



PSL-SC-12200

Rechargeable Lithium Battery **12V 20Ah 256Wh**
PSL-SC – Series Capable Lithium **LiFePO4**

FEATURES

- Super safe lithium iron phosphate (LiFePO4) chemistry reducing the risk of explosion or combustion due to high impact, over-charging, or short circuit condition
- Battery Management System (BMS) controlling the parameters of the battery to provide optimum safety by protecting against over-charging and over-discharging
- BMS multi-function design balances the battery cells optimizing battery performance
- 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 case

INTELLIGENT BATTERY MANAGEMENT SYSTEM

The PSL-SC Series comes with an intelligent battery management system which monitors current and voltages during charge and discharge. This protects the battery from over-charge and over-discharge.

The BMS embeds smart balancing algorithms that control all cell voltages in the battery, making sure they are constantly at the same voltage level, optimizing battery capacity.

SERIES CAPABLE SERIES

The SC series allows up to four batteries connected in series. The batteries must all be matched at voltage levels, capacity, state of charge, date of manufacturing, and chemistry.

GLOBAL HEADQUARTERS (USA AND INTERNATIONAL EXCLUDING EMEA)

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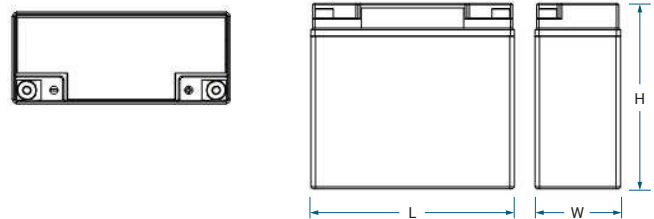
POWER-SONIC EMEA (EMEA – EUROPE, MIDDLE EAST AND AFRICA)

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PERFORMANCE SPECIFICATIONS

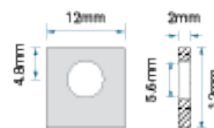
Nominal Voltage	12.8 V
Nominal Capacity	20 Ah
Stored Energy	256 Wh
Dimensions	
Length (+/-2mm)	7.1" (181 mm)
Width (+/-2mm)	3.0" (76 mm)
Total Height (+/-4mm)	6.5" (166 mm)
Minimum Weight	5.7 lbs (2.60 kg)
Internal Resistance	≤70.0 mΩ
Max Continuous Discharge Current	25.0 A
Charge Cut-off Voltage	14.6 V
Recommended Charge Current	5.0 A - 10.0 A
Recommended Discharge Cut-Off Voltage	11 V
Cycle Charge (Initial Current ≤ 0.25C)	14.4 V – 14.6 V
Cycle Life (@100% Depth of Discharge)	2000
Series Connection	Up to Four Series Connections
Parallel Connection	Unlimited Parallel Connections
Operating Temperature	
Charge	0 to 60 °C
Discharge	-20 to 65 °C
Case	ABS

DIMENSIONS



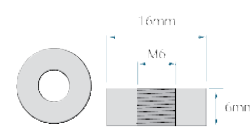
TERMINALS:

NB1: Terminal posts with nut & bolt connectors.



Torque: 2.0–3.0 Nxm

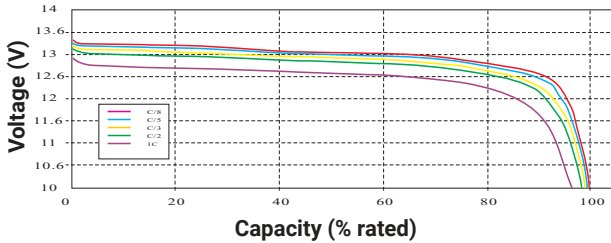
M6: Threaded insert with 6mm stud fastener



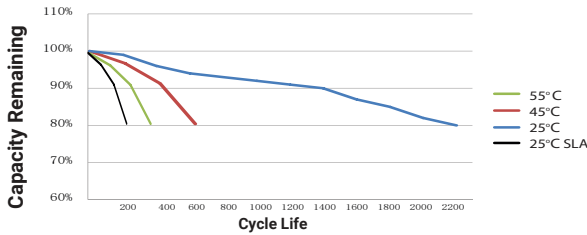
Torque: 3.9–5.4 Nxm



DISCHARGE VOLTAGE PROFILES AT VARIOUS RATES 25°C AMBIENT TEMPERATURE



CYCLE LIFE vs. VARIOUS TEMPERATURE 0.2C CHARGE/0.5C DISCHARGE @ 100% DOD



CHARGING

Cycle Applications: Apply constant voltage charge at 3.45 – 3.65 volts per cell at 20°C. Initial charging current should be set at less than C/4 Amps. Switch to float charge to avoid overcharging.

“Float” or “Stand-By” Service: Apply constant voltage charge of 3.35 – 3.40 volts per cell at 20°C. When held at this voltage, the battery will seek its own current level and maintain itself in a fully charged condition.

APPLICATION

- Golf Cart
- Home Energy
- Mobility
- Sports & Recreation
- Solar

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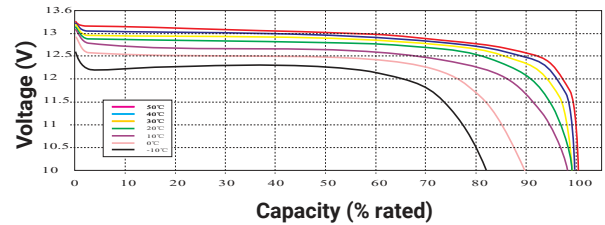
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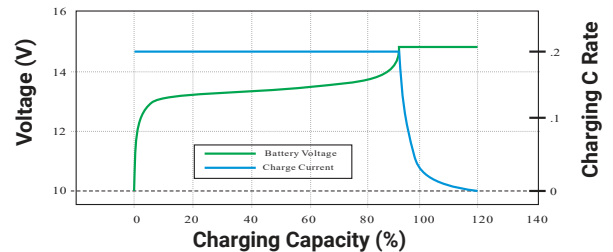
Rechargeable Lithium Battery
PSL-SC – Series Capable Lithium

12V 20Ah 256Wh
LiFePO4

DISCHARGE VOLTAGE PROFILES AT 0.5C DISCHARGE RATE VARIOUS AMBIENT TEMPERATURES



CHARGING CHARACTERISTICS (0.2C AMP @ 25°C)



APPROVALS

- UN 38.3 certified
- IEC 62133 cell certificate
- UL 1642 cell certificate
- ISO9001:2015 - Quality management system



FURTHER INFORMATION

Please refer to our website 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.