

# **PSL-SC-12350**

# PSL-SC - Series Capable Lithium PSL-SC Series

PSL-SC series lithium batteries can be connected in series or parallel for greater voltage or capacity. They deliver constant power, fast charging without the need for float, and long cycle life even at higher temperatures, making them a reliable, flexible solution for applications such as renewable energy systems, telecom, UPS, and industrial equipment.



### **Engineering Drawing**

L: 7.68in (195.0mm)
W: 5.16in (131.0mm)
H: 6.73in (171.0mm)

**HT:** 6.73in (171.0mm)

+/- 0.04 in. (+/- 1mm) for length and width +/- 0.08 in. (+/- 2mm) for height dimensions

#### **Available Terminals**



#### **Features**

- BMS Optimization
- Lightweight Lithium
- Lithium 2X Power
- Lithium 40% Lighter
- Lithium Cycle Life
- Lithium Maintenance Free
- Lithium Powersport Performance
- Lithium Safety
- Not For Starting
- Serial/Parallel Benefit

# **Performance Specs**

Nominal Voltage	12.8V
Nominal Capacity	35.0Ah
20-hr Rate	35.0Ah
10-hr Rate	35.0Ah
5-hr Rate	35.0Ah
1-hr Rate	35.0Ah
Weight	4.4kg
Internal Resistance	60.0 milliohms
Max Discharge Current	35.0A
Charge Temp Range	32°F (0°C) to 113°F (45°C)
Discharge Temp Range	-4°F (-20°C) to 140°F (60°C)
Case Material	ABS Plastic Rated to UL94:V0





## **Available options**

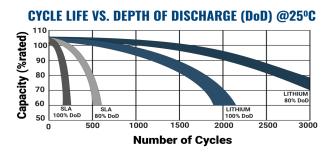
• PSL-SC-12350-GU1 M8

# **Applications**

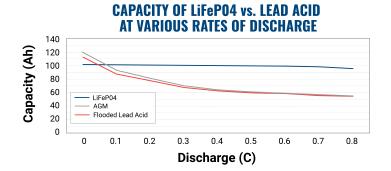


## **Graphs**

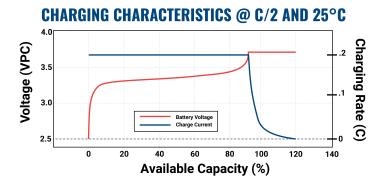
#### 1. Cycle Life Lithium vs. SLA



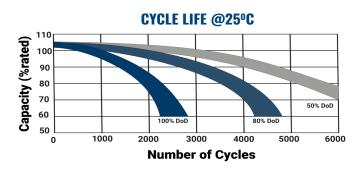
#### 2. Discharge Rates Lithium vs. SLA



#### 3. Lithium Charging

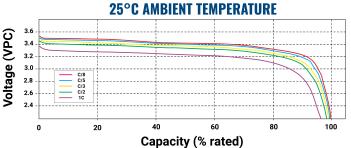


#### 4. Lithium Cycle Life

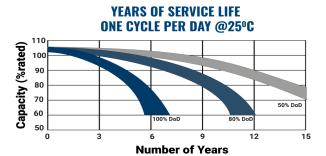


#### 5. Lithium Discharge Rates

# VOLTAGE PROFILES AT VARIOUS DISCHARGE RATES 25°C AMBIENT TEMPERATURE

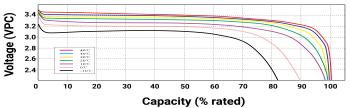


#### 6. Lithium Service Life



## 7. Lithium Temperature Discharge

# VOLTAGE PROFILES AT VARIOUS AMBIENT TEMPERATURES C/2 DISCHARGE RATE







#### **Lithium Protections**

Condition Nominal Voltage Delay Release

#### **Charging**

Cycle Applications: Apply constant voltage charge at 3.60VPC – 3.65VPC (14.4 to 14.6 volts for 12V Monobloc) at 20°C. The initial charging current should be set at less than C/4 Amps. Terminate the charge when the current falls to a 3% capacity rate to avoid overcharging. Stand-By or "Float" Service: Apply constant voltage charge of 3.35VPC – 3.45VPC (13.4 to 13.8 volts for 12V Monobloc) at 20°C. When held at this voltage, the battery will seek its own current level and maintain itself in a fully charged condition. For further charging and maintenance information see the lithium resource center on Power-Sonic.com.

#### **Approvals**







