

# New! Alltech ELSD 800

## The First High-Performance, Low-Cost ELSD

- **Sensitive, Universal HPLC Detection at an Affordable Price**
- **Easy to Use**
- **Smallest Stackable ELSD available**

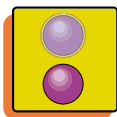
Now everyone can afford to add universal HPLC detection to any LC system to replace or complement existing detectors. The ELSD 800 detects any compound less volatile than the mobile phase to low nanogram levels, independent of functional groups or optical properties. Mobile phase is evaporated before detection occurs, which eliminates solvent fronts and keeps baselines stable throughout gradients.

### How it Works:

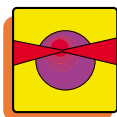
Evaporative light scattering detectors use a simple three-step process that produces a signal for any non-volatile sample component:



**1. Nebulization** – Inside the nebulizer, column effluent passes through a needle, mixes with nitrogen gas, and forms a dispersion of droplets.



**2. Mobile Phase Evaporation** – The droplets pass through a heated zone where the mobile phase evaporates, leaving a fine mist of dried sample particles in solvent vapor.



**3. Detection** – The sample particles pass through a flow cell where they interrupt a laser light beam. Light scattered by the sample particles is detected, generating an electrical signal.

The ELSD 800 is small and stackable, so that bench space requirements are minimized when using multiple ELSDs.



**Detect These Difficult Samples:** carbohydrates, pharmaceuticals, nutraceuticals, combinatorial libraries, lipids, surfactants, polymers, fatty acids, amino acids, inorganic anions

### ELSD 800 Specifications

<b>Light Source:</b>	Laser diode with collimating optics, 670nm, max output less than 5mW, class IIIA
<b>Detector Element:</b>	Silicon photodiode
<b>Temperature Range:</b>	Ambient to 110°C in 1°C increments
<b>Nebulizer Gas:</b>	Up to 3.0L/min, nitrogen recommended
<b>Gas Inlet Pressure:</b>	15–90psi (1.0–6.0 Bar)
<b>Typical Operating Range:</b>	1.0–3.0 L/min
<b>Flow Control:</b>	Fixed orifice with regulated pressure
<b>Mobile Phase Flowrate:</b>	0–5.0 mL/min
<b>Analogue Outputs:</b>	1V or 10mV full scale
<b>Communications:</b>	<b>Outputs:</b> TTL/contact closure - Fault relay for LC pump shutdown
<b>Operating Parameter Selection &amp; Display:</b>	Liquid crystal display and keypad entry of operating parameters
<b>Power Requirements:</b>	120/240V, 50/60Hz
<b>Dimensions:</b>	14.0"H x 13"W x 18"D (35.6cm H x 33.1cm W x 45.7cm D)
<b>Weight:</b>	20lbs (9kg)
<b>Warranty:</b>	1 year parts and labor



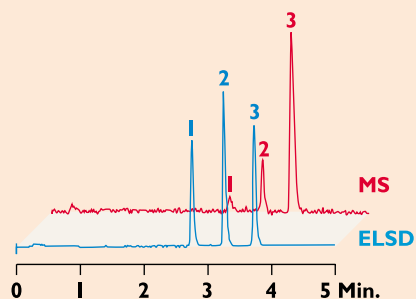
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## The ELSD 800 is an effective replacement for or a perfect complement to your existing LC detectors

1. Fmoc - Ala-OH
2. Fmoc - Trp-OH
3. Fmoc - Arg (Pmc)-OH

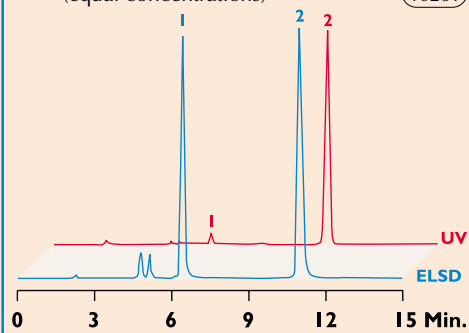
CHROM-9208  
CHROM-9209



Use in parallel with **MS** to obtain maximum Structural and Concentration information for each sample.

