



## PSL-CP-12500 12V 50Ah 640Wh LiFePO4

Rechargeable Lithium Battery  
PSL-CP – Communication Port Series

### 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

### COMMUNICATION PORT SERIES

Combining proven lithium technology with an intelligent battery management system (BMS), the Power-Sonic PSL-CP range delivers a lithium battery that lasts longer, weighs less, and charges quicker than the equivalent lead acid battery.

At the heart of every Power-Sonic PSL-CP lithium battery is an intelligent BMS that monitors and reacts to multiple voltage, current, and temperature events to maximize performance, battery life, and safety. With its advanced BMS design, the PSL-CP is capable of communicating with its application over a hard wired connection. Contact Power-Sonic to learn more about our PSL-CP communication protocols.

#### GLOBAL HEADQUARTERS (USA AND INTERNATIONAL EXCLUDING EMEA)

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

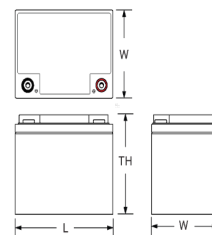
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### PERFORMANCE SPECIFICATIONS

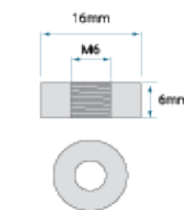
Nominal Voltage	12.8 V
Nominal Capacity	50 Ah
Stored Energy	640 Wh
<b>Dimensions</b>	
Length (+/-2mm)	7.7" (195 mm)
Width (+/-2mm)	5.2" (130 mm)
Height (+/-4mm)	7.2" (183 mm)
Minimum Weight	12.9 lbs (5.90 Kg)
Internal Resistance	<30.0 mOhm
Max Continuous Discharge Current	35.0 A

Charge Cut-off Voltage	14.6 V
Recommended Charge Current	5.0 A - 12.5 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	No Series Connections
Parallel Connection	Contact Power-Sonic
<b>Operating Temperature</b>	
Charge	0 to 55 °C
Discharge	-30 to 55 °C
Case	ABS V0

### DIMENSIONS



### TERMINALS:

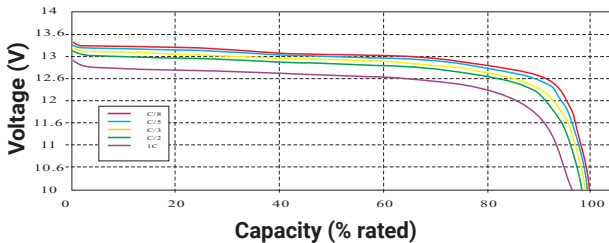


Torque: 3.9~5.4 Nmm

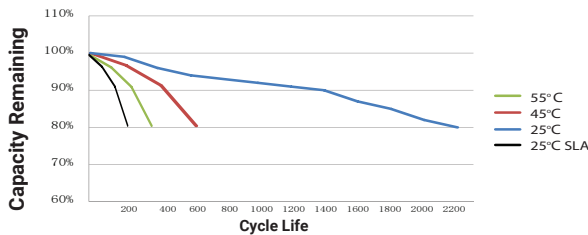




## DISCHARGE VOLTAGE PROFILES AT VARIOUS RATES 25°C AMBIENT TEMPERATURE



## 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

- Medical
- Scooter
- Mobility
- Utilities
- Telecommunications
- UPS

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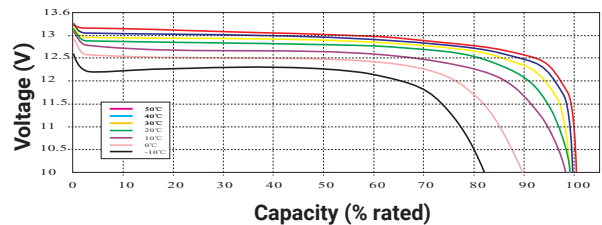
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# PSL-CP-12500

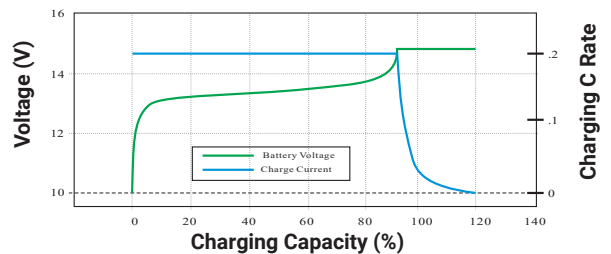
12V 50Ah 640Wh  
LiFePO4

Rechargeable Lithium Battery  
PSL-CP – Communication Port Series

## DISCHARGE VOLTAGE PROFILES AT 0.5C DISCHARGE RATE VARIOUS AMBIENT TEMPERATURES



## CHARGING CHARACTERISTICS (0.2C AMP @ 25°C)



## APPROVALS

- UN 38.3 certified
- ETL Listed
- IEC61233 - Cell Level



## 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](mailto:technical-support@power-sonic.com) for a complete range of useful downloads such as product catalogs, material safety data sheets (MSDS), ISO certification, etc.