POWERSONIC
TRUSTED BATTERY SOLUTIONS

PSL-BTC SERIES

Medical Solar Wind Mobility Data Center Transport Sport & Recreation Utility

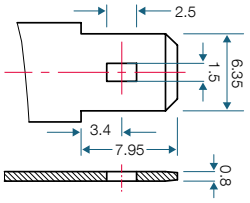
Bluetooth®

PSL-BTC-1290 12.8V 9.0 AH

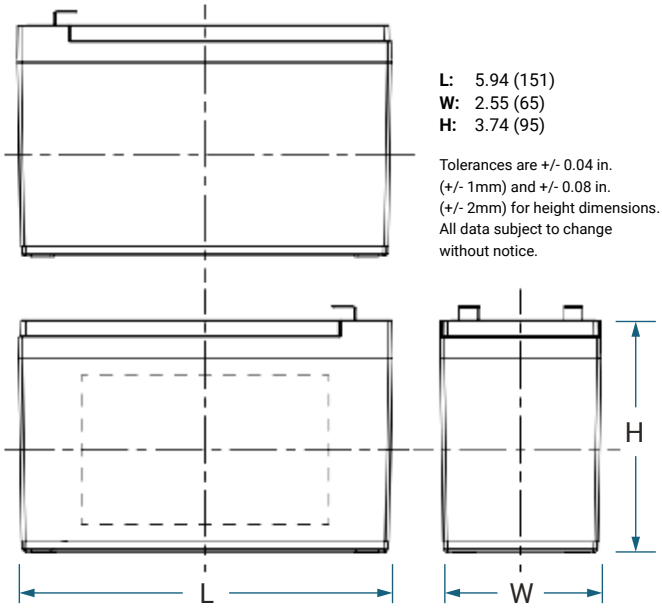
Rechargeable Lithium Iron Phosphate Battery
PSL BTC – LiFePO4 Bluetooth® Series

TERMINALS: (mm)

F2: Quick disconnect tabs, 0.250" x 0.032" – Mate with AMP. INC FASTON "250" series



DIMENSIONS: inch (mm)



L: 5.94 (151)
W: 2.55 (65)
H: 3.74 (95)

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
- 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

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

PERFORMANCE SPECIFICATIONS

Nominal Voltage	12.8 volts
Rated Capacity	9.0 AH
Stored Energy	115Wh
Cycle Life (@DOD100%)	≤2000 cycles
Approximate Weight	2.64 lbs. (1.2kg)
Internal Resistance at 50% SOC	≤80.0 milliohms
Max Charge Current	10A
Max Discharge Current	10A
Pulse Discharge Current	20A withstand 3s
Discharge Cut-Off Voltage	8.0V
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
Power Sonic Chargers	Contact us for information on a suitable charger

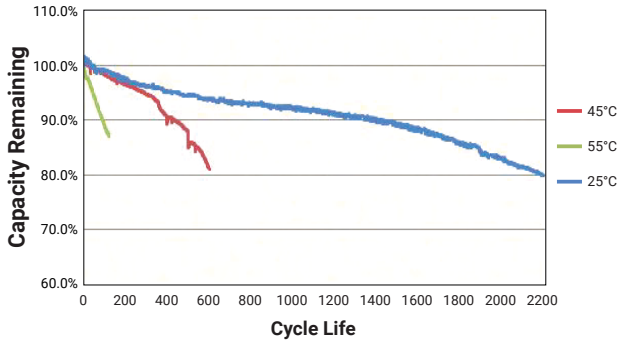
CORPORATE HEADQUARTERS
(USA AND INTERNATIONAL EXCLUDING EMEA)
Power-Sonic Corporation
7550 Panasonic Way, San Diego,
California 92154
T: +1 (619) 661 2020
F: +1 (619) 661 3650
E: customer-service@power-sonic.com

