | A.06.14   | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | Column Compartment       | G7116A - 1260 Infinity II Multicolumn Thermostat   | D.07.01   | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | Column Compartment       | G7116B - 1290 Infinity II Multicolumn Thermostat (Host with firmware B.06.75/D.06.75 required) | C.06.75   | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | Column Compartment       | G7130A - Integrated Column Compartment ICC   | C.06.76   | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | Valve Thermostat Cluster | G1170A   | C.06.75 (Module); B.06.75/D.06.75 (Host Module) | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |

| Manufacturer - System / Family | Type                     | Model   | Firmware   | Interface Type | Inst. Class | Options Required | Required Chromeleon Version | Operating Systems  | 247 Instrument Controller |
|--------------------------------|--------------------------|---|--|----------------|-------------|------------------|-----------------------------|--|---------------------------|
| <b>Agilent LC-ICF Drivers</b>  | Valve Thermostat Cluster | G7116B  | C.06.75 (Module);<br>B.06.75/D.06.75 (Host Module) | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | Valve Thermostat Cluster | G7130A (option of G7129A/B)   | D.06.76 (Module)                                   | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | Valve Thermostat Cluster | G1316C  | A.06.55 (Module)                                   | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | Valve Thermostat Cluster | G1316A/B  | A.06.10 (Module)                                   | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | Quick Change Valves      | G1157A - 1200 Series 2-Position/10-Port Valve                               | A.06.02  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | Quick Change Valves      | G1158A - 1200 Series 2-Position/6-Port Valve                                | A.06.02  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | Quick Change Valves      | G1158B - 1200 Series 2-Position/6-Port Valve (600bar)                       | A.06.02  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | Quick Change Valves      | G1159A - 1200 Series 6-Position Selection Valve                             | A.06.02  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | Quick Change Valves      | G1160A - 1100 Series Multiple Purpose Switching Valve (12-Position/13-Port) | A.06.02  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |

| Manufacturer - System / Family | Type                | Model   | Firmware | Interface Type | Inst. Class | Options Required | Required Chromeleon Version | Operating Systems  | 247 Instrument Controller |
|--------------------------------|---------------------|---|----------|----------------|-------------|------------------|-----------------------------|--|---------------------------|
| <b>Agilent LC-ICF Drivers</b>  | Quick Change Valves | G1162A - 1200 Series 2-Position/6-Port Micro Valve                                | A.06.02  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | Quick Change Valves | G1163A - 1200 Series 2-Position/10-Port Micro Valve                               | A.06.02  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | Quick Change Valves | G1170A - 1290 Infinity Valve Drive (Host required with firmware B.06.40/D.06.060) | C.06.40  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | Fraction Collector  | G1364A - 1100 Series Automatic Fraction Collector                                 | A.06.53  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | Fraction Collector  | G1364B - 1260 Infinity Fraction Collector (preparative-scale)                     | A.06.53  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | Fraction Collector  | G1364C - 1260 Infinity Fraction Collector (analytical-scale)                      | A.06.53  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | Fraction Collector  | G1364D - 1100 Series Micro Fraction Collector                                     | A.06.53  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | Fraction Collector  | G1364E - 1260 Infinity II Preparative Fraction Collector                          | D.07.20  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | Fraction Collector  | G1364F - 1260 Infinity II Analytical Fraction Collector                           | D.07.20  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |

| Manufacturer - System / Family | Type               | Model   | Firmware | Interface Type | Inst. Class | Options Required | Required Chromeleon Version | Operating Systems  | 247 Instrument Controller |
|--------------------------------|--------------------|---|----------|----------------|-------------|------------------|-----------------------------|--|---------------------------|
| <b>Agilent LC-ICF Drivers</b>  | Fraction Collector | G5664A - 1260 Infinity Bio-inert Fraction Collector AS                            | A.06.53  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | Fraction Collector | G5664B - 1260 Infinity II Bio-inert Fraction Collector                            | D.07.20  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | Fraction Collector | G7159B - 1290 Infinity II Preparative Open-Bed Fraction Collector                 | D.07.10  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | Fraction Collector | G7166A - 1260 Infinity II Preparative Valve-Based Collector                       | C.07.10  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | Other Modules      | G4227A - 1290 Infinity Flexible Cube (Host required with B.06.52 firmware)        | C.06.52  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | Other Modules      | G7170B - 1290 Infinity II MS Flow Modulator (Host required with B.07.20 firmware) | C.07.20  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | LC Systems         | G4286A - 1120 Compact LC Isocratic  | B.06.50  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | LC Systems         | G4287A - 1120 Compact LC Isocratic with Oven and ALS                              | B.06.50  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | LC Systems         | G4287B - 1220 Infinity LC Isocratic, ALS, TCC, VWD, 600 bar                       | B.06.50  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |

| Manufacturer - System / Family | Type       | Model   | Firmware | Interface Type | Inst. Class | Options Required | Required Chromeleon Version | Operating Systems  | 247 Instrument Controller |
|--------------------------------|------------|---|----------|----------------|-------------|------------------|-----------------------------|--|---------------------------|
| <b>Agilent LC-ICF Drivers</b>  | LC Systems | G4288A - 1120 Compact LC Gradient                                     | B.06.50  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | LC Systems | G4289A - 1120 Compact LC Gradient with Oven                           | B.06.50  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | LC Systems | G4289B - 1220 Infinity LC Gradient, ALS, TCC, VWD, 600 bar            | B.06.50  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | LC Systems | G4290A - 1120 Compact LC Gradient with oven and ALS                   | B.06.50  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | LC Systems | G4290B - 1220 Infinity LC Gradient, ALS, Man. Inj., TCC, VWD, 600 bar | B.06.50  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | LC Systems | G4292B - 1220 Infinity LC Isocratic, ALS, VWD, 600 bar                | B.06.50  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | LC Systems | G4293B - 1220 Infinity LC Gradient, ALS, VWD, 600 bar                 | B.06.50  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | LC Systems | G4294B - 1220 Infinity LC Gradient, ALS, TCC, DAD, 600 bar            | B.06.50  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | LC Systems | G4290C - 1220 Infinity LC System VL Gradient, ALS, TCC, VWD, 400 bar  | B.06.50  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | LC Systems | G4293C - 1220 Infinity LC System VL Gradient, ALS, VWD, 400 bar       | B.06.50  | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |

| Manufacturer - System / Family | Type                       | Model                                 | Firmware | Interface Type | Inst. Class | Options Required | Required Chromeleon Version | Operating Systems  | 247 Instrument Controller |
|--------------------------------|----------------------------|---------------------------------------|----------|----------------|-------------|------------------|-----------------------------|--|---------------------------|
| <b>Agilent LC-ICF Drivers</b>  | Additional Driver Features | External Contacts Board G1351         | N/A      | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | Additional Driver Features | ISET G2197AA I                        | N/A      | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | Additional Driver Features | ISET G2197AA II                       | N/A      | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | Additional Driver Features | ISET G2197AA III                      | N/A      | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent LC-ICF Drivers</b>  | Additional Driver Features | ISET G2197AA IV                       | N/A      | LAN            | 3           |                  | 7.2                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] | TDS5 (WES7, 10) [20]      |
| <b>Agilent CE-ICF Drivers</b>  | CE systems [2]             |                                       |          |                |             |                  |                             |  |                           |
| <b>Agilent CE-ICF Drivers</b>  | CE Systems                 | G7150A – Capillary Electrophoresis II | B.06.25  | LAN            | 3           |                  | 7.2.9                       | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] |                           |
| <b>Agilent CE-ICF Drivers</b>  | CE Detector                | G7151A – Diode Array Detector for CE  | B.06.25  | LAN            | 3           |                  | 7.2.9                       | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> [3] |                           |
| <b>Berthold</b>                | Radioactivity Monitor      | LB507/509                             |          | RS232          | 3           |                  | 7.2 SR4                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>    |                           |

| Manufacturer - System / Family | Type              | Model                          | Firmware | Interface Type | Inst. Class | Options Required  | Required Chromeleon Version | Operating Systems                                     | 247 Instrument Controller |
|--------------------------------|-------------------|--------------------------------|----------|----------------|-------------|---|-----------------------------|---|---------------------------|
| <b>Bruker GC</b>               | Gas Chromatograph | Varian / Bruker 3900-GC        | 6.18     | LAN            | 2           | (Driver not installed by default. Please launch standalone installer in the /Drivers/ folder of the Chromeleon distributable) | 7.2 SR5                     | 7 <sup>64</sup> , 10 <sup>64</sup>                    |                           |
| <b>Bruker GC</b>               | Gas Chromatograph | Varian / Bruker / SCION 430-GC | 7.0      | LAN            | 2           | (Driver not installed by default. Please launch standalone installer in the /Drivers/ folder of the Chromeleon distributable) | 7.2 SR5                     | 7 <sup>64</sup> , 10 <sup>64</sup>                    |                           |
| <b>Bruker GC</b>               | Gas Chromatograph | Varian / Bruker / SCION 450-GC | 5.07     | LAN            | 2           | (Driver not installed by default. Please launch standalone installer in the /Drivers/ folder of the Chromeleon distributable) | 7.2 SR5                     | 7 <sup>64</sup> , 10 <sup>64</sup>                    |                           |
| <b>Dostmann</b>                | Thermometer       | P550                           | -        | RS232          | 1           |   | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> |                           |
| <b>Dostmann</b>                | Thermometer       | P600                           | -        | RS232          | 1           |   | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> |                           |



