

**SEDEX  
LT-ELSD™**

Low Temperature - Evaporative Light Scattering Detectors

**THE RESULT OF 25 YEARS OF EVOLUTION**



## **SEDEX 85LT** **FOR HIGH PERFORMANCE AND HIGH THROUGHPUT**

**SEDEX<sup>LT</sup>-ELSD™**

Low Temperature  
Evaporative Light-Scattering Detectors

### **SEDERE**

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**SENSITIVITY  
FLEXIBILITY  
EXPERIENCE**



## SEDEX 85LT FOR HIGH PERFORMANCE AND HIGH THROUGHPUT

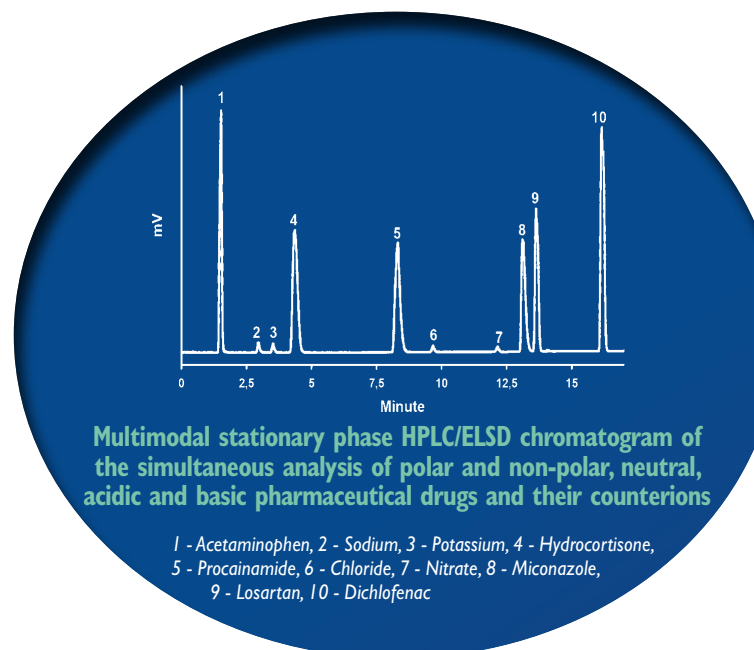
SEDEX Model 85LT Low-Temperature Evaporative Light-Scattering Detector for conventional **HPLC, U-HPLC and SFC** allows for the detection of essentially all compounds: detection is based on a universal property of all analytes and does not require the presence of a chromophoric group, electroactive group, etc. SEDEX Model 85LT combines excellent sensitivity, reliability, and accuracy for your analyses, thanks to unrivalled SEDERE low-temperature technology. This detector presents a number of outstanding innovations providing the best optical and electronic benefits at a reasonable price. SEDEX Model 85LT can be connected to any HPLC or SFC equipment, and you can control the detector locally or via a PC for a fully integrated system thanks to our range of SEDEX drivers. A remote shut down mode is also provided to minimize cost and enhance system lifetime. Full SOP protocols are provided for GLP compliance and validation procedures.

### FEATURES AND BENEFITS:

- Low-temperature evaporation of the mobile phase: optimizes sensitivity of thermally labile and semi-volatile compounds.
- Enhanced sensitivity using digital signal treatment: an innovative signal processing algorithm minimizes noise and optimizes sensitivity.
- Minimized band broadening thanks to an innovative cell design and a wide choice of nebulizers. Six nebulizers are available to optimize your applications. Four nebulizers cover the flow rate range from 5µL/min to 5mL/min, additionally there is one nebulizer optimized for U-HPLC and another one specifically for SFC. All these nebulizers can be easily changed to meet the requirement of the application. In addition, all parts of SEDEX Model 85LT are designed to provide the lowest dispersion, so that the observed peak widths are similar to those obtained with the most advanced UV/Vis detectors.
- Complete Remote Control: gas, heater, photomultiplier and light source can be automatically switched off at the end of a series of analyses.

### TYPICAL APPLICATION: POLAR, NON-POLAR, NEUTRAL, ACIDIC, BASIC API AND THEIR COUNTERIONS

The outstanding combination of multimodal columns with a unique detection mode such as LT-ELSD can provide simple, direct and simultaneous analyses of active pharmaceutical ingredients of different chemical structures and their respective counterions.



### TECHNICAL SPECIFICATIONS

#### COMPONENTS

Detection	Photomultiplier (PMT)
Light Source	Blue LED
	Elapsed Time Counter
Temperature Range	Ambient to 100°C
Nebulizer	HPLC, Low Flow, Micro, CC, U-HPLC, SFC
Eluent Flow Rate	5µL/min to 5mL/min
Typical Sensitivity	1ng

#### DATA

Analog Output	0 - 1 Volt
Gain Settings	1 to 12 - Factor 2 <sup>11</sup> (2048)
Filter	Moving Average (0 - 0.5 - 1 - 2 - ... - 10)
Data Rate	100Hz

#### COMMUNICATION

Selection & Display	Liquid Crystal Display and Keypad
Events	Contact Closure, TTL for Ready, Autozero
Power-down Methods	Shut-off: Gas, Light Source, Heating and/or PMT Cleaning Mode
Computer Interface	RS-232
Software	Drivers (option)

#### EXTERNAL REQUIREMENTS

Power	230V/50Hz or 115V/60Hz
Gas Supply	Nitrogen or Air 3.5bar (less than 3L/min)
Dimensions	250mm (10in) W 480mm (19in) H 550mm (22in) D
Weight	18,5kg (41lb)

### SEDERE IS COMMITTED TO USER SATISFACTION WITH EVERY SEDEX DETECTOR, AND PROVIDES YOU WITH:

- A Worldwide distribution network at your service.
- On-site installation and training.
- Full SOP (Standard Operating Procedures) including IQ, OQ, PQ.
- Technical and applications support.
- Web-access to applications in many fields.
- User seminars, on and off-site.
- Flexible service contract options.
- Easy-to-order spare parts and accessories.