

These specifications are common to all standard ALCT instruments. Systems are configured with selected measurement options made available in WinLC software at time of order.

Ion Charge	
Output Voltage (Min)	± 10 mV
Output Voltage (Max)	± 10 V
Resolution	100 µV
Frequency	0.001 to 1000 Hz
Current Range	100 pA to 1 mA
Current Resolution	0.5 pA
Current Sensing Resistance	1kΩ to 10GΩ
Post Gain	1x, 10x, 100x, 1000x
VHR/RDC Measurement	
Voltage (Min)	± 10 mV
Voltage (Max)	± 10 V
Resolution	100 µV
Output Current (Max)	± 100 mA
Offset Voltage	± 0.1 mV
Input Capacitance (Hold Mode)	< 1 pF
Leak Current (Hold Mode)	< 0.5 pA
V _G Offset (Hold Mode)	± 0.1 mV
Charge Injection	± 5 pC
CV Curve/Rotational Viscosity	
Output Wave	DC to 2 kHz, voltage 0 to ±100 V
Output Update Rate	500 kHz
Output Resolution	16 bit
Input Resolution	16 bit
Input Sample Rate	2 MHz
Current Measurement Range	1 nA to 1 mA
Current Sensing Resistance	1kΩ to 100kΩ
Current Resolution	100 pA
Post Gain	1x, 10x, 100x, 1000x
Capacitance Measurement	2 pF to 10 nF
DC Resistivity	
Voltage (Min)	± 10 mV
Voltage (Max)	± 100 V
Resolution	100 µV
Measurement Resistivity Range	up to 10 ¹⁶ Ω·cm
General Specifications	
Operation Temperature	15°C to 35°C
Input Line	100 to 120 V AC, or 200 to 240 V AC, 50/60 HZ, 2A
Dimensions	1-4 channels: 14.5 x 15 x 7 inches 5-8 channels: 19.5 x 15 x 7 inches
Optional Sample Temperature Control	(1) Oven option (2) Custom hot plate with mK2000 controller

*ALCT specifications subject to change as new hardware revisions become available.