

















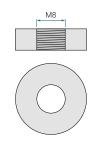




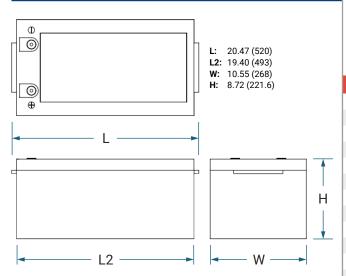


**Rechargeable Lithium Iron Phosphate Battery** PSL BTP - LiFePO4 Bluetooth® Series

#### TERMINALS: (mm)



#### **DIMENSIONS: inch (mm)**



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

#### **CORPORATE HEADQUARTERS** (USA AND INTERNATIONAL EXCLUDING EMEA)

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### **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
- Battery Management System (BMS) controls the parameters of the battery to provide optimum safety and performance
- BMS enhanced design balances the battery cells and protects against overcharging and discharging
- Bluetooth® communication capability for battery status through Power Sonic app

# **APPROVALS**

**Nominal Voltage** 

**Power Sonic Chargers** 

- U.L recognized
- ISO9001:2015 Quality management systems

#### PERFORMANCE SPECIFICATIONS

Nominal Voltage	12.0 Volto
Rated Capacity	300.0 AH
Stored Energy	3.84KWh
Cycle Life (@DOD100%)	≤2000 cycles
Approximate Weight	83.11 lbs. (37.7kg)
Internal Resistance at 50% SOC	≤30.0 milliohms
Max Charge Current	200A
Max Discharge Current	200A
Pulse Discharge Current	450A withstand 5s
Discharge Cut-Off Voltage	10.0V
Protection/Communication	BMS and Bluetooth®
Series & Parallel Connection	Up to 4 packs can be connected in parallel. CANNOT be connected in series
Operating Temperature Range Charge Discharge Recommended	32°F (0°C) to 113°F (45°C) -4°F (-20°C) to 140°F (60°C) 59°F (15°C) to 95°F (35°C)
Case	Flame Retardant ABS Plastic UL94:V-0
Self-Discharge Rate Residual Capacity Reversible Capacity	≤3%/month; ≤15%/year ≤1.5%/month; ≤8%/year

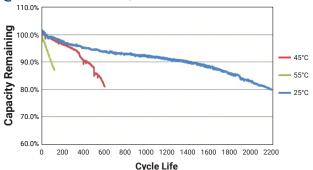
12.8 volts

To ensure safe and efficient operation always refer to the latest edition of our Technical Manual, as published on our website © 2019. 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

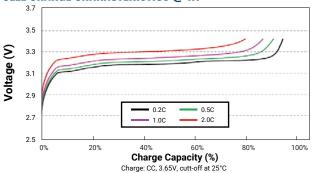
Contact us for information

on a suitable charger

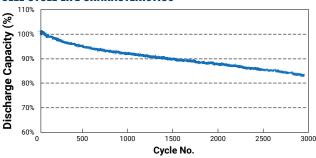
# 0.5C DISCHARGE CYCLE LIFE CURVE @ DIFFERENT TEMPERATURE



#### **CELL CHARGE CHARACTERISTICS @ RT**

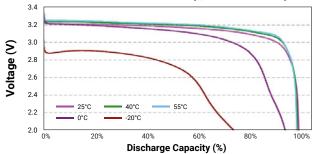


#### **CELL CYCLE LIFE CHARACTERISTICS**



Charge: CC-CV 1C (max) 3.65V, 1250mA, cutt-off at 25°C Discharge: CC 1C, 2.0V cutt-off at 25°C

#### **CELL DISCHARGE CHARACTERISTICS (@ TEMPERATURE)**



Charge: CC-CV 1C (max) 3.65V, 1250mA, cutt-off at 25°C

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# PSL-BTP-123000 12.8V 300.0 AH

Rechargeable Lithium Iron Phosphate Battery
PSL BTP - LiFePO4 Bluetooth® Series

### INTELLIGENT BATTERY MANAGEMENT SYSTEM

The PSL-BTP Series come with an intelligent battery management system which can monitor and optimize each cell during charge and discharge. This protects the battery from over-charge and over-discharge.

The BMS embeds smart balancing algorithms that control all the cells in the battery, making sure they are constantly at the same voltage level. The State of Charge (SoC) and State of Health (SoH) of each individual cell.

# **BUILT IN BLUETOOTH®**

Monitor the State of Charge (SoC) and State of Health (SoH) of your battery from your phone or tablet.

# **APPLICATIONS**

- Medical
- Mobility
- Sports &

- SolarWind
- Data CenterTransport
- Recreation
  Utility

#### **BMS TECHNICAL SPECIFICATIONS**

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 Over-charge protection for each cell
 3.75±0.05V

 Over-charge release for each cell
 3.60±0.04V

 Over-charge release method
 Under the release voltage

Over-discharge

Over-discharge protection for each cell 2.50±0.01V
Over-discharge release for each cell 2.80±0.01V
Over-discharge release method Charging recovery

Over-discharge release method

Discharge over current protection 210A - 250A

Protection delay time 7s-9s

Over current release method Discharge or auto release after 1min

Battery temperature

Charge over temperature

Protection @65±5°C
Release @50±5°C

Protection @65±5°C

Protection @65±5°C

Release @50±5°C

Charge low temperature protection

Protection @-10±5°C

MOSFET over temperature protection Protection @103±10°C Release @75±10°C

# **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.

Release @0±5°C