

SEDEX
LT-ELSD™

Low Temperature - Evaporative Light Scattering Detectors

THE RESULT OF 25 YEARS OF EVOLUTION



SEDEX FP **FOR CHROMATOGRAPHIC PURIFICATIONS**

SEDEXLT-ELSD™

Low Temperature
Evaporative Light-Scattering Detectors

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SENSITIVITY
FLEXIBILITY
EXPERIENCE

SEDEX FP FOR CHROMATOGRAPHIC PURIFICATIONS



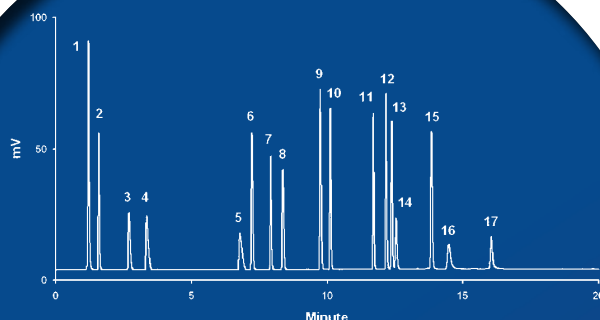
SEDEX Model FP combines simplicity, reliability and robustness for all your purification works by **preparative HPLC, preparative SFC, Flash Chromatography or CounterCurrent Chromatography**, thanks to unrivalled SEDEX technology. SEDEX Model FP allows for the detection of essentially all compounds, detection is based on a universal property of all analytes and does not require the presence of a chromophoric group, electroactive group, etc. This detector presents a new design and a number of outstanding innovations providing the best optical and electronic benefits at a very competitive price. SEDEX Model FP can be connected to any purification system and control can be done either locally or via a PC 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:

- Minimized band broadening thanks to a dedicated SEDEX FP nebulizer and an innovative cell design. This nebulizer covers the flow rate range from 100µL/min to 5mL/min and can be readily and quickly mounted and dismounted.
- With **SAGA** (SEDEX Automated Gain Adjustment), an innovative gain control available when it is driver-controlled by software, SEDEX FP automatically adapts the gain setting to avoid any off-scale saturation of the detector.
- An optimized liquid flow path and a Gas-Focusing technology in the optical detection cell prevent the detector from any clogging or contamination, and extend its operability.
- Complete remote control: the gas, heater, photomultiplier and light source can be automatically shut off at the end of a series of purifications.

TYPICAL APPLICATION:
AMINO ACIDS, PEPTIDES, PROTEINS

In protein and peptide "mapping" and purification, where gradient elution is required, SEDEX ELSD has a key advantage over UV detection: it can detect all compounds including single amino acids, its baseline is unperturbed by the mobile phase change during the gradient, and remains flat. As a mass detector, ELSD can also provide a material balance purity assessment.



Chromatogram of the direct and simultaneous HPLC/ELSD analysis of eight underivatized amino acids, five peptides and four proteins

1 - Glycine, 2 - Proline, 3 - Valine, 4 - Methionine, 5 - Leucine, 6 - Tyrosine, 7 - GLY-TYR, 8 - Phenylalanine, 9 - Tryptophane, 10 - VAL-TYR-VAL, 11 - MET-Enkephaline, 12 - Angiotensin II, 13 - Ribonuclease A, 14 - LEU-Enkephalin, 15 - Cytochrome C, 16 - Holo-Transferrin, 17 - Apomyoglobin.

TECHNICAL SPECIFICATIONS

COMPONENTS

| | |
|---------------------|----------------------|
| Detection | Photodiode |
| Light Source | Blue LED |
| | Elapsed Time Counter |
| Temperature Range | Ambient to 100°C |
| Nebulizer | Flash-Purif |
| Eluent Flow Rate | 100µL/min to 5mL/min |
| Typical Sensitivity | 100ng |

DATA

| | |
|----------------------|---|
| Analog Output | 0 - 1 Volt |
| Gain Settings | 1 to 8 |
| Filter | Moving Average (0 - 0.5 - 1 - 2 - ... - 10) |
| Signal Amplification | SAGA (SEDEX Automated Gain Adjustment) |
| Data Rate | 10Hz |

COMMUNICATION

| | |
|---------------------|--|
| Selection & Display | OLED Display and Keypad |
| Events | Contact Closure, TTL for Ready, Autozero |
| Power-down Methods | Shut-off: Gas, Light Source, Heating and/or Photodiode Cleaning Mode |

| | |
|--------------------|------------------|
| Computer Interface | USB, RS-232 |
| Software | Drivers (option) |

EXTERNAL REQUIREMENTS

| | |
|------------|--|
| Power | 100V to 240V (50Hz/60Hz) |
| Gas Supply | Nitrogen or Air 2.0bar (less than 3L/min) |
| Dimensions | 250mm (10in) W 330mm (13in) H 530mm (21in) D |
| Weight | 15kg (33lb) |

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.