POWER-SONIC EUROPE LIMITED
(EMEA – EUROPE, MIDDLE EAST AND AFRICA)
3 Buckingham Square,
Hurricane Way, Wickford,
Essex SS11 8YQ
T: +44 (0)1268 560686
F: +44 (0)1268 560902
E: salesEMEA@power-sonic.com

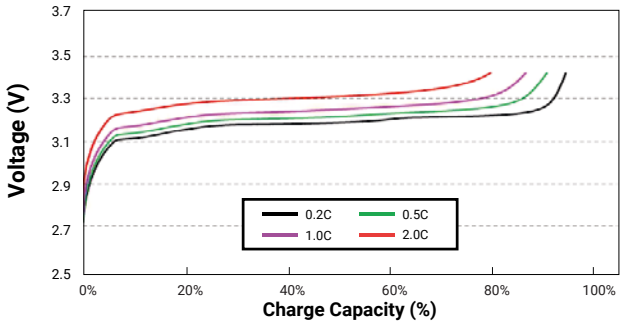
POWER PS SONIC
TRUSTED BATTERY SOLUTIONS

PSL-BTC SERIES

0.5C DISCHARGE CYCLE LIFE CURVE @ DIFFERENT TEMPERATURE

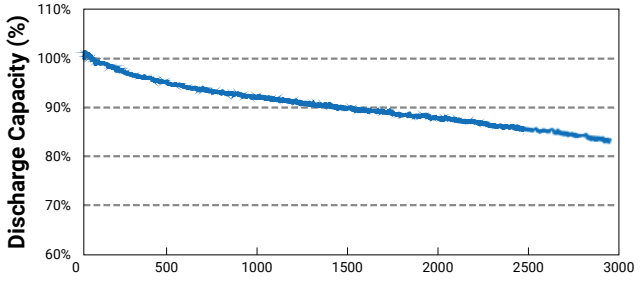


CELL CHARGE CHARACTERISTICS @ RT



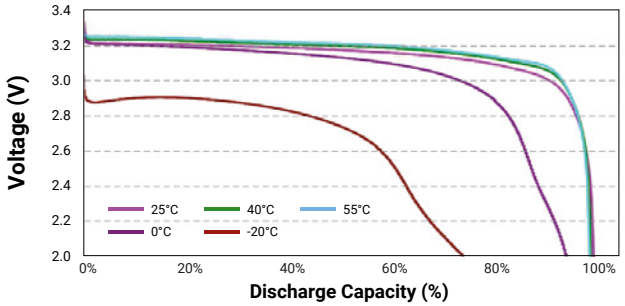
Charge: CC, 3.65V, cutt-off at 25°C

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
Discharge: CC 1C, 2.0V cutt-off at different temperature

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 8YQ
T: +44 (0)1268 560686
F: +44 (0)1268 560902
E: salesEMEA@power-sonic.com

PSL-BTC-1290 12.8V 9.0 AH

Rechargeable Lithium Iron Phosphate Battery
PSL BTC – LiFePO4 Bluetooth® Series

INTELLIGENT BATTERY MANAGEMENT SYSTEM

The PSL-BTC 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
- Solar
- Wind
- Mobility
- Data Center
- Transport
- Sports & Recreation
- Utility

BMS TECHNICAL SPECIFICATIONS

Over-charge	
Over-charge protection for each cell	3.75±0.05V
Over-charge release for each cell	3.60±0.05V
Over-charge release method	Under the release voltage
Over-discharge	
Over-discharge protection for each cell	2.00±0.05V
Over-discharge release for each cell	2.50±0.05V
Over-discharge release method	Charging recovery
Over current	
Discharge over current protection	8A - 40A
Protection delay time	25s-35s
Over current release method	Delay for about 8s after recovery
Battery temperature	
Charge over temperature	Protection @65±5°C Release @50±5°C
Discharge over temperature	Protection @65±5°C Release @50±5°C
Charge low temperature protection	Protection @-10±5°C Release @0±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.

power-sonic.com

Rev3. 07/19