

- **Sparging and blanketing with inexpensive N<sub>2</sub>**
- **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 gas atmosphere using inexpensive N<sub>2</sub> or He. The inert gas atmosphere 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.

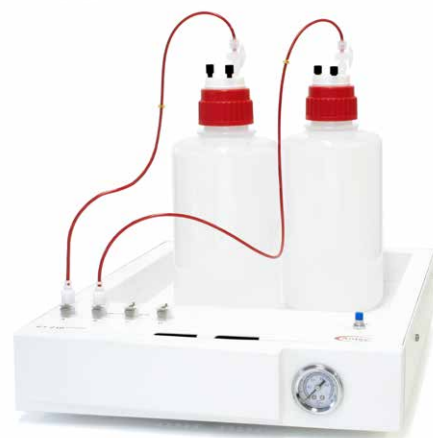
Keeping the mobile phase free of carbonate is one of the key factors towards reproducible carbohydrate analyses via Anion-Exchange Chromatography. The ET 210 is the perfect choice to keep your mobile phase 'carbonate-free'.

### Sparging and blanketing

Besides nitrogen sparging mode during the preparation of mobile phases the ET 210 can also be used for nitrogen 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 inert gas in case



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



He is used. For sparging the ET 210 is equipped with a flow control valve for adjustment of the 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 N<sub>2</sub> blanketing.

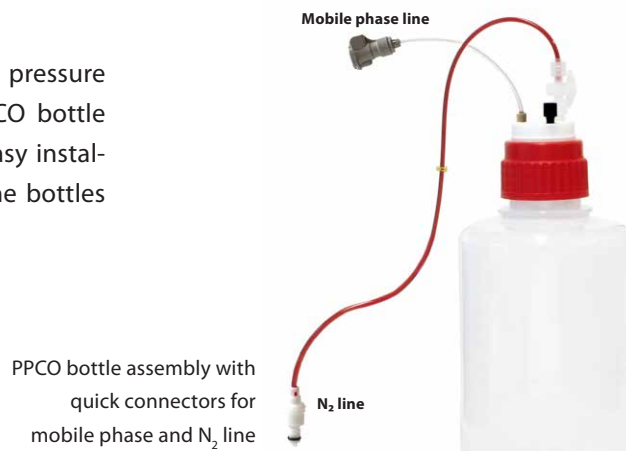
### Four channels

The ET 210 has four 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.

# 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.



PPCO bottle assembly with quick connectors for mobile phase and N<sub>2</sub> line



## Specifications ET 210 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	N <sub>2</sub> other usable gases He, Ar

Pneumatics	
<b>Inlet</b>	
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 source)
<b>Outlet</b>	
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 - 0.5 bar (3 - 7 bar), depending on inlet pressure
Pressure safety	Pressure relief valve opening at 1.0 bar /15 psi
Max. pressure	0.5 bar (7 psi)
Flow rate	Adjustable using manual flow regulator valve

Part no	Description
192.0050	ET 210 Eluent tray

Bottle Assembly to be ordered separately, recommended qty 4 x	
184.0205	PPCO bottle assembly, 2L, 1x
184.0209	Glass bottle assembly, 1L, 1x 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, required qty 4x
180.0204C	Degasser inlet assembly, HPAEC, required qty 4x

Antec Scientific (USA)  
 sales.usa@AntecScientific.com  
 www.AntecScientific.com  
 T 888 572 0012

Antec Scientific (worldwide)  
 info@AntecScientific.com  
 www.AntecScientific.com  
 T +31 71 5813333

