PSL-12450E 12.8V 45.0 AH
Rechargeable Lithium Iron Phosphate Battery
PSL – LiFePO4 Series

PCM FEATURES
- Balancing function for cells
- Over-current protection
- Over-voltage protection
- Over-discharge protection
- Short-circuit protection

APPROVALS
- U.L recognized
- ISO9001:2015 – Quality management systems
- ETL Approved
- FCC Approved

TERMINALS: (mm)
- M6 threaded insert (female-threaded)

DIMENSIONS: inch (mm)
- L: 7.70 (195)
- W: 5.20 (130)
- H: 7.20 (183)
- HT: 7.20 (183)

Tolerances are +/- 0.04 in. (+/- 1mm) and +/- 0.08 in. (+/- 2mm) for height dimensions. All data subject to change without notice.

BATTERY FEATURES
- Compact and only 40% of the weight of comparable lead acid batteries
- Up to 10 times more cycles than lead acid batteries
- Faster charging and lower self-discharge
- Delivers twice the power of lead acid batteries, even high discharge rate, while maintaining high energy capacity
- Super safe chemistry reducing the risk of explosion or combustion due to high impact, over-charging or short circuit situation
- Rugged impact resistant ABS case and cover flame retardant to UL94:V0
- Integrated battery management system (BMS) controls the parameters of the battery to provide optimum safety and performance. Enhanced design balances the battery cells and protects against overcharging or over discharging
- The battery will communicate with most smart charging (power module) systems
- Smart electrical design for enhanced temperature control

PERFORMANCE SPECIFICATIONS
- Nominal Voltage: 12.8 volts
- Rated Capacity: 45.0 AH
- Watt Hour: 579
- Life Expectation: Residual capacity is approximately 60% of rated capacity after 2500 cycle based on standard charge/discharge
- Approximate Weight: 12.8 lbs. (5.8 kg)
- Cell Configuration: IFR 18650EC - 1.5AH 4S30P
- Internal Resistance at 50% SOC: <35.0 milliohms
- Max Continuous Discharge Current at 68°F (20°C): 25A
- Protection/Communication: BMS/SMBus
- Shelf Life (% of nominal capacity at 68°F (20°C):
  - 1 Month: 97%
  - 3 Month: 91%
  - 6 Month: 85%
- Operating Temperature Range
  - Charge: 32°F (0°C) to 122°F (50°C)
  - Discharge: 14°F (-10°C) to 122°F (50°C)
  - Storage: 32°F (0°C) to 86°F (30°C)
- Case: Flame Retardant ABS Plastic UL94:V-0
- Power Sonic Chargers: Contact us for information on a suitable charger
- Standard Charge/Discharge: Charge CC at 0.2C to 14.6V then CV until current drops to 0.05C, Rest 30 min. Maximum Charging Current: 25A
- Charging Time with Max Charging Current: 2 Hours
- Standard Discharge: Discharge @ 0.2C to 10V.
- Terminal: M6 threaded insert (female-threaded)
- Connector: PJ45
- Fuel Gauge: 5 LED Indicator

To ensure safe and efficient operation always refer to the latest edition of our Technical Manual, as published on our website.

© 2018 Power-Sonic Corporation. All rights reserved. All trademarks are the property of their respective owners.

All data subject to change without notice. E&O E

power-sonic.com
PSL-12450E 12.8V 45.0 AH
Rechargeable Lithium Iron Phosphate Battery
PSL – LiFePO4 Series

CHARGING CHARACTERISTICS (0.2C AMP @ 25°C)

DISSCHARGE VOLTAGE PROFILES @ VARIOUS DISCHARGE RATES @ 25°C AMBIENT TEMPERATURES

APPLIANCES

• Medical
• Solar
• Wind
• Mobility
• Data Center
• Transport
• Sports & Recreation
• Utility

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.

CHARGERS

Power Sonic offers a wide range of chargers suitable for batteries with a variety of capacities.
Please refer to our website for more information on our switch mode and transformer type chargers.
Please contact our technical department for advice if you have difficulty in locating a suitable charger.

CORPORATE HEADQUARTERS
(USA AND INTERNATIONAL EXCLUDING EMEA)
Power-Sonic Corporation
7550 Panasonic Way, San Diego,
California 92154
T: +1 (619) 661 2020
F: +1 (619) 661 3650
E: customer-service@power-sonic.com

POWER-SONIC EUROPE LIMITED
(EMEA – EUROPE, MIDDLE EAST AND AFRICA)
3 Buckingham Square,
Hurricane Way, Wickford,
Essex SS11 BYQ
T: +44 (0)1268 560686
F: +44 (0)1268 560902
E: salesEMEA@power-sonic.com

To ensure safe and efficient operation always refer to the latest edition of our Technical Manual, as published on our website. © 2018. Power-Sonic Corporation. All rights reserved. All trademarks are the property of their respective owners. All data subject to change without notice. E&OE.