

ACQUITY UPLC ELS DETECTOR

The Waters® ACQUITY UPLC® Evaporative Light Scattering (ELS) detector has been specifically designed for Waters ACQUITY UPLC system. This detector offers unparalleled performance when monitoring compounds with poor to no ultraviolet/visible response and analytes that do not ionize well in mass spectrometry. The ACQUITY UPLC ELS detector's unique design allows for maximum uptime, ideal for high throughput laboratories in open access environments.

OPERATING SPECIFICATIONS

Nebulizer	Front mounted, snap-in design
Temperature control nebulizer chamber	Heater 0 to 100%, thermally controlled, cooler on/off
Gas	Nitrogen, to be supplied, at least 65 psi
Temperature range drift tube	0.1 °C increments, feedback accuracy to 0.1 °C
Eluent flow rate maximum	100% water at 2 mL/min
Filter setting	Hamming, 0 to 5.0 seconds in 0.1 second increments
Unattended operation	Leak sensors, full diagnostic data captured through console software

OPTICAL COMPONENT SPECIFICATIONS

Optics	Heated optics bench (constant 50 °C)
Light source	Tungsten halogen polychromatic, front mounted, pre-aligned, user installable
Lamp calibration	PMT calibration/normalization to compensate for lamp degradation over time
Lamp normalization	On demand and at startup diagnostic corrects for lamp signal output decrease
Detector	Photomultiplier tube
PMT calibration	Based on individual PMT
Voltage range	0 to 1250 VDC

DATA

Range	0.1 to 2000 light scattering units full scale
Analog outputs	Two (2), LS units and nebulizer, drift tube
Analog data output signal range	-0.1V to +2.0 VDC fully attenuated
Attenuation settings	10 to 2000 LSU full scale; 10 to 2000 mV
RS232 output	Used for service diagnostics and firmware updates
Digital data	24 bit digital data, 80 Hz using ethernet connection
Analog output	Two (2), fully programmable output either ELS detector signal and temperature, can monitor temperature of either nebulizer, drift tube 0 to 2 volts, with user programmable voltage or data offset

[INSTRUMENT SPECIFICATIONS]

PROGRAMMABILITY

Software compatibility
MassLynx™ software v. 4.1 or higher
Empower™ and Empower 2 software
24-bit digital data

I/O EVENTS

Numbers	Inputs	Lamp on/off, inject start, chart mark
	Outputs	Stop flow, switches pump flow off/on gas pressure fault Programmable contact closure enabled by time or threshold signal

PHYSICAL / ENVIRONMENTAL SPECIFICATIONS

Dimensions	Width: 34.3 cm (13.5 in.) Height: 21.6 cm (8.5 in.) Depth: 51.8 cm (20.4 in.)
Weight	14.7 kg (32.5 pounds)
Operating humidity range	< 90%, non-condensing
Operating temperature range	4 to 30 °C
Warranty	2000 hour lamp, 1 year
Compliance	CE Mark CSA C-tick and UL

ELECTRICAL SPECIFICATIONS

Input voltage range	85 to 264 VAC
Input frequency range	47 to 63 Hz
Max VA input	200 VA

ORDERING INFORMATION

ACQUITY UPLC ELS detector with nebulizer
ACQUITY UPLC ELS detector nebulizer

PART NUMBER

176015027
205000342

Waters

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