| Manufacturer - System / Family | Type                            | Model                             | Firmware | Interface Type | Inst. Class | Options Required | Required Chromeleon Version | Operating Systems                                     | 247 Instrument Controller |
|--------------------------------|---------------------------------|-----------------------------------|----------|----------------|-------------|------------------|-----------------------------|---|---------------------------|
| <b>Dostmann</b>                | Thermometer                     | P650                              | -        | RS232          | 1           |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> |                           |
| <b>Dostmann</b>                | Thermometer                     | P700                              | -        | USB            | 1           |                  | 7.1 SR2                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> |                           |
| <b>ERC</b>                     | Refractive Index Detector       | RefractoMax 521, 523, 524         | RA21E01  | RS232          | 1           |                  | 7.1 SR2                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> |                           |
| <b>Fluke</b>                   | Multimeter                      | 189                               | -        | RS232          | 1           |                  | 7.1                         | 7 <sup>32</sup>                                       |                           |
| <b>Fluke</b>                   | Multimeter                      | 289 (replaces 189)                | -        | RS232          | 1           |                  | 7.1                         | 7 <sup>32</sup>                                       |                           |
| <b>Gilson - NEBULA</b>         | LC Autosampler                  | 215                               | -        | RS232-GSIOC    | 3           |                  | 7.2 MUa                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> |                           |
| <b>Gilson</b>                  | LC Autosampler / Liquid Handler | 221XL, 222XL, 231XL, 232XL, 233XL | -        | RS232-GSIOC    | 3           |                  | 7.2 MUa                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> |                           |
| <b>Gilson</b>                  | Pump                            | 331, 332                          | -        | RS232-GSIOC    | 3           |                  | 7.2 MUb                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> |                           |
| <b>Gilson</b>                  | Pump                            | 333, 334                          | -        | RS232-GSIOC    | 3           |                  | 7.2 MUb                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> |                           |
| <b>Gilson</b>                  | UV Detector                     | 151, 152                          | -        | RS232-GSIOC    | 3           |                  | 7.2 MUb                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> |                           |
| <b>Gilson</b>                  | UV Detector                     | 155, 156                          | -        | RS232-GSIOC    | 3           |                  | 7.2 MUb                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> |                           |
| <b>Gilson</b>                  | Valve Module                    | 817                               | -        | RS232-GSIOC    | 3           |                  | 7.2 MUa                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> |                           |
| <b>Gilson</b>                  | Valve Module                    | 819                               | -        | RS232-GSIOC    | 3           |                  | 7.2 MUa                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> |                           |
| <b>Gilson</b>                  | Valve Module                    | UVSM                              | -        | RS232-GSIOC    | 3           |                  | 7.2 MUa                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> |                           |

| Manufacturer - System / Family | Type                  | Model                                 | Firmware      | Interface Type | Inst. Class | Options Required | Required Chromeleon Version | Operating Systems                                     | 247 Instrument Controller |
|--------------------------------|-----------------------|---------------------------------------|---------------|----------------|-------------|------------------|-----------------------------|---|---------------------------|
| <b>Gilson</b>                  | Valve Module          | ValveMate                             | -             | RS232          | 3           |                  | 7.2 MUa                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> |                           |
| <b>Gilson</b>                  | Valve Module          | ValveMate II                          | -             | USB            | 3           |                  | 7.2 MUa                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> |                           |
| <b>ISCO</b>                    | Fraction Collector    | Foxy Junior                           | -             | RS232          | 1           | FC               | 7.2 MUB                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> |                           |
| <b>ISCO</b>                    | Fraction Collector    | Foxy 200                              | -             | RS232          | 1           | FC               | 7.2 SR1                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> |                           |
| <b>ISCO</b>                    | Fraction Collector    | Foxy R1                               | -             | RS232          | 1           | FC               | 7.2 MUB                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> |                           |
| <b>Kontron</b>                 | Fluorescence Detector | SFM25                                 | -             | RS232          | 3           |                  |                             | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> |                           |
| <b>Linear Instruments</b>      | UV Detector           | UV205 (same as TSP UV2000)            | 3.12          | RS232          | 1           | UCI              | 7.1 DU0b                    | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> |                           |
| <b>Linear Instruments</b>      | UV Detector           | UV206 (same as TSP UV3000)            | Not available | RS232          | 1           |                  | 7.1 DU0b                    | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> |                           |
| <b>Markes</b>                  | Thermal Desorber      | TD100-xr Standard                     | 4.5.5         | USB            | 1           |                  | 7.2.6                       | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup>  |                           |
| <b>Markes</b>                  | Thermal Desorber      | TD100-xr Standard - Tube IS Accessory | n.a.          | (via TD-100)   | 1           |                  | 7.2.6                       | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup>  |                           |
| <b>Markes</b>                  | Thermal Desorber      | TD100-xr Advanced                     | 4.5.5         | (via TD-100)   | 1           |                  | 7.2.6                       | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup>  |                           |
| <b>Markes</b>                  | Thermal Desorber      | TD100-xr Advanced - Tube IS Accessory | n.a.          | (via TD-100)   | 1           |                  | 7.2.6                       | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup>  |                           |
| <b>Markes</b>                  | Thermal Desorber      | UNITY-xr                              | 3.8.10        | RS232          | 1           |                  | 7.2.6                       | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup>  |                           |

| Manufacturer - System / Family      | Type              | Model                    | Firmware   | Interface Type | Inst. Class | Options Required | Required Chromeleon Version | Operating Systems   | 247 Instrument Controller |
|-------------------------------------|-------------------|--------------------------|--|----------------|-------------|------------------|-----------------------------|---|---------------------------|
| <b>Markes</b>                       | Thermal Desorber  | Air Server-xr            | n.a.   | (via UNITY-xr) | 1           |                  | 7.2.6                       | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup>                          |                           |
| <b>Markes</b>                       | Thermal Desorber  | Kori-xr                  | 3.8.10   | RS232          | 1           |                  | 7.2.6                       | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup>                          |                           |
| <b>PerkinElmer-AutoSystem GC</b>    | Gas Chromatograph | AutoSystem GC            | 1.6  | RS232          | 2           |                  | 7.1 DU0a                    | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                         |                           |
| <b>PerkinElmer-AutoSystem XL GC</b> | Gas Chromatograph | AutoSystem XL GC         | 3.500  | RS232          | 2           |                  | 7.1 DU0a                    | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                         |                           |
| <b>PerkinElmer - Clarus GC</b>      | Gas Chromatograph | Clarus 400, 480, 580 [9] | Not known  | RS232          | 2           |                  | 7.1 DU0a                    | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> [18] |                           |
| <b>PerkinElmer - Clarus GC</b>      | Gas Chromatograph | Clarus 590 [9]           | Autosystem: 6.1.051, PPC: 3.70, Autosampler: 3.1.021 | RS232          | 2           |                  | 7.2.10                      | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> [18] |                           |
| <b>PerkinElmer - Clarus GC</b>      | Gas Chromatograph | Clarus 500 [7]           | Autosystem: 4.110, PPC: 3.70                         | RS232          | 2           |                  | 7.1 DU0a                    | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> [18] |                           |
| <b>PerkinElmer - Clarus GC</b>      | Gas Chromatograph | Clarus 600 [7]           | Autosystem: 5.5.075, PPC: 3.70, Autosampler: 2.24    | RS232          | 2           |                  | 7.1 DU0a                    | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> [18] |                           |
| <b>PerkinElmer - Clarus GC</b>      | Gas Chromatograph | Clarus 680 [7]           | Autosystem: 7.0.086, PPC: 3.70, Autosampler: 3.0.010 | RS232          | 2           |                  | 7.1 DU0a                    | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> [18] |                           |

| Manufacturer - System / Family         | Type                          | Model   | Firmware  | Interface Type | Inst. Class | Options Required | Required Chromeleon Version | Operating Systems   | 247 Instrument Controller |
|--|-------------------------------|---|-----------|----------------|-------------|------------------|-----------------------------|---|---------------------------|
| <b>PerkinElmer - Clarus GC</b>         | Gas Chromatograph             | Clarus 690 [9]                                  | Not known | RS232          | 2           |                  | 7.2.10                      | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> [18] |                           |
| <b>PerkinElmer - AutoSystem/Clarus</b> | GC Inlet                      | Capillary Split/Splitless Injector (CAP)        | -         | (via GC)       | 2           |                  | 7.1 DU0a                    | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                         |                           |
| <b>PerkinElmer - AutoSystem/Clarus</b> | GC Inlet                      | Gas Sampling Valve (GSV)                        | -         | (via GC)       | 2           |                  | 7.1 DU0a                    | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                         |                           |
| <b>PerkinElmer - AutoSystem/Clarus</b> | GC Inlet                      | Packed Column Injector (PKD)                    | -         | (via GC)       | 2           |                  | 7.1 DU0a                    | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                         |                           |
| <b>PerkinElmer - AutoSystem/Clarus</b> | GC Inlet                      | Programmable On-column Capillary Injector (POC) | -         | (via GC)       | 2           |                  | 7.1 DU0a                    | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                         |                           |
| <b>PerkinElmer - AutoSystem/Clarus</b> | GC Inlet                      | Programmable Split/Splitless Injector (PSS)     | -         | (via GC)       | 2           |                  | 7.1 DU0a                    | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                         |                           |
| <b>PerkinElmer - AutoSystem/Clarus</b> | GC Detector                   | Electron Capture Detector (ECD)                 | -         | (via GC)       | 2           |                  | 7.1 DU0a                    | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                         |                           |
| <b>PerkinElmer - AutoSystem/Clarus</b> | GC Detector                   | Flame Ionization Detector (FID)                 | -         | (via GC)       | 2           |                  | 7.1 DU0a                    | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                         |                           |
| <b>PerkinElmer - AutoSystem/Clarus</b> | GC Detector                   | Nitrogen-Phosphorus Detector (NPD)              | -         | (via GC)       | 2           |                  | 7.1 DU0a                    | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                         |                           |
| <b>PerkinElmer - AutoSystem/Clarus</b> | GC Detector                   | Thermal Conductivity Detector (TCD)             | -         | (via GC)       | 2           |                  | 7.1 DU0a                    | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                         |                           |
| <b>PerkinElmer - AutoSystem/Clarus</b> | GC Auxiliary                  | Auxiliary Pressure Module (e.g. Swafer)         | -         | (via GC)       | 2           |                  | 7.1 DU0a                    | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                         |                           |
| <b>PerkinElmer – Series 200</b>        | Quarternary low-pressure pump | PE Series 200 LC Quaternary Pump                | 2.43      | RS232          | 3           |                  | 7.1 SR1                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                         |                           |