1. Hexabromocyclododecane
2. Tetrabromobisphenol A (allyl ether) (equal concentrations)

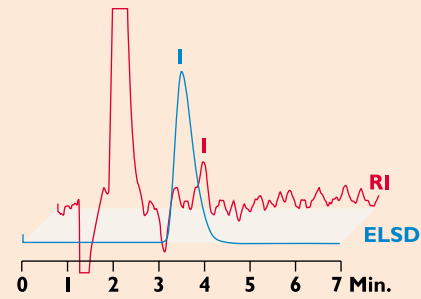
CHROM-10260  
CHROM-10261



The ELSD's universal response gives a closer representation of sample mass than **UV** detectors, making Quantitation more accurate when standards are not available.

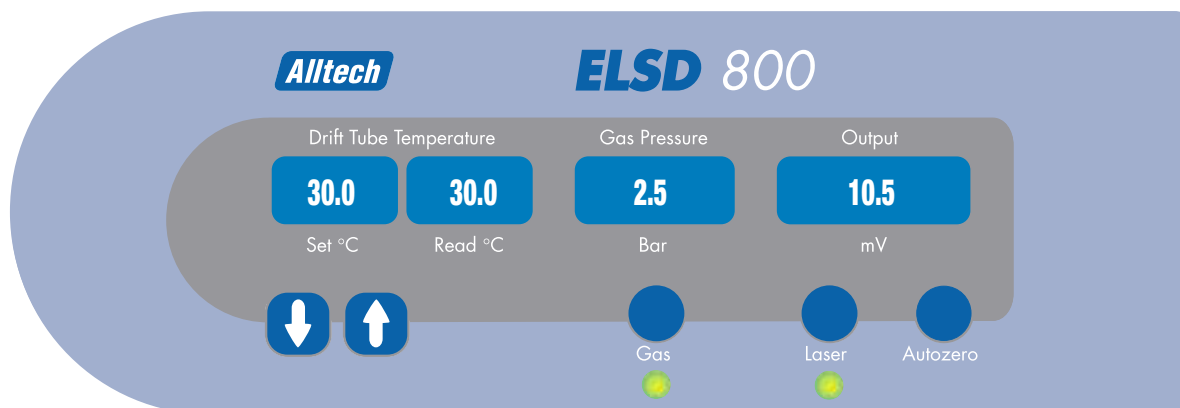
1. Sucrose

CHROM-9421  
CHROM-9422



Replace **RI** with ELSD for better Sensitivity, fast Equilibration, and Gradient capability.

All critical operating parameters are displayed and controlled from the front panel LCD. The user can adjust drift tube temperature, turn gas flow on and off, turn the laser on and off, and auto zero the output.



The ELSD 800 is easy to operate and requires virtually no optimization. The same low temperature and gas flow is used for most applications, including organic and aqueous mobile phases, and gradient methods.

### Instrument Qualification (IQ/OQ/PQ) Services

The ELSD 800 is thoroughly tested before shipment and calibration and performance documents are included with each instrument. Installation and familiarization is available, as well as comprehensive onsite IQ, OQ, and PQ services performed by a certified Alltech representative.



The ELSD 800 has been designed and manufactured in accordance with the following standards: EN6101-1 + A2:95, EN555011: 1998, FCC CFR 47 Part 15: 2001, EN 61326: 1998, EN 6100-3-2: 1995 + A14:2000 and EN61000-3-3: 1995

### ELSD 800

DESCRIPTION	PART NO.	PRICE
120V	<b>800100</b>	
240V	<b>800200</b>	

### Instrument Services

DESCRIPTION	PART NO.	PRICE
<b>Qualification Services</b>		
IQ/OQ performed by Alltech	<b>Q80010</b>	
PQ performed by Alltech	<b>Q80020</b>	
IQ/OQ/PQ performed by Alltech	<b>Q80030</b>	
IQ/OQ Documentation	<b>Q80041</b>	
PQ Documentation	<b>Q80042</b>	
IQ/OQ/PQ Documentation	<b>Q80043</b>	
Re-OQ performed by Alltech	<b>Q80040</b>	
Re-OQ/PQ performed by Alltech	<b>Q80050</b>	

### Installation and Training

Installation and familiarization	<b>INSTALL</b>
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