

# Models 1400 and 1300

## Evaporative Light Scattering Detector

### ELSD



Model 1300



Model 1400

Firma **SOFTA Corporation** dodává ekonomicky i designově výhodné řešení ELSD, které splňuje i ty nejnáročnější technické požadavky. Dva typy detektorů této firmy **ELSD-1300** a **ELSD-1400** dokonale respektují design HPLC/UPLC sestav firmy Agilent Technologies. Pro jejich kontrolu včetně vyhodnocení dat je možné využít buď integrovaný počítač nebo LC Chemstation. Uvedené detektory díky patentovanému flexibilnímu technickému řešení se vždy přizpůsobí Vaším požadavkům, takže nebudete muset měnit stávající LC metodu a „obcházet“ tak nedostatky jiných ELSD.

- Designed for Rapid Resolution and Ultra Performance LC Systems
- Communicates with ChemStation via an exclusive SofTA Driver
- Superior HPLC Detection to Replace or Complement your Current Detection
- Sensitive Detection for a Wide Variety of Chemical Classes and Structures
- Easy to Use, Fast Start-up, No Consumable Parts, Low Cost of Operation
- Precise Vapor Phase Control with SofTA Exclusive Thermo-Split™ Technology
- Low Temperature Operation with Organic and Aqueous Mobile Phases

## Complements UPLC and Rapid Resolution Systems

The New SofTA Model 1400 (formally the Model 1200) and Model 1300 maintain the peak widths obtained with rapid resolution and ultra performance LC systems. This is our fastest ELSD yet, with the narrowest peaks of any ELS Detector, peak widths < 1sec. The sensitivity is better than the Model 400.

### Unique, Full Feature Display

The touch screen displays all the detector settings and conditions. Simply touch the screen to modify setting, view the chromatogram in real time, annotate a method, and much more.

ELSD



## The Models 1400 and 1300 fit into the Agilent LC System Stacks

The SofTA Model 1400 and 1300 ELSD incorporates SofTA exclusive technology in a format that fits in your Agilent LC system. This ELSD can also integrate seamlessly into any existing systems. They are designed to fit in the existing Agilent 1100 and 1200 LC systems. It is placed at the bottom of the stack to reduce the tubing length between the autosampler, or UV, and the ELSD. Now Agilent 1100 and 1200 systems can benefit from the superior performance obtained with Thermo-Split™ technology. See our technical page **Exclusive Thermo-Split™ Technology** for more details on this exciting new concept in Evaporative Light Scattering Detection. (Patent No. US 7,290,723 B1)

## SofTA Features Increase Productivity, Enhance Performance and Reduce Cost of Operation

These Models are extremely fast to set-up. Inject samples with in 30 minutes of power up by selecting the primary method. This set of conditions is appropriate for 90% of all HPLC applications. They can also be optimized for superior detection of semi-volatile analytes and very low concentrations. Less volatile mobile phases and high flowrates are accommodated by selecting a sub-ambient Thermo-Split temperature.

Unlike halogen light sources, the laser does not need replacement and the intensity is maintained with internal feedback and displayed and recorded for reproducible results. The fully warranted Teflon nebulizer provides superior solvent and chemical resistance, eliminates sample build-up even at high temperatures, does not permit sample carry over or increased noise from surface leaching. Reproducible droplet distributions are assured by thermally isolating the nebulizer from the spray chamber and drift tube, improving reproducibility between methods.

Low gas pressure and flow requirements allows use of cylinder, house systems, or gas generators. The pneumatic system is protected by a high pressure shut off, and provides a signal in the event of unstable or low pressure.

# Superior Performance

SofTA exclusive technology provides

- Very Low Detection Limits (5ng)
- Enhanced Dynamic Range (up to 0.25mg or 2+ orders of magnitude)
- Outstanding Reproducibility (<2%RSD)
- Very Narrow Peak Widths (1sec)
- Low Evaporation Temperatures (3mL/min water at 10°C SP/40°C DT)
- No Baseline Shift with Extreme Gradients (0 –100% in 10 min)

Specifications may change without prior notice. Trademarks property of their respective owners.

The **Model 1400** features a 5" full color WVGA display and can be controlled via system software or a USB mouse and keyboard.

The **Model 1300** performance mirrors that of the Model 1400 but uses a 2 line LCD display and multifunction touch sensitive keys for the user interface.

## Specifications

	Model 1300	Model 1400
Dimensions	13.75" W x 17.25" D x 6.25" H	
Weight	46 lbs	
Display	2 Line x 20 Character per line VFD	5" Full Color WVGA
User Interface	Six multi-function buttons or ChemStation Control	USB Mouse or ChemStation Control
Evaporative Zone Temperature	Ambient to 120°C	
Thermo-Split™ Chamber Temperature	10°C to 60°C	
Liquid Flow Rate	0.2mL/min to 5mL/min	
Gas Requirements	60 - 80 psi Nitrogen or other inert gas	
Gas Consumption	~3 SLPM	
Operating Conditions	Intended for indoor use only, 60°F to 85°F and <90% R.H. non condensing	
Electrical Requirements	Nominal 120 VAC, 50/60 Hz or Nominal 240 VAC, 50/60 Hz; 600 watts	
Wetted Materials	Stainless steel, glass, anodized aluminum, Teflon™	
Light Source	670 nm Laser Diode, <5mW	
Detector	Hermetically sealed photo-diode/operational amplifier	
Output Signal	0 - 1VDC	
Interface	RS232, Contact Closure	