| Manufacturer - System / Family  | Type                                  | Model                         | Firmware      | Interface Type | Inst. Class | Options Required | Required Chromeleon Version | Operating Systems                                     | 247 Instrument Controller |
|---------------------------------|---------------------------------------|-------------------------------|---------------|----------------|-------------|------------------|-----------------------------|---|---------------------------|
| <b>PerkinElmer – Series 200</b> | Isocratic micro pump                  | PE Series 200 LC Micro Pump   | 2.43          | RS232          | 3           |                  | 7.1 SR1                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> |                           |
| <b>PerkinElmer – Series 200</b> | LC Autosampler                        | PE Series 200 LC Autosampler  | 1.08          | RS232          | 3           |                  | 7.1 SR1                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> |                           |
| <b>PerkinElmer – Series 200</b> | Column Oven                           | PE Series 200 Column Oven     | 2.4           | RS232          | 3           |                  | 7.1 SR1                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> |                           |
| <b>PerkinElmer – Series 200</b> | UV Detector                           | PE Series 200 UV/Vis Detector | 1.01          | RS232          | 3           |                  | 7.1 SR1                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> |                           |
| <b>PerkinElmer – Series 200</b> | Photodiode Array Detector             | PE Series 200 LC DAD          | A6.03         | RS232          | 3           |                  | 7.1 SR1                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> |                           |
| <b>PerkinElmer TurboMatrix</b>  | GC HS Autosampler                     | TurboMatrix                   |               | RS232          | 2           |                  | 7.2 MUB                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> |                           |
| <b>Polymer Labs</b>             | Evaporative Light Scattering Detector | ELS-2100                      | 1.5.5         | RS232          | 1           |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> |                           |
| <b>Polymer Labs</b>             | Evaporative Light Scattering Detector | ELS-2100 Ice                  | 1.5.5         | RS232          | 1           |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> |                           |
| <b>Rheodyne</b>                 | Switching Valve                       | MX Series II Switching Valves | 41            | USB            | 1           |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> |                           |
| <b>Rheodyne</b>                 | Switching Valve                       | LabPro Valves                 | Not available | RS232          | 1           |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> |                           |
| <b>Rheodyne</b>                 | Switching Valve                       | RV/EV Valves                  | Not available | RS232          | 1           |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> |                           |

| Manufacturer - System / Family           | Type              | Model                          | Firmware | Interface Type | Inst. Class | Options Required  | Required Chromeleon Version | Operating Systems                  | 247 Instrument Controller |
|--|-------------------|--------------------------------|----------|----------------|-------------|---|-----------------------------|------------------------------------|---------------------------|
| <b>SCION GC</b>                          | Gas Chromatograph | Varian / Bruker / SCION 430-GC | 7.0      | LAN            | 2           | (Driver not installed by default. Please launch standalone installer in the /Drivers/ folder of the Chromeleon distributable) | 7.2 SR5                     | 7 <sup>64</sup> , 10 <sup>64</sup> |                           |
| <b>SCION GC</b>                          | Gas Chromatograph | Varian / Bruker / SCION 450-GC | 5.07     | LAN            | 2           | (Driver not installed by default. Please launch standalone installer in the /Drivers/ folder of the Chromeleon distributable) | 7.2 SR5                     | 7 <sup>64</sup> , 10 <sup>64</sup> |                           |
| <b>Shimadzu LC Driver for Chromeleon</b> | LC Systems        |                                |          |                |             |   | 7.2                         |                                    |                           |
| <b>Shimadzu LC Driver for Chromeleon</b> | System Controller | CBM-20A, CBM-20A Lite          | 3.70     |                | 3           |   | 7.2                         |                                    |                           |
| <b>Shimadzu LC Driver for Chromeleon</b> | Pump              | LC-30AD                        | 3.21     |                | 3           |   | 7.2                         |                                    |                           |
| <b>Shimadzu LC Driver for Chromeleon</b> | Pump              | LC-20ADXR                      | 2.12     |                | 3           |   | 7.2                         |                                    |                           |
| <b>Shimadzu LC Driver for Chromeleon</b> | Pump              | LC-20AD                        | 2.11     |                | 3           |   | 7.2                         |                                    |                           |
| <b>Shimadzu LC Driver for Chromeleon</b> | Pump              | LC-20AT                        | 2.01     |                | 3           |   | 7.2                         |                                    |                           |

| Manufacturer - System / Family    | Type          | Model   | Firmware                              | Interface Type | Inst. Class | Options Required | Required Chromeleon Version | Operating Systems | 247 Instrument Controller |
|-----------------------------------|---------------|---|---------------------------------------|----------------|-------------|------------------|-----------------------------|-------------------|---------------------------|
| Shimadzu LC Driver for Chromeleon | Pump          | LC-20Ai   | 1.01                                  |                | 3           |                  | 7.2                         |                   |                           |
| Shimadzu LC Driver for Chromeleon | Pump          | LC-20AB   | 2.01                                  |                | 3           |                  | 7.2                         |                   |                           |
| Shimadzu LC Driver for Chromeleon | Column Oven   | CTO-30AS  | 3.10                                  |                | 3           |                  | 7.2                         |                   |                           |
| Shimadzu LC Driver for Chromeleon | Column Oven   | CTO-30A   | 3.11                                  |                | 3           |                  | 7.2                         |                   |                           |
| Shimadzu LC Driver for Chromeleon | Column Oven   | CTO-20A, CTO-20AC   | 2.10                                  |                | 3           |                  | 7.2                         |                   |                           |
| Shimadzu LC Driver for Chromeleon | Autosampler   | SIL-30ACMP  | 3.21                                  |                | 3           |                  | 7.2                         |                   |                           |
| Shimadzu LC Driver for Chromeleon | Autosampler   | SIL-30AC  | 3.22                                  |                | 3           |                  | 7.2                         |                   |                           |
| Shimadzu LC Driver for Chromeleon | Autosampler   | SIL-20A(HT, UFLC),<br>SIL-20AC(HT, UFLC)<br>SIL-20AXR, SIL-20ACXR | Old board: 1.31<br>New board:<br>2.12 |                | 3           |                  | 7.2                         |                   |                           |
| Shimadzu LC Driver for Chromeleon | Autosampler   | Rack Changer II   | 2.00                                  |                | 3           |                  | 7.2                         |                   |                           |
| Shimadzu LC Driver for Chromeleon | Autosampler   | Rack Changer, Rack Changer C                                      | 1.11                                  |                | 3           |                  | 7.2                         |                   |                           |
| Shimadzu LC Driver for Chromeleon | Subcontroller | Subcontroller VP<br>(Option Box VP)                               | 5.22                                  |                | 3           |                  | 7.2                         |                   |                           |
| Shimadzu LC Driver for Chromeleon | Detector      | SPD-M30A  | 1.04 or 4.04                          |                | 3           |                  | 7.2                         |                   |                           |

| Manufacturer - System / Family           | Type          | Model   | Firmware     | Interface Type | Inst. Class | Options Required | Required Chromeleon Version | Operating Systems | 247 Instrument Controller |
|--|---------------|---|--------------|----------------|-------------|------------------|-----------------------------|-------------------|---------------------------|
| <b>Shimadzu LC Driver for Chromeleon</b> | Detector      | SPD-M20A  | 2.03         |                | 3           |                  | 7.2                         |                   |                           |
| <b>Shimadzu LC Driver for Chromeleon</b> | Detector      | SPD-20A, SPD-20AV   | 2.03 or 3.03 |                | 3           |                  | 7.2                         |                   |                           |
| <b>Shimadzu LC Driver for Chromeleon</b> | Detector      | RF-20A, RF-20AXS  | 2.02         |                | 3           |                  | 7.2                         |                   |                           |
| <b>Shimadzu LC Driver for Chromeleon</b> | Detector      | RID-20A   | 1.04 or 2.04 |                | 3           |                  | 7.2                         |                   |                           |
| <b>Shimadzu LC Driver for Chromeleon</b> | Detector      | AD  | -            |                | 3           |                  | 7.2                         |                   |                           |
| <b>Shimadzu LC Driver for Chromeleon</b> | i-Series      | LC-2030<br>LC-2030C<br>LC-2030C 3D<br>LC-2040C<br>LC-2040C 3D<br>LC-2030C LT<br>LC-2040C LT<br>LC-2040C MT<br>LC-2040C 3D MT  | 2.30         |                | 3           |                  | 7.2                         |                   |                           |
| <b>Shimadzu LC Driver for Chromeleon</b> | i-Series Plus | LC-2030 Plus<br>LC-2030C Plus<br>LC-2030C 3D Plus<br>LC-2040C Plus<br>LC-2040C 3D Plus<br>LC-2030C LT Plus<br>LC-2040C LT Plus<br>LC-2040C MT Plus<br>LC-2040C 3D MT Plus | 3.02         |                | 3           |                  | 7.2                         |                   |                           |



