

PSL-SC-12750

Series Capable Rechargeable Lithium (LiFePO4)

PSL-SC - Series Capable Lithium



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.

Configuration Options

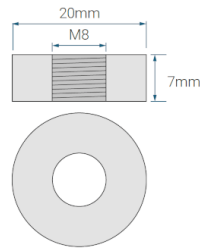
- PSL-SC-12750-G24 M8

Performance Specifications

Nominal Voltage	12.8 Volts, (4.0 cells)
Nominal Capacity	100.0Ah
2-hr. (50.0A to 10.0 Volts)	
Stored Energy	960.0Wh
Cycle Life (@100% Depth of Discharge)	2000
Series Connection	4
Parallel Connection	Contact Power-Sonic to connect more than 4 in parallel
Approximate Weight	21.61lbs, (9.8kg)
Dimensions	L: 10.24in, 260.0mm +/- 0.04 in. (+/- 1mm) for length and width +/- 0.08 in. (+/- 2mm) for height dimensions W: 6.61in, 168.0mm H: 8.39in, 213.0mm TH: 8.39in, 213.0mm
Internal Resistance (approx.) mΩ	20.0mΩ
Max Continuous Discharge Current	80.0A
Operating Temperature Range	
Charge	32°F (0°C) to 113°F (45°C)
Discharge	-4°F (-20°C) to 140°F (60°C)
Case	ABS Plastic Rated to UL94:V0
Recommended Power-Sonic Charger	PSC-1220000-LIFE

Available Terminals (mm)

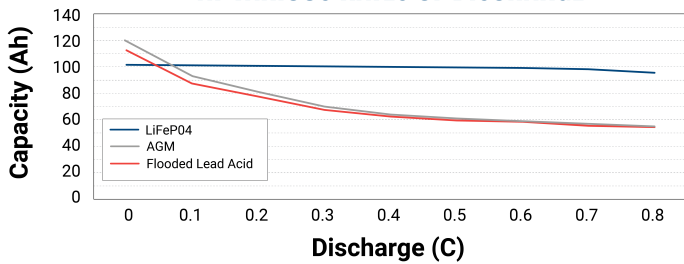
T11 THREADED INSERT
- 8mm STUD



Graphs

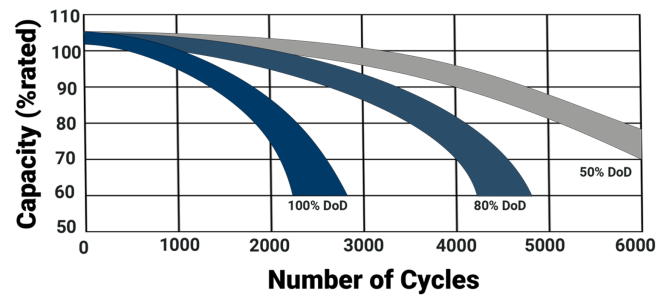
Discharge Rates Lithium vs. SLA

CAPACITY OF LiFePO4 vs. LEAD ACID AT VARIOUS RATES OF DISCHARGE



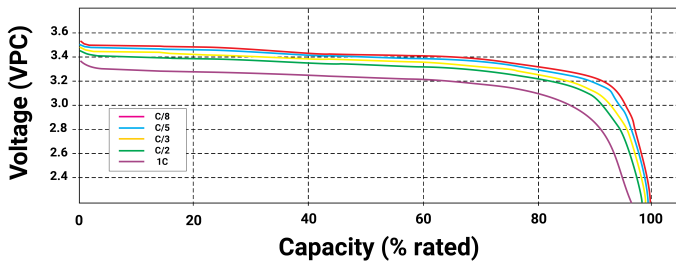
Lithium Cycle Life

CYCLE LIFE @25°C



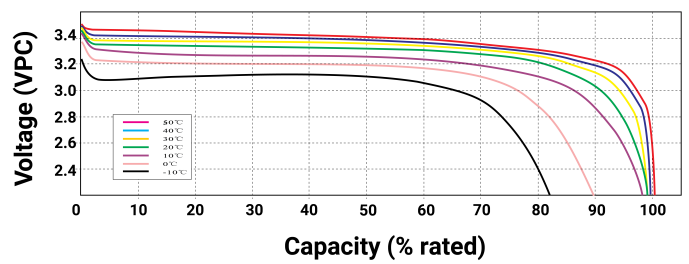
Lithium Discharge Rates

VOLTAGE PROFILES AT VARIOUS DISCHARGE RATES 25°C AMBIENT TEMPERATURE



Lithium Temperature Discharge

VOLTAGE PROFILES AT VARIOUS AMBIENT TEMPERATURES C/2 DISCHARGE RATE



Protections Circuit Characteristics

Parameter	Condition	Delay	Release
1st Over Discharge Current	A	s	s
2nd Over Discharge Current	A	s	s
Over Charge Current	A	s	s
Cell Over Voltage Protection	V	s	V
Cell Under Voltage Protection	V	s	V
Short Circuit Protection Current	A	ms	s

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.

Engineering Drawing

For Further Information

Please refer to our website, www.power-sonic.com, for a complete range of useful downloads, such as product catalogs, material safety data sheets (MSDS), ISO certification, etc.

Approvals



Extended mineral reporting meets global supply chain transparency standards for responsible and ethical sourcing practices.



IEC 62133 certification ensures lithium battery safety, quality, and reliability for industrial and consumer use.



ISO 9001:2015 certification ensures consistent quality management and manufacturing standards for energy storage products.



Manufactured with UL 1642 certified lithium cells ensuring battery safety, durability, and regulatory compliance.



REACH compliant with EU chemical safety standards ensuring restricted substances are controlled in all battery components.



RoHS compliance ensures restriction of hazardous substances in electrical, electronic, and battery-powered products.



SVHC compliant with EU REACH regulations for Substances of Very High Concern used in electrical and energy storage products.



UN 38.3 certification ensures lithium batteries meet global transport safety standards for air, sea, and ground.