## SofTA ELSD



Model 1300

### Features Rich Detectors for Every Laboratory and Application

### **Model 2300**

- New modern design. Similar performance to Model 1300
  Model 1300
- Designed for UPLC with narrow peak widths and high sensitivity.
- Model 300S
- Advanced performance at a lower cost

Model 200S

- Versatile detection, perfect for most applications
  Model 100
- Typically used in QC, student or general purpose labs

# **Key Specifications**

- Variable Vapor Phase Control for the very best signal to noise resulting in higher sensitivity for every method.
  - Patented Thermo-Split Technology

#### Specifications

Model	SofTA 2300				
		1300	300S	200S	100
Dimensions, ", W x D x H	7.5 x 15 x 12	13.75 x 17.25 x 6.25	9.8 x 18x 11.5	9.8 x 18 x 11.5	9.8x 18x 11.5
Weight, Ibs	21	46	25	25	25
Display	VFD 2 Line x 20 Character	VFD 2 Line x 20 Character	VFD 2 Line x 20 Character	VFD 2 Line x 20 Character	VFD 2 Line x 20 Character
User Interface	Touch-sensitive keys, Clarity Control, CDS or PC based application control	Six multi-function buttons or ChemStation or Clarity Control	Four multi-function buttons or Clarity Control	Two multi-function buttons or Clarity Control	Two multi-function buttons
Evaporative Zone Temperature, °C	Ambient to 120	Ambient to 120	Ambient to 120	Ambient to 120	30
Nebulizer Temperature	10 to 60	10 to 60	10 to 70	Ambient +10 to 70	60
Liquid Flow Rate	0.2mL/min to 5mL/min	0.2mL/min to 5mL/min	0.2mL/min to 5mL/min	0.2mL/min to 3mL/min	0.2mL/min to 3mL/min
Gas Requirements,psi	65	60 - 80	60 - 80	60 - 80	60 - 80
Gas Consumption, SLPM	~3	~3	~ 2.5	~ 2.5	~ 2.5
Light Source	Laser, 650 nm , <5mW	Laser, 650 nm , <5mW	Laser, 650 nm , <5mW	Laser, 650 nm , <5mW	Laser, 650 nm , <5mW
Detector	photo-diode operational amplifier	photo-diode operational amplifier	photo-diode operational amplifier	photo-diode operational amplifier	photo-diode operational amplifier
Output Signal	0 - 1 VDC	0 - 1 VDC	0 - 5 VDC	0 - 5 VDC	0 - 5 VDC
Gain Settings	Normal, Low	Normal, Low	Normal, Low	Normal, Low	Normal, Low
Filter	Baseline and RC	Baseline and RC	Baseline and RC	Baseline and RC	RC

# The SofTA Advantages

- Thermo-Split<sup>™</sup>:Tunable for application for precise vapor phase control for optimum signal to noise
- Teflon Nebulizer: One nebulizer for all flowrate, contaminated do not build up and block flow
- Laser and photodiode detection provides increased dynamic range and lifetime operation.
- Consistent results over extreme gradients.
- Narrow peak width for high speed pharmaceutical separations.
- Lowest purchase price
- Made in the USA

### How to Compare ELSD's

- DO try a variety of instruments in *your* lab with *your* samples. SofTA will provide you with an instrument to evaluate. Ask other manufactures to do the same.
- DO compare how easy each detector is to set up and use. Compare how each detector handles gradients, semi-volatile compounds, and fast chromatography.
- DO look inside. Are the common maintenance items, such as nebulizer, light source, and light trap, easily accessible? Is the instrument neatly assembled? Are all thermal components well insulated? Are electrical components clear of, and not underneath, liquid lines?
- DO consider cost of ownership. Ask for pricing on common replacement parts. A replacement nebulizer is a good test case. Inquire about recommended routine maintenance procedures, frequency and fees.

# The Sensitivity Game

DO NOT rely only on published sensitivity specifications. The ultimate sensitivity is limited by the physics of light scattering, and is very similar for all instruments. However, other important properties, such as baseline stability, dynamic range, signal to noise ratios at working concentrations, peak width and peak shape are profoundly influenced by instrument design. Choose the detector that demonstrates the best chromatography for *your* application, not the optimized method used for published sensitivity data.

Each type of detector has an conditions it operated best. SofTA can be optimized for great results everywhere.

Encourage customers to compare ELSD with their separations and analytes.