| Manufacturer - System / Family    | Type                 | Model  | Firmware | Interface Type | Inst. Class | Options Required | Required Chromeleon Version | Operating Systems | 247 Instrument Controller |
|-----------------------------------|----------------------|--|----------|----------------|-------------|------------------|-----------------------------|-------------------|---------------------------|
| Shimadzu LC Driver for Chromeleon | System Controller    | SCL-40, CBM-40, CBM-40lite   | 1.20     |                | 3           |                  | 7.2                         |                   |                           |
| Shimadzu LC Driver for Chromeleon | Mobile Phase Monitor | MPM-40   | 1.02     |                | 3           |                  | 7.2                         |                   |                           |
| Shimadzu LC Driver for Chromeleon | Pump                 | LC-40D, LC-40D XR, LC-40B<br>XR, LC-40D XS, LC-40D X3,<br>LC-40B X3  | 1.02     |                | 3           |                  | 7.2                         |                   |                           |
| Shimadzu LC Driver for Chromeleon | Autosampler          | SIL-40, SIL-40C, SIL-40 XR,<br>SIL-40C XR, SIL-40C XS,<br>SIL-40C X3 | 1.05     |                | 3           |                  | 7.2                         |                   |                           |
| Shimadzu LC Driver for Chromeleon | Autosampler          | PlateChanger   | 1.04     |                | 3           |                  | 7.2                         |                   |                           |
| Shimadzu LC Driver for Chromeleon | Column Oven          | CTO-40C, CTO-40S   | 1.00     |                | 3           |                  | 7.2                         |                   |                           |
| Shimadzu LC Driver for Chromeleon | Detector             | SPD-40, SPD-40V  | 1.02     |                | 3           |                  | 7.2                         |                   |                           |
| Shimadzu LC Driver for Chromeleon | Detector             | RID-20A  | 2.04     |                | 3           |                  | 7.2                         |                   |                           |
| Shimadzu LC Driver for Chromeleon | Detector             | RF-20A, RF-20AXS   | 2.02     |                | 3           |                  | 7.2                         |                   |                           |
| Shimadzu LC Driver for Chromeleon | Detector             | CDD-10Avp  | 5.10     |                | 3           |                  | 7.2                         |                   |                           |
| Shimadzu LC Driver for Chromeleon | Detector             | Optional AD Board  | -        |                | 3           |                  | 7.2                         |                   |                           |

| Manufacturer - System / Family    | Type                                    | Model   | Firmware   | Interface Type | Inst. Class | Options Required | Required Chromeleon Version | Operating Systems | 247 Instrument Controller |
|-----------------------------------|---|---|--|----------------|-------------|------------------|-----------------------------|-------------------|---------------------------|
| Shimadzu LC Driver for Chromeleon | Detector                                | SPD-M40   | 2.00   |                | 3           |                  | 7.2                         |                   |                           |
| Shimadzu LC Driver for Chromeleon | Mobile phase Flow line Switching valve  | LPGE Unit, FCV-11AL, FCV-11ALS<br>Recycling valve for UV detector | -  |                | 3           |                  | 7.2                         |                   |                           |
| Shimadzu LC Driver for Chromeleon | High pressure Flow line Switching valve | FCV-0206, FCV-0607, FCV-0206H, FCV-0607H, FCV-0206H3, FCV-0607H3  | -  |                | 3           |                  | 7.2                         |                   |                           |
| Shimadzu LC Driver for Chromeleon | High pressure Flow line Switching valve | FCV-DR  | 1.02   |                | 3           |                  | 7.2                         |                   |                           |
| Shimadzu GC Driver for Chromeleon | GC Systems                              |   |  |                |             |                  | 7.2                         |                   |                           |
| Shimadzu GC Driver for Chromeleon | Gas Chromatograph                       | GC-2030 (Nexis)   | 1.09 or later                                      |                | 2           |                  | 7.2                         |                   |                           |
| Shimadzu GC Driver for Chromeleon | GC Autoinjector                         | AOC-20i   | 2.10 or later                                      |                | 2           |                  | 7.2                         |                   |                           |
| Shimadzu GC Driver for Chromeleon | GC Autoinjector and Autosampler         | AOC-20i+<br>AOC-20s   | 2.10 or later (AOC-20i)<br>2.40 or later (AOC-20s) |                | 2           |                  | 7.2                         |                   |                           |
| Shimadzu GC Driver for Chromeleon | GC Headspace Autosampler                | HS-20   | 1.04.03 or later                                   |                | 2           |                  | 7.2                         |                   |                           |
| Shimadzu GC Driver for Chromeleon | GC Headspace Autosampler                | HS-10   | 1.00 or later                                      |                | 2           |                  | 7.2                         |                   |                           |

| Manufacturer - System / Family    | Type                            | Model              | Firmware | Interface Type | Inst. Class | Options Required | Required Chromeleon Version | Operating Systems | 247 Instrument Controller |
|-----------------------------------|---------------------------------|--------------------|----------|----------------|-------------|------------------|-----------------------------|-------------------|---------------------------|
| Shimadzu GC Driver for Chromeleon | GC Injection port               | SPL-2030           |          |                | 2           |                  | 7.2                         |                   |                           |
| Shimadzu GC Driver for Chromeleon | GC Injection port               | WBI-2030           |          |                | 2           |                  | 7.2                         |                   |                           |
| Shimadzu GC Driver for Chromeleon | GC Injection port               | OCI-2030           |          |                | 2           |                  | 7.2                         |                   |                           |
| Shimadzu GC Driver for Chromeleon | GC Injection port               | PTV-2030           |          |                | 2           |                  | 7.2                         |                   |                           |
| Shimadzu GC Driver for Chromeleon | GC Detector                     | FID-2030           |          |                | 2           |                  | 7.2                         |                   |                           |
| Shimadzu GC Driver for Chromeleon | GC Detector                     | TCD-2030           |          |                | 2           |                  | 7.2                         |                   |                           |
| Shimadzu GC Driver for Chromeleon | GC Detector                     | ECD-2010 Exceed    |          |                | 2           |                  | 7.2                         |                   |                           |
| Shimadzu GC Driver for Chromeleon | GC Detector                     | FPD-2030           |          |                | 2           |                  | 7.2                         |                   |                           |
| Shimadzu GC Driver for Chromeleon | GC Detector                     | FTD-2030           |          |                | 2           |                  | 7.2                         |                   |                           |
| Shimadzu GC Driver for Chromeleon | GC Detector                     | BID-2030           |          |                | 2           |                  | 7.2                         |                   |                           |
| Shimadzu GC Driver for Chromeleon | GC Detector                     | SCD-2030           |          |                | 2           |                  | 7.2                         |                   |                           |
| Shimadzu GC Driver for Chromeleon | Advanced Flow Technologies(AFT) | Back flush         |          |                | 2           |                  | 7.2                         |                   |                           |
| Shimadzu GC Driver for Chromeleon | Advanced Flow Technologies(AFT) | Detector Splitting |          |                | 2           |                  | 7.2                         |                   |                           |

| Manufacturer - System / Family    | Type                            | Model                                     | Firmware                             | Interface Type | Inst. Class | Options Required | Required Chromeleon Version | Operating Systems  | 247 Instrument Controller |
|-----------------------------------|---------------------------------|---|--------------------------------------|----------------|-------------|------------------|-----------------------------|--|---------------------------|
| Shimadzu GC Driver for Chromeleon | Advanced Flow Technologies(AFT) | Detector Switching                        |                                      |                | 2           |                  | 7.2                         |  |                           |
| Shimadzu GC Driver for Chromeleon | Advanced Flow Technologies(AFT) | Heart-Cut                                 |                                      |                | 2           |                  | 7.2                         |  |                           |
| Shimadzu GC Driver for Chromeleon | Additional heater               | AUX heater                                |                                      |                | 2           |                  | 7.2                         |  |                           |
| Shimadzu GC Driver for Chromeleon | Additional flow                 | APC(Aux3ch)                               |                                      |                | 2           |                  | 7.2                         |  |                           |
| Shimadzu GC Driver for Chromeleon | Additional flow                 | APC(Aux2ch)                               |                                      |                | 2           |                  | 7.2                         |  |                           |
| Shimadzu GC Driver for Chromeleon | Additional flow                 | APC(Aux1ch)                               |                                      |                | 2           |                  | 7.2                         |  |                           |
| Shimadzu GC Driver for Chromeleon | Option                          | CRG-2030                                  |                                      |                | 2           |                  | 7.2                         |  |                           |
| Shimadzu GC Driver for Chromeleon | Option                          | PRG-2010Plus                              |                                      |                | 2           |                  | 7.2                         |  |                           |
| Shimadzu GC Driver for Chromeleon | Option                          | PRG Box                                   |                                      |                | 2           |                  | 7.2                         |  |                           |
| Shimadzu - GC 2010/GC 2010Plus    | Gas Chromatograph               | GC 2010/GC-2010Plus                       | GC-2010: 1.1150, GC-2010Plus: 2.1000 | RS232          | 2           |                  | 7.1 SR2 MUa                 | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Shimadzu - GC 2010/GC 2010Plus    | GC Autoinjector                 | AOC-20i                                   |                                      | (via GC)       | 2           |                  | 7.1 SR2 MUa                 | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Shimadzu - GC 2010/GC 2010Plus    | GC Autosampler                  | AOC-20s                                   |                                      | (via GC)       | 2           |                  | 7.1 SR2 MUa                 | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Shimadzu - GC 2010/GC 2010Plus    | GC Inlet                        | Split/Splitless Injection Unit (SPL-2010) |                                      | (via GC)       | 2           |                  | 7.1 SR2 MUa                 | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |

