

- **Sparging followed by blanketing for minimal He consumption**
- **Guaranteed carbonate free assuring highest reproducibility**
- **Easy in use, all parts provided for direct installation**
- **Mobile phase preparation and use under optimized conditions**

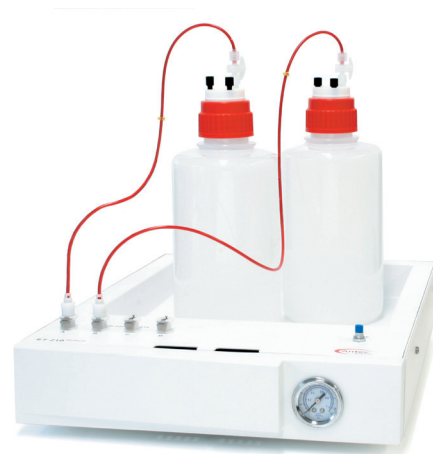
Antec Scientific's ET 210 eluent tray enables you to blanket all your LC mobile phases with an inert Helium gas atmosphere in a user-friendly and easy way. An atmosphere of inert gas in the solvent bottle prevents diffusion of air into the mobile phase and will keep it free of CO<sub>2</sub> and O<sub>2</sub>. Especially in carbohydrate analysis using Anion Exchange Chromatography (HPAEC) based on separation with strong alkaline eluents, dissolved CO<sub>2</sub> can be problematic. Under these circumstances (pH > 12), CO<sub>3</sub><sup>2-</sup> ions can be easily formed in the mobile phase, causing variations in retention times, decrease in column selectivity and loss in resolution. Keeping the mobile phase free of carbonate is one of the key factors towards reproducible carbohydrate analyses via Anion-Exchange Chromatography. The ET 210 is the perfect choice to keep your mobile phase 'carbonate-free'.

### Sparging and blanketing

Besides Helium sparging mode during the preparation of mobile phases the ET 210 can also be used for Helium blanketing during LC separation. Therefore, the bottles are kept closed airtight and pressurized with a small overpressure. No gas is flowing out, thus saving expensive He.



Flow regulator valve with pressure gauge displaying the actual He pressure in psi and bar



For sparging the ET 210 is equipped with a flow control valve for adjustment of the Helium gas flow rate, enabling controlled sparging. A dedicated sparging line is supplied for easy sparging of the mobile phase bottles.

For blanketing the flow regulator is pre-set at the factory on a low gas flow rate. The flow rate can be adjusted by means of the blue adjustment knob. The flow regulator has a locking nut (indicated with the black arrow). The locking nut can be used to set/fix the flow rate for Helium blanketing.

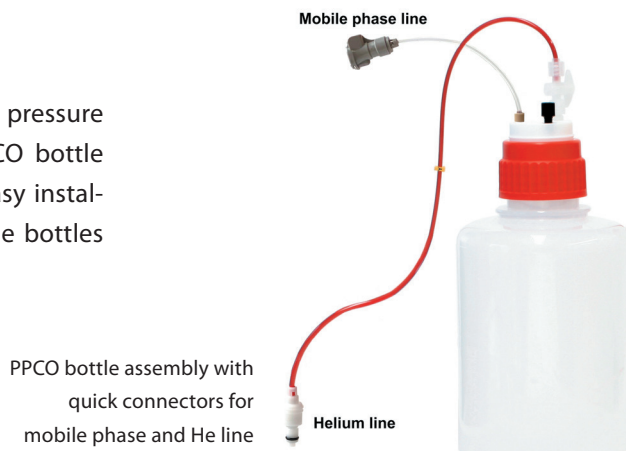
### Four channels

The ET 210 has four Helium gas outlets on the top-front side of the tray, facilitating up to 4 mobile phase bottles which can be independently kept under inert gas atmosphere (blanketing). Enabling isocratic up to quaternary gradient elution with carbonate-free mobile phases. Optional up to 6 channels/solvent bottles can be blanketed individually.

# Helium Eluent Tray ET 210

## Mobile phase bottles

Antec Scientific supplies the pressure and gas resistant plastic PPCO bottle assembly with all parts for easy installation and immediate use. The bottles must be ordered separately.



## Specifications ET 210 Helium eluent tray

### General

Dimensions (housing only)	54 (D) x 37 (W) x 11 (H) cm = 21.3" (D) x 14.6" (W) x 4.3" (H)
Operating conditions	Temperature range: 10 - 35 °C (50 - 95°F)
Weight	3.8 kg (8.4 lbs.)
Format	Stackable on P6.1L or AS 6.1L
Capacity	4x 2L PPCO eluent bottle, or optional 6x
Intended use	Sparging system & eluent pressurization (blanketing)
Suitable gas source	Helium 5.0, other usable gases N2 or Ar

### Pneumatics

#### Inlet

Connector	4 mm push-in connector
Inlet tubing	3/32" ID x 5/32" OD Polyurethane 95A shore (3 meters)
Operating pressure range	1 - 5 bar (15 - 73 psi) optimal operating pressure : 2 - 3 bar
Max. pressure	5 bar/73 psi (from laboratory Helium source)

#### Outlet

Connectors (4 channels)	4x valved 'quick connect' socket for 1/8" tubing
Outlet tubing	1/16" ID x 1/8" OD Polyurethane 85A shore (to mobile phase bottles)
Operating pressure range	0.2 - 0.4 bar (3 - 6 psi), depending on inlet pressure
Pressure safety	Pressure relief valve opening at 0.7 bar/10 psi
Max. pressure	0.4 bar/6 psi
Flow rate	Adjustable using manual flow regulator valve

### Part no

### Description

192.0050	ET 210 H Helium eluent tray
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Bottle Assembly to be ordered separately, recommended qty 4 x

184.0205	PPCO bottle assembly, 2L, 1x
184.0209	Glass bottle assembly, 1L, 1 x. Duran® pressure plus glass recommend for use with acidic mobile phases with organic modifiers

Required accessories for use with 3rd parties (U)HPLC systems

184.0205	PPCO bottle assembly, 2L, Helium, required qty 4 x
180.0204C	Degasser inlet assembly, HPAEC, required qty 4 x

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