The Lechintech LDT 16mp

Your window on Colloidal Chemistry

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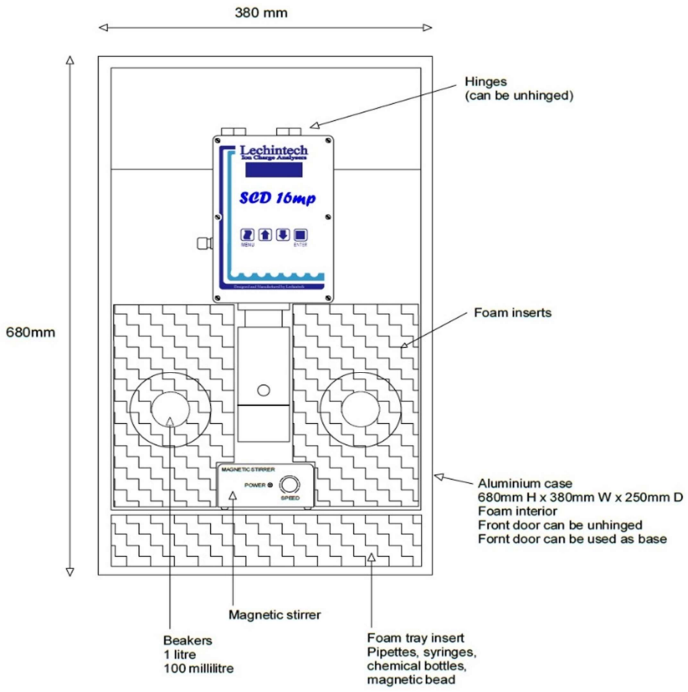
Lechintech

Model LDT 16mp
LABORATORY DEMAND TITRATOR

Lechintech
ION CHARGE ANALYSERS



Technical Data	Model LDT 16mp
Measuring Modes	Ionic Charge (ICu), Cationic Demand (ppm)
Measuring Sensor	Lechintech Ion Charge Analyser, Model SCD 16mp
Samples	Manual collection from selected points in the process, thick stock samples to be filtered through machine wire
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) Relay output Motor Trip/Fault Alarm, Potential free normally open (NO) contact, 250 VAC, 2A Contact - closed motor running, open motor trip/fault
Calibration	Zero and span using Cationic standard 4-20 mA output calibrated using external Ammeter All adjustments from instrument keypad
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 ± 0.1 ICu Cationic Demand ± 1%
Sensitivity	Dependant on cell and probe wear, compensated for by regular calibration within 1%
Response Time	2 to 5 seconds dependent on sample. Stabilisation of readings can take up to 1 minute in some samples
Repeatability	± 1% or less
Ambient Temperature	0 °C minimum to 40 °C maximum
Sample Volume	500 ml
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 for Operation	0 to 5000 µS/cm
Sample Particle Size	<100 µm

Guidelines for titration measuring range dependant on titrant chemical concentration

Titration Concentration	Aliquot	Resolution per Aliquot	Sample	Demand Range	Maximum	Minimum
250 ppm	2 ml	1 ppm	500 ml	very low	20	0
2500 ppm	1 ml	5 ppm	500 ml	low	75	0
2500 ppm	2 ml	10 ppm	500 ml	medium	300	0
10 000 ppm	1 ml	20 ppm	500 ml	high	750	0

Magnetic Stirrer	Magnetic stirrer and bead for sample agitation Speed range 100 rpm (min) to 1000 rpm (max) Maximum stirring capacity is 1 litre
Equipment	2 x 1 litre beakers, 2 x 100 ml beakers, 1 x 10 ml pipette 1 x 1 ml pipette, 2 x 5 ml syringes, 2 x 50 ml chemical bottles 1 x magnetic bead
Power Supply - SCD 16mp	110 to 220 VAC, 50 Hz, 60 Hz, 12VA or 24 VDC Solid earth connection essential
Power Supply - Mag Stirrer	110 or 220 VAC, 50 Hz, 60 Hz (specify voltage at time of order)
Case/Enclosure	Rigidised Aluminium carry case with dust and moisture proof seals on the lid, clip in hinges and recessed lockable catches. High density foam packaging. Case not IP rated SCD 16mp ABS, IP 53, Magnetic stirrer ABS, IP 51
SCD 16mp Wetted Parts	HDPE, POM, Stainless-steel, Neoprene
Overall Dimensions	380mmW x 680mmH x 250mmD
Weight	15 kg
Guarantee Period	1 year for instruments