| Manufacturer - System / Family | Type        | Model  | Firmware | Interface Type | Inst. Class | Options Required | Required Chromeleon Version | Operating Systems  | 247 Instrument Controller |
|--------------------------------|-------------|--|----------|----------------|-------------|------------------|-----------------------------|--|---------------------------|
| Shimadzu - GC 2010/GC 2010Plus | GC Inlet    | On-column/Programmable Temperature Vaporizer Injection Unit (OCI/PTV-2010) |          | (via GC)       | 2           |                  | 7.1 SR2 MUa                 | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Shimadzu - GC 2010/GC 2010Plus | GC Detector | Flame Ionization Detector (FID)  |          | (via GC)       | 2           |                  | 7.1 SR2 MUa                 | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Shimadzu - GC 2010/GC 2010Plus | GC Detector | Electron Capture Detector (ECD), (ECD-2010 Plus)                           |          | (via GC)       | 2           |                  | 7.1 SR2 MUa                 | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Shimadzu - GC 2010/GC 2010Plus | GC Detector | Thermal Conductivity Detector (TCD), (TCD-2010 Plus)                       |          | (via GC)       | 2           |                  | 7.1 SR2 MUa                 | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Shimadzu - GC 2010/GC 2010Plus | GC Detector | Flame Photometric Detector (FPD), (FPD-2010 Plus)                          |          | (via GC)       | 2           |                  | 7.1 SR2 MUa                 | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Shimadzu - GC 2010/GC 2010Plus | GC Detector | Flame Thermionic Detector(FTD/NPD), (FTD-2010 Plus)                        |          | (via GC)       | 2           |                  | 7.1 SR2 MUa                 | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Shimadzu - GC 2010/GC 2010Plus | GC Detector | Pulsed Discharge Helium Ionization Detector (PDHID)                        |          | (via GC)       | 2           |                  | 7.1 SR2 MUa                 | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Shimadzu - GC 2010/GC 2010Plus | GC Relays   | PRG-2010 Plus  |          | (via GC)       | 2           |                  | 7.1 SR2 MUa                 | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| Shimadzu - GC 2010/GC 2010Plus | GC Detector | Other (allows digital acquisition of 3rd party detector using AD board)    |          | (via GC)       | 2           |                  | 7.1 SR2 MUa                 | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |

| Manufacturer - System / Family        | Type                         | Model   | Firmware | Interface Type | Inst. Class | Options Required | Required Chromeleon Version | Operating Systems  | 247 Instrument Controller |
|---------------------------------------|------------------------------|---|----------|----------------|-------------|------------------|-----------------------------|--|---------------------------|
| <b>Shimadzu - GC 2010/GC 2010Plus</b> | GC Auxiliary                 | Auxiliary Advanced Pressure Control (AuxAPC)                |          | (via GC)       | 2           |                  | 7.1 SR2 MUa                 | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Shimadzu – GC 2014</b>             | Gas Chromatograph            | GC 2014   | 1.1150   | RS232          | 2           |                  | 7.1 SR2 MUa                 | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Shimadzu – GC 2014</b>             | GC Autoinjector              | AOC-20i   |          | (via GC)       | 2           |                  | 7.1 SR2 MUa                 | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Shimadzu – GC 2014</b>             | GC Autosampler               | AOC-20s   |          | (via GC)       | 2           |                  | 7.1 SR2 MUa                 | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Shimadzu – GC 2014</b>             | GC Inlet                     | Split/Splitless Injection Unit                              |          | (via GC)       | 2           |                  | 7.1 SR2 MUa                 | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Shimadzu – GC 2014</b>             | GC Inlet                     | On-column/Programmable Temperature Vaporizer Injection Unit |          | (via GC)       | 2           |                  | 7.1 SR2 MUa                 | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Shimadzu – GC 2014</b>             | GC Inlet                     | Dual Packed Injection Unit                                  |          | (via GC)       | 2           |                  | 7.1 SR2 MUa                 | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Shimadzu – GC 2014</b>             | GC Detector                  | Flame Ionization Detector (FID)                             |          | (via GC)       | 2           |                  | 7.1 SR2 MUa                 | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Shimadzu – GC 2014</b>             | GC Detector                  | Electron Capture Detector (ECD), (Packed ECD)               |          | (via GC)       | 2           |                  | 7.1 SR2 MUa                 | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Shimadzu LC-10/20/30</b>           | HPLC                         |   |          |                |             |                  |                             |  |                           |
| <b>Shimadzu – LC 10</b>               | System Controller (required) | SCL-10Avp or built-in (SIL-HTA / SIL-HTC)                   | 5.42     | RS232 [5]      | 3           |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Shimadzu – LC 10</b>               | Pump                         | LC-10AD, LC-10Ai, LC-10AT                                   | 3.10     | (via SCL)      | 3           |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |

| Manufacturer - System / Family | Type                     | Model               | Firmware | Interface Type | Inst. Class | Options Required | Required Chromeleon Version | Operating Systems                                     | 247 Instrument Controller |
|--------------------------------|--------------------------|---------------------|----------|----------------|-------------|------------------|-----------------------------|---|---------------------------|
| <b>Shimadzu – LC 10</b>        | Pump                     | LC10ADvp, LC-10ATvp | 5.28     | (via SCL)      | 3           |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> | TDS5 (WES7)               |
| <b>Shimadzu – LC 10</b>        | Pump                     | LC-10AS, LC-10ASvp  | 5.28     | (via SCL)      | 3           |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> | TDS5 (WES7)               |
| <b>Shimadzu – LC 10</b>        | LPG Solvent Valve Module | FCV-10AL(vp)        | -        | (via SCL)      | 3           |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> | TDS5 (WES7)               |
| <b>Shimadzu – LC 10</b>        | LPG Solvent Valve Module | FCV-11AL(S)         | -        | (via SCL)      | 3           |                  | 7.1 SR1                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> | TDS5 (WES7)               |
| <b>Shimadzu – LC 10</b>        | LPGE proportioning valve | LPGE Unit           | -        | (via SCL)      | 3           |                  | 7.1 SR1                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> | TDS5 (WES7)               |
| <b>Shimadzu – LC 10</b>        | Autosampler              | SIL-HTA             | 6.03     | (via SCL)      | 3           |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> | TDS5 (WES7)               |
| <b>Shimadzu – LC 10</b>        | Autosampler              | SIL-HTC             | 5.32     | (via SCL)      | 3           |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> | TDS5 (WES7)               |
| <b>Shimadzu – LC 10</b>        | Autosampler              | SIL-10ADvp          | 5.32     | (via SCL)      | 3           |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> | TDS5 (WES7)               |
| <b>Shimadzu – LC 10</b>        | Autosampler              | SIL-10AXL           | 3.61     | (via SCL)      | 3           |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> | TDS5 (WES7)               |
| <b>Shimadzu – LC 10</b>        | Autosampler              | SIL-10A             | 4.10     | (via SCL)      | 3           |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> | TDS5 (WES7)               |
| <b>Shimadzu – LC 10</b>        | Autosampler              | SIL-10AF            | 4.10     | (via SCL)      | 3           |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> | TDS5 (WES7)               |
| <b>Shimadzu – LC 10</b>        | Autosampler              | SIL-10Ai            | 4.10     | (via SCL)      | 3           |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> | TDS5 (WES7)               |
| <b>Shimadzu – LC 10</b>        | Column Oven              | CTO-10A, CTO-10Avp  | 5.24     | (via SCL)      | 3           |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> | TDS5 (WES7)               |

| Manufacturer - System / Family      | Type                         | Model                 | Firmware         | Interface Type | Inst. Class | Options Required | Required Chromeleon Version | Operating Systems  | 247 Instrument Controller |
|-------------------------------------|------------------------------|-----------------------|------------------|----------------|-------------|------------------|-----------------------------|--|---------------------------|
| <b>Shimadzu – LC 10</b>             | Column Oven                  | CTO-10AC, CTO-10ACvp  | 5.24             | (via SCL)      | 3           |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |
| <b>Shimadzu – LC 10</b>             | Column Oven                  | CTO-10ASvp            | 5.24             | (via SCL)      | 3           |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |
| <b>Shimadzu – LC 10</b>             | UV-VIS Detector              | SPD-10AVvp            | 5.23             | (via SCL)      | 3           |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |
| <b>Shimadzu – LC 10</b>             | UV-VIS Detector              | SPD-10Avp             | 5.23             | (via SCL)      | 3           |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |
| <b>Shimadzu – LC 10</b>             | UV-VIS Detector              | SPD-10A               | 3.00             | (via SCL)      | 3           |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |
| <b>Shimadzu – LC 10</b>             | UV-VIS Detector              | SPD-10AV              | 3.00             | (via SCL)      | 3           |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |
| <b>Shimadzu – LC 10</b>             | Refractive Index Detector    | RID-10A               | 3.13             | (via SCL)      | 3           |                  | 7.2 SR4                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |
| <b>Shimadzu – LC 10</b>             | Photodiode Array Detector    | SPD-M10Avp            | 3.3              | SCSI [4,10]    | 3           | 3D               | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> [10]                                   | TDS5 (WES7)               |
| <b>Shimadzu – LC 20</b>             | Photodiode Array Detector    | SPD-M20A              | 1.05, 1.08, 1.10 | LAN [5]        | 3           | 3D               | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Shimadzu - LC 2010</b>           | LC System                    | LC 2010A              | 1.13, 3.01       | RS232 [5]      | 3           |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Shimadzu - LC 2010</b>           | LC System                    | LC 2010C              | 1.13, 3.01       | RS232 [5]      | 3           |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Shimadzu - LC-20A Prominence</b> | System Controller (required) | CBM-20A / CBM-20Alite | 1.20             | LAN / RS232    | 3           |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Shimadzu - LC-20A Prominence</b> | Degasser                     | DGU-20AS              | -                | (via CBM)      | 3           |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |



