

The Lechintech SCD 16Plus

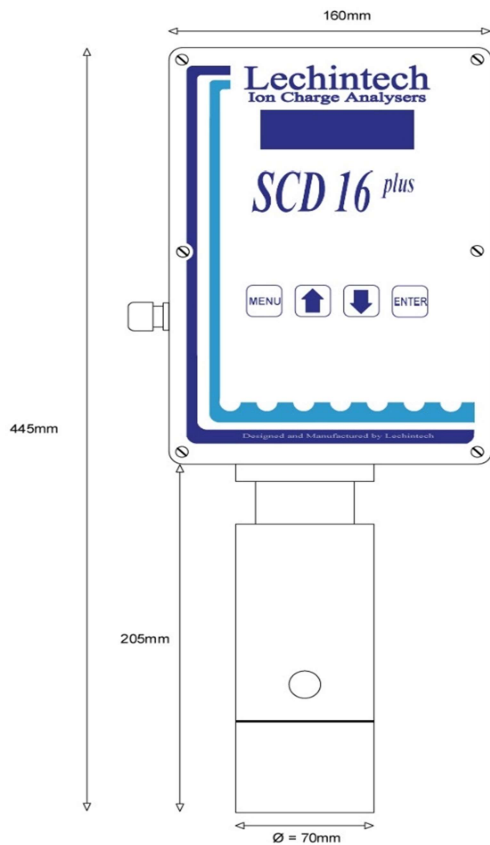


Your window on Colloidal Chemistry

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Lechintech



Technical Data

Measuring Modes	Ionic Charge -5.00 to +5.00 ICu
Measuring Sensor	Lechintech Ion Charge Analyser, Model SCD 16mp
Samples	On-line samples direct from the process or Manual collection from selected points in the process
Sample Pot	Cyclone, 6.5 litres, with inlet and drain regulation valves Flow rate 30 to 40 litres per minute required
Signal Outputs	(i) 4-20 mA output Ion Charge scaled -5.00 to +5.00 ICu 500 Ohms maximum, resolution 12 bit (0 to 4095) (Note: Above scale is configurable) (ii) 4-20 mA output PI Control scaled 0 to 100% 500 Ohms maximum, resolution 12 bit (0 to 4095) (iii) Relay output PI Control 0-255 pulses per minute Scaled 0 to 100%, potential free contacts NO/NC (Note: 0-255 range is configurable) (iv) Relay output Control Alarm, potential free contact NO/NC, 250 VAC, 2A (v) Relay output Deviation Alarm, potential free contact NO/NC, 250 VAC, 2A (vi) Relay output Motor Trip/Fault Alarm, potential free NO/NC, 250 VAC, 2A
Signal Inputs	(i) 4-20 mA input External SP scaled -5.00 to +5.00 ICu (Note: Above scale is configurable) Resolution 12 bit (0 to 4095) (ii) 4-20 mA input Manual Force CV scaled 0 to 100% Resolution 12 bit (0 to 4095) (iii) Digital input Hold PI Control 5 VDC sense voltage (iv) Digital input Manual Force (use Manual Force CV) 5 VDC sense voltage (v) Digital input Cal (calibrate) 5 VDC sense voltage
Calibration	Zero and span using Cationic standard 4-20 mA output calibrated using external Ammeter All adjustments from instrument keypad Remote calibrate feature available (requires automation of calibration process)
Motor Speed Control	Setpoint range 3.5 to 4.5 Hz
ICu Resolution	14 bit (13 bit + sign bit) for selected Icu range
Accuracy	Ion Charge \pm 0.1 ICu
Sensitivity	Dependant on cell and probe wear, compensated for by regular calibration within 1%
Response Time	2 to 5 seconds dependant on sample. Stabilisation of readings can take up to 1 minute in some samples
Repeatability	\pm 1% or less
Ambient Temperature	0 °C minimum to 40 °C maximum
Sample Temperature	5 °C minimum to 60 °C maximum
Humidity	90 % maximum
Consistency	0.0 to 0.5 %
pH Range for Operation	3 to 12 pH
Conductivity Range	0 to 5000 μ S/cm
Sample Particle Size	<100 μ m
Power Supply	110 to 220 VAC, 50 Hz, 60 Hz, 12VA or 24 VDC Solid earth connection essential
Enclosure	ABS instrument housing, IP 53 rating
Wetted Parts	HDPE, POM, Stainless-steel, Neoprene
Overall Dimensions	160mmW x 445mmH x 100mmD
Probe Dimensions	205mmH x 70mmDIA
Weight	4.5 kg
Guarantee Period	1 year for instruments