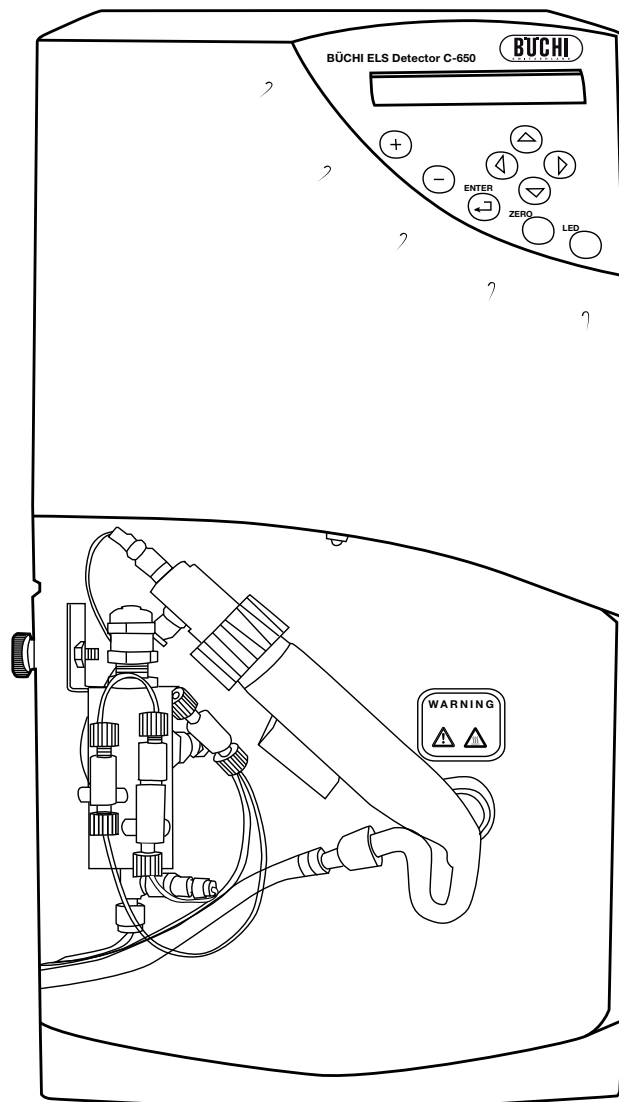




# ELS Detector C-650

## Technical data sheet

The Evaporative Light Scattering Detector C-650 detects all non-volatile compounds thanks to its low-temperature evaporation technology. It handles any combination of mobile phases and gradients required for efficient and fast separations.



## Scope of delivery

Components	Qty
Autozero cable	1
Signal cable	1
RS-232 cable	1
External event cable	1
Gas tubing 6 mm OD	1
Set of fuses	1
Power cable	1
Operation Manual	1

## Order code

1	1	0	5	9	1	0	6	ELS Detector C-650 115V / 60Hz
1	1	0	5	9	1	0	5	ELS Detector C-650 230V / 50Hz

## Technical data

Dimensions (WxHxD)	250 x 450 x 550 mm
Weight	18.5 kg
Current consumption	1.8 A for 115V, 1.7 A for 230V
Frequency	50/60 Hz
Overvoltage category	II
Pollution degree	2
Detection	High sensitivity photomultiplier
Light source	Selected high efficiency blue LED
Temperature range	Ambient to 100°C
Gas consumption	< 5 L/min
Eluent flow rate	0.1 to 5 mL/min
Instrument control	Stand alone keypad control or remote control through RS-232
Signal output	0 – 1 V analog or RS-232
Inputs	Remote autozero and remote Power down mode
Power down modes	General, Standby or Cleaning

## Accessories

Part	Order number
Splitter kit	11059007
Nebulizer assembly	11059162
Glass nebulization assembly	11059164
Drain assembly	11059239

## Functional principle

The C-650 Evaporative Light Scattering Detector detects all non-volatile compounds, including those invisible to UV. There are three different steps in the operation of the detector: nebulization of the eluent, evaporation of the solvent and detection of the compound of interest using a light scattering detection module. It is capable of monitoring flow rates from 0.1 to 5 mL/min.

## Detection principle

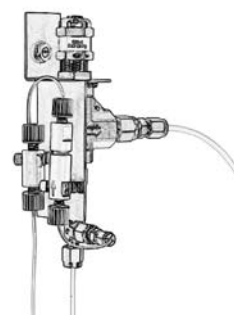


- ① Nebulization and removal of big droplets
- ② Evaporation in a heated tube
- ③ Detection using light diffraction

## Splitter kit for ELSD

The splitter kit is designed to split the flow coming out of a preparative chromatography column and feed the ELSD with a flow comprised between 0.1 and 5 mL/min. It handles an inlet flow rate up to 250 mL/min and is best integrated with the BUCHI ELSD C-650.

Part	Order number
Splitter kit	11059007



## Scope of delivery

The splitter kit is delivered fully mounted and includes the following items:

Components	Qty	Order number
Set of fittings 1/16", 2 pcs	1	44816
Set of 1/16" ferrules, 25 pcs	1	44269
Tube cutter	1	19830
Turix wrench	1	044349
Union adapter 1/4"UNF-28	1	44302
Swagelok ferrule set 1/16"	1	11059072
Swagelok ferrule set 1/8"	1	11059073
FEP capillary, 0.10 mm ID, 100 mm, 5 pcs	1	11059074
FEP capillary, 0.15 mm ID, 100 mm, 5 pcs	1	11059075
Set of frits diam. 6.25 mm, 5 pcs	1	11059076
Instruction leaflet	1	11593451

## Functional principle

The flow splitter kit is designed to allow the connection of the ELSD C-650 to a preparative chromatography system. The flow rate entering the ELSD nebulizer must be smaller than 5 mL/min, whatever the flow rate coming out of the preparative chromatography column ( $\leq 250$  mL/min). A pressure relief valve is used to monitor the flow rate going through a restriction capillary. An inline filter is inserted between the valve and the capillary to avoid plugging the capillary.