| Manufacturer - System / Family      | Type        | Model                 | Firmware                                      | Interface Type | Inst. Class | Options Required | Required Chromeleon Version | Operating Systems  | 247 Instrument Controller |
|-------------------------------------|-------------|-----------------------|---|----------------|-------------|------------------|-----------------------------|--|---------------------------|
| <b>Shimadzu - LC-20A Prominence</b> | Pump        | LC-20AT               | 1.06  | (via CBM)      | 3           |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Shimadzu - LC-20A Prominence</b> | Pump        | LC-20AD               | 1.10  | (via CBM)      | 3           |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Shimadzu - LC-20A Prominence</b> | Pump        | LC-20AB               | 1.10  | (via CBM)      | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Shimadzu - LC-20A Prominence</b> | Pump        | LC-20ADX              | 1.21  | (via CBM)      | 3           |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Shimadzu - LC-20A Prominence</b> | Autosampler | SIL-20A, SIL-20AC     | 1.04  | (via CBM)      | 3           |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Shimadzu - LC-20A Prominence</b> | Autosampler | SIL-20AXR, SIL-20ACXR | 1.20  | (via CBM)      | 3           |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Shimadzu - LC-20A Prominence</b> | Column Oven | CTO-20AC, CTO-20A     | 1.06, 1.07                                    | (via CBM)      | 3           |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Shimadzu - LC-20A Prominence</b> | UV Detector | SPD-20AV, SPD-20A     | 1.04  | (via CBM)      | 3           |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10)           |
| <b>Shimadzu - LC-30A Nexera</b>     | Pump        | LC-30AD               | CBM-20A: 2.10, CBM-20A lite: 2.10, Pump: 2.10 | (via CBM)      | 3           |                  | 7.1 SR1                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> |                           |
| <b>Shimadzu - LC-30A Nexera</b>     | Autosampler | SIL-30AC              | CBM-20A: 2.10, CBM-20A lite: 2.10, Pump: 2.01 | (via CBM)      | 3           |                  | 7.1 SR1                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> |                           |
| <b>Shimadzu - LC-30A Nexera</b>     | Column Oven | CTO-30A               | CBM-20A: 2.10, CBM-20A lite: 2.10, Oven: 2.01 | (via CBM)      | 3           |                  | 7.1 SR1                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    |                           |

| Manufacturer - System / Family                           | Type                                  | Model                  | Firmware                        | Interface Type | Inst. Class | Options Required | Required Chromeleon Version | Operating Systems                                     | 247 Instrument Controller |
|--|---------------------------------------|------------------------|---------------------------------|----------------|-------------|------------------|-----------------------------|---|---------------------------|
| <b>Shodex</b>  | Refractive Index Detector             | RI-101, RI-102, RI-104 | 1.19, 1.09                      | RS232          | 1           |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> |                           |
| <b>SoftA</b>   | Evaporative Light Scattering Detector | ELSD 2300              | AE31                            | USB            | 1           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup>                     |                           |
| <b>URG</b>   | Ambient Ion Monitor (AIM)             | URG-9000 A, B, C, D    | 1.0.3                           | RS232          | 1           |                  | 7.2 MUa                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> |                           |
| <b>Valco / VICI</b>                                      | Valve                                 | 2-position             | I-PD-AHX88RD, I-PD-EHX88RH      | RS232          | 1           |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> |                           |
| <b>Valco / VICI</b>                                      | Valve                                 | Multi-position         | I-PD-AMX88RA                    | RS232          | 1           |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> |                           |
| <b>Valco / VICI - Universal Electric Actuator series</b> | Switching Valve                       | EUHB, EUHA             | Dec 15 2011-15:02:20-UA_MAIN_CT | RS232          | 1           |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> |                           |
| <b>Varian - Varian 38x-LC</b>                            | Evaporative Light Scattering Detector | 380-LC ELSD            | 22.02.00                        | RS232          | 1           |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> |                           |
| <b>Varian - Varian 38x-LC</b>                            | Evaporative Light Scattering Detector | 385-LC ELSD            | 22.02.00                        | RS232          | 1           |                  | 7.0                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> |                           |
| <b>Varian/Rainin</b>                                     | Cooled                                | SD-1                   | -                               | RS232          | 3           |                  | 7.2 MUb                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> |                           |
| <b>Varian/Rainin</b>                                     | LC Pump                               | SD-200                 | -                               | RS232          | 3           |                  | 7.2 MUa                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> |                           |
| <b>Varian/Rainin</b>                                     | LC Pump                               | SD-300                 | -                               | RS232          | 3           |                  | 7.2 MUa                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> |                           |
| <b>Varian/Rainin</b>                                     | LC Pump                               | ProStar PrepStar 2xx   | -                               | RS232          | 3           |                  | 7.2 MUa                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> |                           |
| <b>Varian – Varian 3800</b>                              | Gas Chromatograph                     | 3800                   | 3.3.5D                          | LAN (Coax)     | 2           |                  | 7.2 SR2                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> |                           |

| Manufacturer - System / Family | Type              | Model                                     | Firmware | Interface Type | Inst. Class | Options Required  | Required Chromeleon Version | Operating Systems                                     | 247 Instrument Controller |
|--------------------------------|-------------------|---|----------|----------------|-------------|---|-----------------------------|---|---------------------------|
| <b>Varian – Varian 3800</b>    | Gas Autosampler   | 8100/8200                                 |          | (via GC)       | 2           |   | 7.2 SR2                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> |                           |
| <b>Varian – Varian 3800</b>    | GC Autosampler    | 8400/8410                                 |          | (via GC)       | 2           |   | 7.2 SR2                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> |                           |
| <b>Varian – Varian 3800</b>    | GC Inlet          | On-Column Injector (1041)                 |          | (via GC)       | 2           |   | 7.2 SR2                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> |                           |
| <b>Varian – Varian 3800</b>    | GC Inlet          | Universal Capillary Injector (1079)       |          | (via GC)       | 2           |   | 7.2 SR2                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> |                           |
| <b>Varian – Varian 3800</b>    | GC Inlet          | Split/Splitless Capillary Injector (1177) |          | (via GC)       | 2           |   | 7.2 SR2                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> |                           |
| <b>Varian – Varian 3800</b>    | GC Detector       | Flame Ionization Detector (FID)           |          | (via GC)       | 2           |   | 7.2 SR2                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> |                           |
| <b>Varian – Varian 3800</b>    | GC Detector       | Thermal Conductivity Detector (TCD)       |          | (via GC)       | 2           |   | 7.2 SR2                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> |                           |
| <b>Varian – Varian 3800</b>    | GC Detector       | Electron Capture Detector (ECD)           |          | (via GC)       | 2           |   | 7.2 SR2                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> |                           |
| <b>Varian – Varian 3800</b>    | GC Detector       | Thermionic Specific Detector (TSD)        |          | (via GC)       | 2           |   | 7.2 SR2                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> |                           |
| <b>Varian – Varian 3900 GC</b> | Gas Chromatograph | Varian / Bruker 3900-GC                   | 6.18     | LAN            | 2           | (Driver not installed by default. Please launch standalone installer in the /Drivers/ folder of the Chromeleon distributable) | 7.2 SR5                     | 7 <sup>64</sup> , 10 <sup>64</sup>                    |                           |

| Manufacturer - System / Family | Type                  | Model  | Firmware                     | Interface Type | Inst. Class | Options Required  | Required Chromeleon Version | Operating Systems  | 247 Instrument Controller |
|--------------------------------|-----------------------|--|------------------------------|----------------|-------------|---|-----------------------------|--|---------------------------|
| <b>Varian – Varian 3900 GC</b> | Gas Chromatograph     | Varian / Bruker / SCION 430-GC   | 7.0                          | LAN            | 2           | (Driver not installed by default. Please launch standalone installer in the /Drivers/ folder of the Chromeleon distributable) | 7.2 SR5                     | 7 <sup>64</sup> , 10 <sup>64</sup>                                       |                           |
| <b>Varian – Varian 3900 GC</b> | Gas Chromatograph     | Varian / Bruker / SCION 450-GC   | 5.07                         | LAN            | 2           | (Driver not installed by default. Please launch standalone installer in the /Drivers/ folder of the Chromeleon distributable) | 7.2 SR5                     | 7 <sup>64</sup> , 10 <sup>64</sup>                                       |                           |
| <b>Waters</b>                  | LC Separation Module  | Alliance 2690/2695 (XE) Separations Module (e2695 supported via GPIB) [19] | 1.20                         | GPIB           | 3           |   | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7) [21]          |
| <b>Waters</b>                  | Diode-Array Detector  | 996/2996   | 2.30                         | GPIB           | 3           |   | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7) [21]          |
| <b>Waters</b>                  | Fluorescence Detector | 474  |                              | RS232          | 3           |   | 7.2 MUB                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup>                    | TDS5 (WES7)               |
| <b>Waters [6]</b>              | Fluorescence Detector | 2475   | Driver Pack 2019 R1/ICS 1.73 | LAN            | 3           | 3D (optional)   | 7.2.9                       | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup>                     | TDS5 (WES7, 10) [22]      |

