The multifunction Series 8000 High Power Test System is a fully automated, computerized test system providing the highest level of specifications and features available in the industry.

With channel ratings as high as 700 Volts and 1000 Amps, the Series 8000 is the perfect instrument in your toolbox for high power applications. Using Maccor’s Standard Full Feature Battery Test Software, the Series 8000 is the most powerful test system you will own. Perform virtually any type of test (FUDS, SFUDS, DST, etc) on any type of energy storage device (batteries, battery packs, super-capacitors, fuel cells, etc.). The Series 8000 comes standard with the high level accuracy, resolution, and dependability satisfied Maccor customers expect.

**FEATURES:**
- Test channels operate independently of the other positions
- Easily programmable to run a wide range of multiple step tests
- Operate in steps in any combination of fixed current, power, voltage, or resistance
- Record data at operator specified intervals of time, voltage, current, etc.
- Delivered calibrated to NIST traceable standards, and requires calibration only once per year
- Automatic scaling of W/kg for FUDS, SFUDS, DST, and other driving simulation test protocols

The Series 8000 is supplied as a complete turnkey system consisting of a test cabinet(s), computer, tester software, and data analysis software. The test cabinet, with a distributed architecture, is connected to the tester PC via an Ethernet communications network.
Specifications

**Configuration**

<table>
<thead>
<tr>
<th></th>
<th>Charge Current</th>
<th>Discharge Current</th>
<th>Voltage</th>
<th>Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increments</td>
<td>145 Amps</td>
<td>100 Amps</td>
<td>50 Volts</td>
<td>50 kW</td>
</tr>
<tr>
<td>Maximum</td>
<td>700 Volts</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Sample Configuration**

<table>
<thead>
<tr>
<th>Channels</th>
<th>Voltage</th>
<th>Current</th>
<th>Current</th>
<th>Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>50 to 600 V</td>
<td>0 to 145 A</td>
<td>0 to 500 A</td>
<td>200 kW</td>
</tr>
</tbody>
</table>

**Accuracy**

Voltage & Current ±0.05% of Full Scale

**Resolution**

Voltage & Current 16-bit (1 part in 65,536)

**Time**

Minimum Step Time 10 mS

Control, Measurement, and Adjustment every 10 mS

**Modes of Operation**

Constant: Current, Power, Resistance, or Voltage

Import Test Step: Where an ASCII text file containing a table (list) of constant current or power values at fixed or specified intervals is executed as a test step. The values in the table can be automatically scaled for W/kg or C rate.

**Options**

- 1kHz High-Speed Data Acquisition Burst Mode
- Auxiliary Voltage Inputs ±5V, ±10V, ±20V, etc.
- Temperature Monitoring K, J, T, thermistor
- Control of External Load and/or Charger
- Environmental Chamber Control

All specifications subject to change, please contact Maccor for latest specification.

1 In Charge, Channel Power is Battery Voltage less Power Supply Voltage multiplied by current. In Discharge, Channel Power is Battery Voltage multiplied by current.