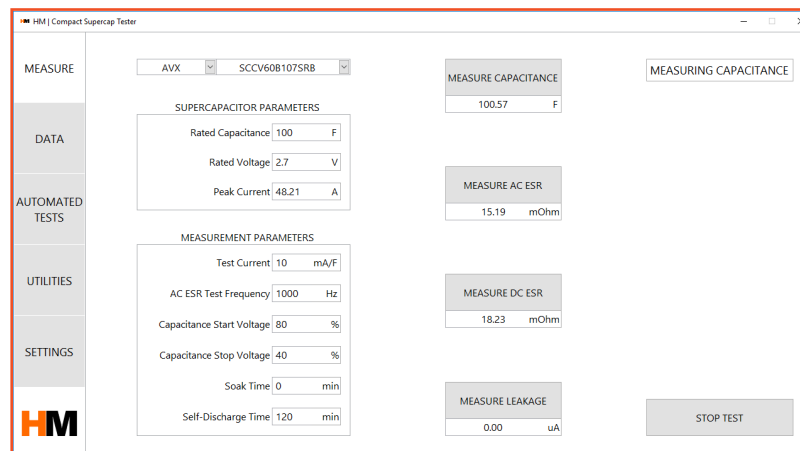


cSCT-X00 Series Super Capacitor Instrumentation



The cSCT Series from Hiller Measurements leverages the latest generation of measurement science developed for production and incoming inspection test of today's super capacitor products. This second generation of design leverages a 24-bit architecture to quickly provide DC and AC ESR measurements, Leakage, and Capacitance measurements within a single instrument. With industry leading accuracy, simplicity of use, and no need for complex integration of external LCR or SMU instruments, the cSCT series provides the optimal measurement science for super capacitor users.



The cSCT-X00 is coupled with a full-featured and intuitive software user interface, allowing for minimal time from unboxing to testing. Start getting measurements in only three clicks when measuring supercapacitors from select manufacturers. A growing library of pre-configured inspection tests integrated directly into the cSCT-X00 software aligns users' measurements with the test methods used by specific supercapacitor producers.

Parameter	Specification
Measurements	Capacitance, AC ESR, DC ESR, Leakage, Temperature
Capacitance	
Range	100mF to 1000F (current source range of 1mA to 10A)
Accuracy	±1% of reading (typical)
Resolution	24-bits
Method	Incremental capacitor measurement every 1 second across the user specified start / stop range, averaged for the final value
Modes	Measured during charge, Measured during discharge
Output Data	Final (average) value Capacitance readings versus time or capacitor voltage (plotted or exported)
AC ESR	
Range	100uΩ to 10Ω
Accuracy	±2% of reading (typical)
Resolution	24-bits
Frequency	10Hz to 1KHz
Frequency Acc	≤ 0.01% reading
Method	Vrms / Irms with sinewave test current injected 35uA to 3.5A rms
Modes	Measured when charged / discharged
Output Data	AC ESR value
DC ESR	
Range	100uΩ to 10Ω
Accuracy	±1% of reading (typical)
Resolution	24-bits
Method	$\Delta V / \Delta I$ with step from zero to full test current (1mA to 10A)
Modes	Measured when charged / discharged
Output Data	DC ESR value
Leakage	
Range	1uA to 10mA
Resistances	100mΩ to 100Ω (1,3,10 sequence)
Accuracy	±1% (typical)
Resolution	24-bits
Method	Current measured thru programmable leakage resistor versus time
Modes	Minimum current measured during soak period
Output Data	Leakage value (minimum measured value)
Current Source	
Range	1mA to 10A full scale (DC, AC pk-pk)
Accuracy	±1% (typical)
Resolution	24-bits
Frequency	DC, 10Hz to 1KHz
Voltage Measurement	
Range	0 to 16V (DC, AC pk-pk)
Accuracy	DC: ±1% (typical), AC: ±2% (typical)
Resolution	24-bits

Ordering Information:

Part Number	Capacitance Range	Current Supply
cSCT-100	1-1000F	1mA to 10A
cSCT-330	1000F-3300F	10A to 35A