| Manufacturer - System / Family | Type                                   | Model                  | Firmware                     | Interface Type | Inst. Class | Options Required | Required Chromeleon Version | Operating Systems  | 247 Instrument Controller |
|--------------------------------|--|------------------------|------------------------------|----------------|-------------|------------------|-----------------------------|--|---------------------------|
| <b>Waters</b>                  | Refractive Index Detector              | 2414                   | Driver Pack 2019 R1/ICS 1.73 | LAN            | 3           |                  | 7.2.9                       | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup>                     | TDS5 (WES7, 10) [22]      |
| <b>Waters</b>                  | UV Detector, 2 channels                | 2487                   | 1.01                         | GPIB           | 3           |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10) [22]      |
| <b>Waters [6]</b>              | UV-VIS Detector                        | 2489                   | Driver Pack 2019 R1/ICS 1.73 | LAN            | 3           |                  | 7.1 SR1                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup>                     | TDS5 (WES7, 10) [22]      |
| <b>Waters [6]</b>              | Diode-Array Detector                   | 2998                   | Driver Pack 2019 R1/ICS 1.73 | LAN            | 3           | 3D               | 7.1 SR1                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup>                     | TDS5 (WES7, 10) [22]      |
| <b>Waters - ACQUITY [6]</b>    | Pump                                   | Binary Solvent Manager | Driver Pack 2019 R1/ICS 1.73 | LAN            | 3           |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup>                     | TDS5 (WES7, 10) [22]      |
| <b>Waters - ACQUITY [6]</b>    | LC Autosampler                         | Sample Manager         | Driver Pack 2019 R1/ICS 1.73 | LAN            | 3           |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup>                     | TDS5 (WES7, 10) [22]      |
| <b>Waters - ACQUITY [6]</b>    | Column Oven                            | Column Manager         | Driver Pack 2019 R1/ICS 1.73 | LAN            | 3           |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup>                     | TDS5 (WES7, 10) [22]      |
| <b>Waters - ACQUITY [6]</b>    | Diode-Array Detector                   | PDA Detector           | Driver Pack 2019 R1/ICS 1.73 | LAN            | 3           | 3D               | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup>                     | TDS5 (WES7, 10) [22]      |
| <b>Waters - ACQUITY [6]</b>    | Evaporative Light Scattering Detctecor | ELS Detector           | Driver Pack 2019 R1/ICS 1.73 | LAN            | 3           |                  | 7.2.9                       | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup>                     | TDS5 (WES7, 10) [22]      |
| <b>Waters - ACQUITY [6]</b>    | UV Detector                            | Tunable UV Detector    | Driver Pack 2019 R1/ICS 1.73 | LAN            | 3           |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup>                     | TDS5 (WES7, 10) [22]      |

| Manufacturer - System / Family      | Type                     | Model                          | Firmware                     | Interface Type | Inst. Class | Options Required | Required Chromeleon Version | Operating Systems                                    | 247 Instrument Controller |
|-------------------------------------|--------------------------|--------------------------------|------------------------------|----------------|-------------|------------------|-----------------------------|--|---------------------------|
| <b>Waters - ACQUITY [6]</b>         | Column Heater / Cooler   | Column Heater / Cooler         | Driver Pack 2019 R1/ICS 1.73 | LAN            | 3           |                  | 7.1                         | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10) [22]      |
| <b>Waters - ACQUITY [6]</b>         | Sample Organizer         | Sample Organizer               | Driver Pack 2019 R1/ICS 1.73 | LAN            | 3           |                  | 7.1 SR1                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10) [22]      |
| <b>Waters - ACQUITY [6]</b>         | Column Manager Auxiliary | Column Manager Aux             | Driver Pack 2019 R1/ICS 1.73 | Proprietary    | 3           |                  | 7.1 SR1                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10) [22]      |
| <b>Waters – ACQUITY [6]</b>         | Fluorescence Detector    | FLR Detector                   | Driver Pack 2019 R1/ICS 1.73 | LAN            | 3           | 3D (optional)    | 7.1 SR2                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10) [22]      |
| <b>Waters – ACQUITY ARC [6]</b>     | Pump                     | Quaternary Solvent Manager - R | Driver Pack 2019 R1/ICS 1.73 | LAN            | 3           |                  | 7.2.9                       | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10) [22]      |
| <b>Waters – ACQUITY ARC [6]</b>     | LC Autosampler           | Sample Manager (FTN) - R       | Driver Pack 2019 R1/ICS 1.73 | LAN            | 3           |                  | 7.2.9                       | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10) [22]      |
| <b>Waters – ACQUITY H-Class [6]</b> | Pump                     | Quaternary Solvent Manager     | Driver Pack 2019 R1/ICS 1.73 | LAN            | 3           |                  | 7.1 SR1                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10) [22]      |
| <b>Waters – ACQUITY H-Class [6]</b> | LC Autosampler           | Sample Manager (FTN)           | Driver Pack 2019 R1/ICS 1.73 | LAN            | 3           |                  | 7.1 SR1                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10) [22]      |
| <b>Waters – ACQUITY I-Class [6]</b> | Pump                     | Binary Solvent Manager         | Driver Pack 2019 R1/ICS 1.73 | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10) [22]      |
| <b>Waters – ACQUITY I-Class [6]</b> | LC Autosampler           | Sample Manager (FTN)           | Driver Pack 2019 R1/ICS 1.73 | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10) [22]      |

| Manufacturer - System / Family      | Type           | Model               | Firmware                     | Interface Type | Inst. Class | Options Required | Required Chromeleon Version | Operating Systems                                    | 247 Instrument Controller |
|-------------------------------------|----------------|---------------------|------------------------------|----------------|-------------|------------------|-----------------------------|--|---------------------------|
| <b>Waters – ACQUITY I-Class [6]</b> | LC Autosampler | Sample Manager (FL) | Driver Pack 2019 R1/ICS 1.73 | LAN            | 3           |                  | 7.2 SR5                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 10 <sup>64</sup> | TDS5 (WES7, 10) [22]      |

[1] The Agilent 6850 GC driver has not been tested on Windows 7 or Windows 8.1. Based on extensive validation on Windows XP in the past it is anticipated, but not guaranteed, that it will function correctly.

[2] Not all modules are controlled by all versions of Agilent ICF. Details of Agilent ICF instrument control support may be found at <http://www.agilent.com/en-us/products/liquid-chromatography/icf> and <http://www.agilent.com/cs/library/usermanuals/public/DriverReleaseNoteA0214.pdf>. Please also refer to the Chromeleon Release Notes for limitations on the support of some modules.

[3] Windows 10 support requires Agilent Instrument Control Framework version A.02.14 or higher.

[4] Windows 7 only. Agilent 7697 Headspace requires Agilent Instrument Control Framework: A.02.03 DU1-HF2 or higher.

[5] Uses external OCX.

[6] Waters Driver Pack based driver. Waters Driver Pack 2017 R2 required (compatible with Windows 7 and Windows 10).

[7] PerkinElmer Clarus GC's provide a number of different FW versions: Entire system (not readable via RS232), AutoSystem board, PPC sub system and Autosampler.

[8] Uses external DLL.

[9] Extended support for the PerkinElmer Clarus 400, 480, 580, 590 and 690 GC's has not been fully tested. It is anticipated, but not guaranteed, that it will function correctly.

[10] Please contact your local Shimadzu Customer Support for a driver appropriate to your operating system.

[11] This driver is compatible with Chromeleon 7.2.6 and higher and supersedes the MS Software Installation Guide recommendation regarding the MSQ

[12] TSQ Quantiva and Endura support were introduced with Chromeleon 7.2 SR2 MUa. However, these instruments are compatible with the same instrument control software v3.0 as the TSQ Altis and Quantis.

[13] Exactive Series 2.9 should only be used in workstation environments and is not included on the Chromeleon DVD. Enterprise users should only use Exactive Series 2.8 SP1 at this time. Please contact your Chromeleon support representative for details on upgrading. Note that upgrading the driver will also involve upgrading to Foundation 3.1, which is not supported for other drivers should you later change which model of MS you wish to control.

[14] TSQ Series II Control of the Altis and Quantis should only be used in workstation environments and is not included on the Chromeleon DVD. Please contact your Chromeleon support representative for details on upgrading. Note that upgrading the driver will also involve upgrading to Foundation 3.1, which is not supported for other drivers should you later change which model of MS you wish to control.

[15] At high acquisition rates (100 to 200Hz) with long run times, there is an increased risk of problems which will then lead to a sequence abort.

[16] After a TRACE 1300 GC firmware upgrade, a "Get Configuration" must be performed on any existing TRACE1300 instruments in order for the new firmware version to be stored in the configuration and option to use the 600 Hz acquisition rate to become available in Chromeleon.

[17] The model number listed and later versions (model number with suffixes e.g. -01 or -02) are supported, if not otherwise noted.

