**PSL-SC-122000-G8D**
**12.8V 200AH**

Rechargeable Lithium Iron Phosphate Battery
PSL-SC – LiFePO4 Series Connection Range

**BATTERY FEATURES**
- Super safe lithium iron phosphate (LiFePO4) chemistry reducing the risk of explosion or combustion due to high impact, over-charging or short circuit situation
- Protection Circuit Module (PCM) monitors the current and voltage of the battery to provide optimum safety by protecting against over-charging and over-discharging
- PCM enhanced design balances the battery cells, optimizing battery performance
- Higher capacity or voltage capability through parallel or serial connections
- Delivers twice the power of lead acid batteries, even at high discharge rates, while maintaining constant power
- Faster charging and lower self-discharge
- Up to 10 times more cycles than lead acid batteries
- Compact and only 40% of the weight of comparable lead acid batteries
- Rugged impact resistant ABS case

**APPROVALS**
- UL 1642 cell certificate
- IEC 62133 cell certificate
- UN 38.3 certified
- ISO9001:2015 - Quality management systems

**PERFORMANCE SPECIFICATIONS**
- Nominal Voltage: 12.8 V
- Rated Capacity: 200 AH at a Constant Current of 0.2C to 10V
- Stored Energy: 2560 Wh
- Cycle Life: 2000 Cycles
- Approximate Weight: 53.4 lbs (24.2 kg)
- Internal Resistance: ≤20.0 mΩ
- Max Charge Current: 150 A
- Max Discharge Current: 150 A
- Charging Voltage: 14.6 V
- Recommended Discharge Cut-Off Voltage: 11 V

**APPLICATIONS**
- Medical
- Solar
- Wind
- Mobility
- Data Center
- Transport
- Sports & Recreation
- Utility

**SERIAL CONNECTION CAPABLE**
The SC series allows for up to 4 batteries connected in series or 4 in parallel, but not concurrently. The batteries must all be matched at voltage levels, capacity, state of charge, date of manufacturing, and chemistry.

**DIMENSIONS:** inch (mm)

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<th>W</th>
<th>L</th>
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<td>10.6 (268)</td>
<td>20.5 (520)</td>
<td>9.0 (228)</td>
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**PROTECTION CIRCUIT MODULE**
The PSL-SC-122000-G8D comes with a protection circuit module which monitors current and voltages during charge and discharge. This protects the battery from over-charge and over-discharge.

The PCM includes a balancing circuit that controls all cell voltages in the battery, making sure they are constantly at the same voltage level, optimizing battery capacity.

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**REV4: 10/19**
**Benign of Lithium**

Lithium offers several performance benefits versus its sealed lead acid (SLA) equivalent. A lithium battery’s capacity is independent from the discharge rate and provides constant power throughout its discharge. The degradation of a lithium battery at a high temperature is significantly reduced in comparison to SLA.

Lithium has ten times the cycle life as SLA at room temperature. Even at an elevated temperature, lithium still has increased cycle life over SLA at room temperature.

Lastly, Lithium charging follows a similar charging profile as SLA, Constant Current Constant Voltage (CC/CV). However, lithium can be charged faster, without the need for a maintenance float charge.

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**PCM Technical Specifications**

**Over Charge**
- Over-charge protection for each cell: 3.90 V
- Over-charge release for each cell: 3.60 V
- Over-charge release method: Protection releases when all cell voltages drop below the over-charge release voltage

**Over Discharge**
- Over-discharge protection for each cell: 2.00 V
- Over-discharge release for each cell: 2.50 V
- Over-discharge release method: Protection releases when all cell voltages rise above the over-discharge release voltage

**Over current**
- Discharge over-current protection: 430-470 A
- Protection delay time: 31 ms
- Over-current release method: Remove load for the over-current protection to release

**Battery Temperature**
- Over-temperature protection: 75° C
- Release temperature: 65° C

**Short circuit protection**
- Function condition: External short circuit
- Short circuit delay time: 250-500 ms
- Release condition: Remove load for the short circuit protection to release

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**Further Information**

Please refer to our website [www.power-sonic.com](http://www.power-sonic.com) or email us at technical-support@power-sonic.com for a complete range of useful downloads, such as product catalogs, material safety data sheets (MSDS), ISO certification, etc.