

SEDEX
LT-ELSD™

Low Temperature - Evaporative Light Scattering Detectors

THE RESULT OF 25 YEARS OF EVOLUTION



SEDEX 100LT
FOR HIGH PERFORMANCE AND HIGH THROUGHPUT

SEDEXLT-ELSD™

Low Temperature
Evaporative Light-Scattering Detectors

SEDERE

BP 10027 - Parc Volta - 9, rue Parmentier
94141 Alfortville Cedex - FRANCE
Tel: +33 (0)1 45 18 05 18
Fax: +33 (0)1 45 18 05 25
Email: info@sedere.com

www.sedere.com



SENSITIVITY
FLEXIBILITY
EXPERIENCE

SEDEX 100LT FOR HIGH PERFORMANCE AND HIGH THROUGHPUT

The SEDEX Model 100LT 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. The SEDEX Model 100LT combines the highest sensitivity, reliability, and accuracy for your analyses compared to all other aerosol-based detectors, thanks to unrivalled SEDERE low-temperature technology. This detector presents a number of outstanding innovations thereby providing the best optical and electronic benefits at a reasonable price. The SEDEX Model 100LT can be connected to any HPLC or SFC system, and you can control the detector locally or via a PC for a fully integrated system using a broad 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:

- New generation design for low-temperature evaporation of the mobile phase: optimizes sensitivity of thermally labile and semi-volatile compounds.
- New optical head design based on a new high power laser: provides the highest signal-to-noise ratio for all compounds.
- Enhanced sensitivity using digital signal treatment: an innovative signal processing algorithm minimizes noise and optimizes sensitivity.
- **Direct dynamic range of over five orders of magnitude:** With SAGA (SEDEX Automated Gain Adjustment), an innovative gain control available when it is driver-controlled by software, SEDEX Model 100LT automatically adapts the gain setting to avoid any off-scale saturation of the detector: enhanced determination of very low percentage of impurities.
- Direct linearity on the global dynamic range: enhanced correlation coefficients.
- Minimized band broadening due to an innovative cell design and a wide choice of nebulizers. Four nebulizers are available to optimize your applications. Nebulizers cover a wide flow rate range from a few $\mu\text{L}/\text{min}$ to several mL/min , in addition there is a nebulizer optimized for U-HPLC and a nebulizer specifically optimized for SFC. These nebulizers can be easily changed to meet the specific requirements of the application. In addition, all parts of SEDEX Model 100LT 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 (typically below 1 second in U-HPLC).
- Complete Remote Control: gas, heater, photo-detector and light source can be automatically switched off at the end of a series of analyses.



TECHNICAL SPECIFICATIONS

COMPONENTS

| | |
|---------------------|---|
| Detection | SAGA-Enhanced Photodiode board |
| Light Source | Blue SEDERE High power laser; with elapsed time counter and high performance power management |
| Temperature Range | Ambient to 100°C |
| Nebulizer | Low Flow, HPLC, UHPLC, SFC |
| Eluent Flow Rate | 50 $\mu\text{L}/\text{min}$ to 2 mL/min |
| Typical Sensitivity | < 250 pg |

DATA

| | |
|---------------|---|
| Analog Output | 0 - 1 Volt |
| Gain Settings | 1 to 7 or SAGA (patented dynamic auto-gain) |
| Noise Filter | Dedicated numerical algorithm |
| Data Rate | Up to 100 Hz |

COMMUNICATION

| | |
|---------------------|--|
| Selection & Display | OLED Display with illuminated keypad |
| Events | Contact closure, TTL for Ready, Autozero |
| Power-down Methods | Frontpanel or driver activated, with or without delay |
| Computer Interface | USB or RS-232 |
| Software | Drivers (option): Openlab EZChrom®, Openlab Chemstation®, Chemstation®, EZChrom®, Clarity®, Chromleon® |

EXTERNAL REQUIREMENTS

| | |
|------------|--|
| Power | 100V to 240V (50Hz/60Hz) |
| Gas Supply | Nitrogen or Air 3,5bar/51psi (Less than 3L/min) |
| Dimensions | 250mm (10in) W - 330mm (13in) H - 530mm (21in) D |
| Weight | 15.5kg (33lbs) |

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.