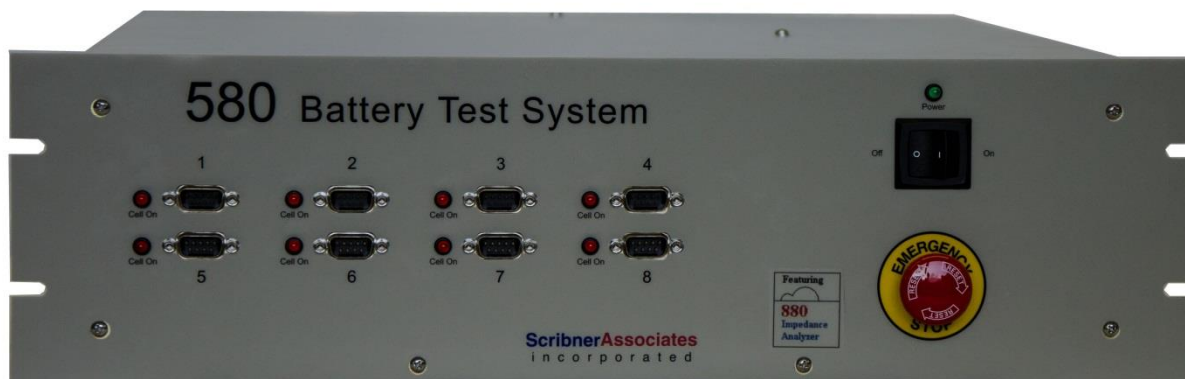


New!

# 580 BATTERY TEST SYSTEM

## Advanced 8 Channel Battery Cycler

- ✓ Each channel is an independent potentiostat/galvanostat
- ✓ 6 current ranges from 10  $\mu$ A to 1 A
- ✓ 5 terminal measurement
- ✓ Control modes: current, voltage, power
- ✓ HFR for internal resistance
- ✓ 100 pts/sec sample rate
- ✓ *BCycle*<sup>TM</sup> software – user-friendly, powerful, flexible



### APPLICATIONS:

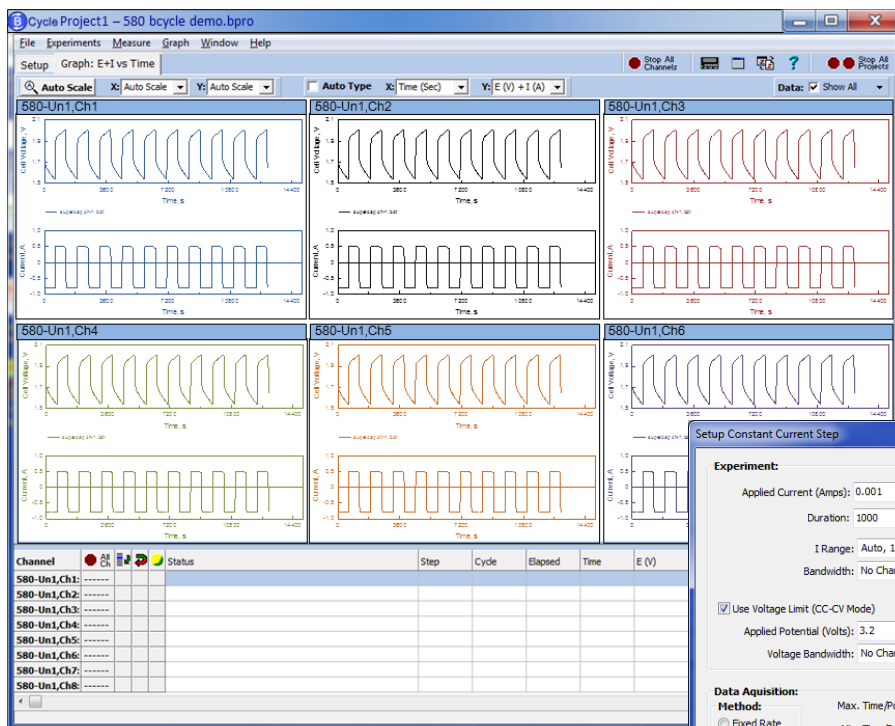
- Battery testing
- Supercapacitors

### OPTIONS:

- Universal cell holder
- Standard or custom cell cables

## SPECIFICATIONS:

Set Voltage:	-2.000 V to +10.000 V
Compliance Voltage:	-2.000 V to +10.000 V
Maximum Current:	±1.000 A
Current Ranges:	1 A, 100 mA, 10 mA, 1 mA, 100 µA, 10 µA (Auto)
Mode:	Constant Current, Voltage or Power (charge, discharge)
Control Accuracy:	
Voltage:	< 0.1% of Positive Full Scale (at 25 °C)
Current:	< 0.1% of Full Scale of Range (at 25 °C)
Measurement Accuracy:	
Voltage:	< 0.05% of Positive Full Scale (at 25 °C)
Current:	< 0.1% of Full Scale of Range (at 25 °C)
Overload Tolerance:	
Current:	110% of rating
Voltage:	110% of rating
Connection:	2, 3, 4, or 5-wire (I+, I-, V+, V-, AUX)
Sampling Rate:	Max. 100Sa/s per channel (with 1 580-unit per computer)
Impedance:	2 frequency HFR; user-defined frequencies
Host Interface:	USB, full-speed, HID-compliant
Channels:	8, independent, not electrically isolated from each other or USB interface
Dimensions:	43 cm W x 23 cm H x 54 cm D (17 in. x 8.8 in. x 21.3 in.)
Weight:	9 kg (20 lbs.)
Environment:	5-35 °C
Power:	100-240 V, 50/60 Hz



Setup Constant Current Step

**Experiment:**  
Applied Current (Amps): 0.001 Absolute  
Duration: 1000 Seconds  
I Range: Auto, 10 uA Min  
Bandwidth: No Change  
 Use Voltage Limit (CC-CV Mode)  
Applied Potential (Volts): 3.2 Absolute  
Voltage Bandwidth: No Change

**Data Acquisition:**  
Method:  Fixed Rate  
 delta - E      delta-E (Volts): 0.005  
 delta - I      delta-I (Amps): 0.001

**Max. Time/Point (Sec):** 1  
**Min. Time/Point (Sec):** 1

**Terminate this step if the following condition occurs:**

**Voltage**  
 E < V (Volts): 2.5  
 E > V (Volts): 5  
 Eref < V (Volts): 0  
 Eref > V (Volts): 5  
 dE/dt < dV (Volts): 0.002 dt (Sec): 10  
 dE/dt > dV (Volts): 0.005 dt (Sec): 10  
 dE\_Ref/dt < dV (Volts): 0.002 dt (Sec): 10  
 dE\_Ref/dt > dV (Volts): 0.005 dt (Sec): 10

**Current**  
 I < A (Amps): 0.0001  
 I > A (Amps): 1  
 dI/dt < dI (Amps): 0.002 dt (Sec): 10  
 dI/dt > dI (Amps): 0.005 dt (Sec): 10

**Power**  
 P < P (Watts): 0  
 P > P (Watts): 5

**Charge**  
 Q < Charge(Ah): 0  
 Q > Charge(Ah): 5

**Energy**  
 Wh < Energy(Wh): 0  
 Wh > Energy(Wh): 2

**Description:**

OK Cancel Help