

## SBS BCT-5000 Battery Capacity Tester

*DC Resistive Load Bank (24V, 48V, or 120V)*

The only way to know your industrial batteries will perform to specification is to test them regularly. SBS's battery capacity testers enable you to test your wet or sealed batteries in a variety of ways and at three voltages. Load bank test 24V, 48V, or 120V DC systems with currents up to 171 amps. A built-in digital meter lets you read volts, amps, amp-hours, and elapsed time without having to hook up a separate meter. The display is accurate to 1% of full scale at the rated voltages. The unit also offers continuous operation, so there's no cool down needed after or between tests. Use the master load control switch to instantly apply or remove loads.

### Built-in Protection

The over-voltage and over-temperature protection components coupled with load elements extend instrument life and system reliability by operating at less than 50% of the maximum temperature rating. Additionally, the automatic under-voltage trip keeps cells from being damaged during testing.

### Ordering Information:

- BCT-5000 Battery Capacity Tester



### Specifications

Capacity:	12V/24V/105V DC to 150AH; 24/48/120V DC to 171AH
Load Steps:	Six load-step resolution in 5A increments (5-50A)
Load Elements:	Chromium alloy wire
Under voltage Trip:	Automatically removes load if voltage drops below 19.2 /38.4 / 96 Vdc)
Voltage:	24V/48V/120V DC
Blower/Control Power	110V AC, single-phase (optional 220V, 50hz)
Size/Weight:	16.8 x 21.25 x 24.25" HWD (42.7 x 54 x 61.6 cm) 75 lbs. (34 kg)

### Features:

- Tests 24V/48V/120V DC power sources
- Use with wet or sealed batteries
- Built-in digital meter with 1% full scale accuracy
- Rated for continuous operation – no cool-down period
- Master switch instantly applies/removes loads
- Operates conveniently and quietly

### General Information:

Each unit includes:

1. 15-foot quick-disconnect test cables
2. Operating instructions

## SBS BCT-3000

*Lightweight 24V, 48V DC Resistive Load Bank*

The SBS Model BCT-3000 is a lightweight, DC resistive load bank contained in a small enclosure. It provides up to 150 amperes loading capacity for testing utility sub-station, telecommunication, and related DC power sources at 24V or 48V DC.

### Specifications

Capacity:	Up to 150 Amps DC
Load Step Resolution:	1 Amp
Voltage:	24V or 48V
Controls:	Master Load ON/OFF, 12 Load Step Switches
Load Elements:	Helically wound chromium alloy wire; no "cool down" required; over-temperature protected
Blower Power:	120 VAC 1 Ø with line cord or DC-powered version listed
Weight:	Approximately 30 pounds



Cat. No Versions

- BCT-3000 AC Fans ■ BCT-3010 DC Fans

# SBS GL-1000 Constant Current Electronic DC Load Tester

Battery Capacity Tester (1,000 Watts)



The SBS GL-1000 is a great tester for single cells or lower ampere hour battery systems up to 64 Vdc.

- Adjustable, constant current load
- 1.0V to 64.0V Range
- Parallel operation to enable increased load — up to four units
- Selectable Constant Current or Constant Resistance
- Weight: 11 lbs.

#### Voltage/ Loading Capacity:

Input voltage: 120/220 VAC; 60/50 Hz  
 Maximum Loading Power: 1,000 Watts  
 Minimum Loading Voltage: 1.0 VDC  
 Maximum Loading Voltage: 64.0 VDC  
 Maximum Loading Current: 200AH

Cat. No GL-1000

Conversion Table		
Watts / Voltage = Current (Amps)		
Watts	Voltage	Max Current (Per Unit)
1000	64	15.6 Amps
1000	48	20.8 Amps
1000	36	27.7 Amps
1000	24	41.6 Amps
1000	12	83.3 Amps
1000	6	166 Amps
1000	2	200 Amps (max)

# SBS Electronic Constant Current DC Load Testers

RBL Series Load Banks (0-600V and 0-1,000amps)



#### Battery Testing

The SBS RBL Series Load Tester is used to test batteries by analyzing life cycle and establishing the V/I characteristics. The load is operated in the constant current mode, which freezes one of the variables when calculating the battery's power level. Some batteries require exotic waveform testing in order to simulate real-life uses. This is accomplished by using the internal pulse generator. Many different waveforms can be created through the use of variable current levels, frequency, duty cycle, and slew rate. The load may be controlled through analog remote programming input for situations where the required waveforms are extremely complex. This input is directly proportional to the selected full-scale current of 0 to 10 volts.

The constant power mode is used to test batteries designed for UPS back-up systems. It simulates the changing current demand as the battery voltage decays, which are the characteristics of DC-to-DC converters and inverter input simulations.

#### Features:

- Ratings from 0-600 volts, 0-1,000 Amps, up to 4,000 watts in a single unit
- Units available in 50V, 100V, 400V or 600V:
  - 800 Watt (8"W x 5.25"H x 22"D)
  - 2,000 Watt (19"W x 5.25"H x 22"D)
  - 4,000Watt (19"W x 8.75"H x 22"D)
- Variable speed fans minimize fan noise
- Master/Slave paralleling
- Five modes of operation: Constant Current, Constant Resistance, Constant Power, Constant Voltage, Pulse Mode
- Synchronized paralleling for larger systems that are controlled simultaneously
- Programmable under voltage
- Internal pulse generator with variable slew adjustable for transient testing.

SBS RBL series load banks are ideal for testing large batteries, power supplies, fuel cells, and other related DC power equipment. The high-range current capability and constant power feature facilitate battery testing and analysis. The ultra-fast slew rate provides unmatched power supply transient testing capabilities. The ultra-low voltage, high current capability makes the SBS Electronic Load Tester a sound solution for any fuel cell requirement.