[18] The PerkinElmer Clarus 500 GC driver has been tested with Chromeleon 7.2SR5 MUi on Windows 10. Support for the PerkinElmer Clarus 400, 480, 580, 590, 600, 680 and 690 on Windows 10 has not been tested. It is anticipated, but not guaranteed, that it will function correctly. Tests with Windows 10 and Startech PCI Multi I/O card did not reveal any differences in stability with respect to other Operating Systems. However, be aware that other Multi I/O solutions and corresponding Windows low level drivers still might have stability issues with Windows 10.

[19] It is not possible to control a column selection valve installed in a Waters Alliance 2695.

[20] Thermo Scientific 247 Instrument Controllers with Windows 10 firmware require Agilent ICF version A.02.06 Update 2 or higher to be installed.

[21] The driver currently available for the Keysight USB-to-GPIB adapter is not compatible with the security features of the Windows 10 Thermo Scientific 247 Instrument Controller, meaning GPIB connection cannot currently be used with the Windows 10 version of the 247 Instrument Controller.

[22] Thermo Scientific 247 Instrument Controllers with Windows 10 firmware require Waters Driver Pack 2019 R1 to be installed.

[23] Thermo Scientific FOCUS GC control with Thermo Scientific 247 Instrument Controller with Windows 10 firmware is only supported with USB-to-RS232 cable; a defect has been raised regarding PCIe RS232 card.



## 5 Obsolete Device Drivers

The following table lists instrument drivers that are considered obsolete. In some cases, they have been superseded by newer drivers which are incompatible with the old ones. They are included with the Chromeleon distributable for backward compatibility. However, support for these drivers is limited to a best effort as resources permit.

| Manufacturer - System / Family                                | Type               | Model   | Firmware | Interface Type | Instrument Class | Options Required | Required Chromeleon Version | Operating Systems                                     |
|---|--------------------|---|----------|----------------|------------------|------------------|-----------------------------|---|
| <b>CTC<br/>PAL-xt Series</b>                                  | Autosampler        |   |          |                |                  |                  |                             |   |
| <b>CTC PAL</b>  | GC Autosampler     | GC PAL  | 2.4      | RS232          | 2                |                  | 7.1 SR2                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> |
| <b>CTC PAL</b>  | GC Autosampler     | GC CombiPAL   | 2.4      | RS232          | 2                |                  | 7.1 SR2                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> |
| <b>CTC PAL</b>  | LC Autosampler     | LC PAL  | 2.4      | RS232          | 3                |                  | 7.1 SR2                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> |
| <b>CTC PAL</b>  | LC Autosampler     | HTC PAL   | 2.4      | RS232          | 3                |                  | 7.1 SR2                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> |
| <b>CTC PAL</b>  | LC Autosampler     | HTS PAL   | 2.4      | RS232          | 3                |                  | 7.1 SR2                     | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> |
| <b>Thermo Scientific<br/>TRACE 1300 GC (Classic Driver)</b>   | Gas Chromatography |   |          |                |                  |                  |                             |   |
| <b>Thermo Scientific – TRACE 1300 Series (classic driver)</b> | Gas Chromatograph  | TRACE 1300 / 1310                                       | 3.0      | LAN            | 1                |                  | 7.1 SR1 MUa                 | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> |
| <b>Thermo Scientific – TRACE 1300 Series (classic driver)</b> | GC Oven            | TRACE 1300 / 1310                                       | 1.06     | (via GC)       | 1                |                  | 7.1 SR1 MUa                 | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> |
| <b>Thermo Scientific – TRACE 1300 Series (classic driver)</b> | GC Auxiliary       | Auxiliary Pressure Module, Auxiliary Temperature Module | 2.01     | (via GC)       | 1                |                  | 7.1 SR1 MUa                 | 7 <sup>32</sup> , 7 <sup>64</sup> , 8.1 <sup>64</sup> |

|   |              |  |      |          |   |  |             |  |
|---|--------------|--|------|----------|---|--|-------------|--|
| Thermo Scientific – TRACE 1300 Series<br>(classic driver) | GC Auxiliary | Auxiliary Oven   | n.a. | (via GC) | 1 |  | 7.1 SR2 MUB | 7 <sup>32</sup> , 7 <sup>64</sup> ,<br>8.1 <sup>64</sup> |
| Thermo Scientific – TRACE 1300 Series<br>(classic driver) | HMI          | TRACE 1310   | 1.12 | (via GC) | 1 |  | 7.1 SR1 MUa | 7 <sup>32</sup> , 7 <sup>64</sup> ,<br>8.1 <sup>64</sup> |
| Thermo Scientific – TRACE 1300 Series<br>(classic driver) | GC Detector  | Flame Ionization<br>Detector (FID)   | 1.04 | (via GC) | 1 |  | 7.1 SR1 MUa | 7 <sup>32</sup> , 7 <sup>64</sup> ,<br>8.1 <sup>64</sup> |
| Thermo Scientific – TRACE 1300 Series<br>(classic driver) | GC Detector  | Thermal<br>Conductivity<br>Detector (TCD)  | 1.03 | (via GC) | 1 |  | 7.1 SR1 MUa | 7 <sup>32</sup> , 7 <sup>64</sup> ,<br>8.1 <sup>64</sup> |
| Thermo Scientific – TRACE 1300 Series<br>(classic driver) | GC Detector  | Nitrogen<br>Phosphorous<br>Detector (NPD)  | 1.06 | (via GC) | 1 |  | 7.1 SR1 MUa | 7 <sup>32</sup> , 7 <sup>64</sup> ,<br>8.1 <sup>64</sup> |
| Thermo Scientific – TRACE 1300 Series<br>(classic driver) | GC Detector  | Electron Capture<br>Detector (ECD)   | 1.03 | (via GC) | 1 |  | 7.1 SR1 MUa | 7 <sup>32</sup> , 7 <sup>64</sup> ,<br>8.1 <sup>64</sup> |
| Thermo Scientific – TRACE 1300 Series<br>(classic driver) | GC Detector  | Flame Photometric<br>Detector (FPD)  | 1.0  | (via GC) | 1 |  | 7.1 SR2 MUB | 7 <sup>32</sup> , 7 <sup>64</sup> ,<br>8.1 <sup>64</sup> |
| Thermo Scientific – TRACE 1300 Series<br>(classic driver) | GC Inlet     | Split/Splitless (with<br>and without<br>backflush)                                   | 2.0  | (via GC) | 1 |  | 7.1 SR1 MUa | 7 <sup>32</sup> , 7 <sup>64</sup> ,<br>8.1 <sup>64</sup> |
| Thermo Scientific – TRACE 1300 Series<br>(classic driver) | GC Inlet     | Helium Saver<br>Split/Splitless inlet  | 2.0  | (via GC) | 1 |  | 7.2 MUB     | 7 <sup>32</sup> , 7 <sup>64</sup> ,<br>8.1 <sup>64</sup> |
| Thermo Scientific – TRACE 1300 Series<br>(classic driver) | GC Inlet     | GSV Split/Splitless<br>inlet   | 2.0  | (via GC) | 1 |  | 7.2 MUB     | 7 <sup>32</sup> , 7 <sup>64</sup> ,<br>8.1 <sup>64</sup> |
| Thermo Scientific – TRACE 1300 Series<br>(classic driver) | GC Inlet     | Programmable<br>Temperature<br>Vaporization (PTV)<br>(with and without<br>backflush) | 1.0  | (via GC) | 1 |  | 7.1 SR1 MUa | 7 <sup>32</sup> , 7 <sup>64</sup> ,<br>8.1 <sup>64</sup> |

## 6 Device Drivers Available from Third Parties

The following table lists drivers that are developed, maintained, validated and commercialized by third parties. The drivers have been certified by Thermo Fisher Scientific to comply with the rules for Chromeleon driver development. However, Thermo Fisher Scientific takes no responsibility for the functionality of these drivers. The provider takes full responsibility for support and maintenance. The list is provided for your information, without any warranty. If you want to control any of the listed instruments, please contact the Driver Manufacturer for additional details.

| Manufacturer                           | Type                        | Model  | Instrument Class | Driver Manufacturer                  |
|--|-----------------------------|--|------------------|--------------------------------------|
| <b>Antec Scientific</b>                | ECD Detector                | DECADE Elite<br>DECADE Lite<br>ROXY Exceed                             | 3                | Antec Scientific                     |
| <b>Hitachi</b>                         | HPLC system                 | Chromaster   | 3                | Beyontics                            |
| <b>Global Analyzer Solutions (GAS)</b> | GC                          | GAS Compact GC 4   | 2                | Persistent                           |
| <b>Knauer</b>                          | HPLC system                 | Azura  | 3                | Knauer Wissenschaftliche Geräte GmbH |
| <b>Sedere</b>                          | ELS Detector                | SEDEX 90LT<br>SEDEX 85LT<br>SEDEX 80LT<br>SEDEX 100LT SEDEX LC &<br>FP | 3                | Sedere                               |
| <b>Superon</b>                         | Thermostat                  | Thermos  | 3                | Superon GmbH                         |
| <b>Teledyne Tekmar</b>                 | Purge and Trap Concentrator | Atomx XYZ  | 2                | Teledyne Technologies, Inc.          |
| <b>Teledyne Tekmar</b>                 | Purge and Trap Concentrator | Lumin  | 2                | Teledyne Technologies, Inc.          |
| <b>Wyatt</b>                           | Field Flow Fractionation    | Eclipse  | 3                | Superon GmbH                         |

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