POWERPS SONIC

TRUSTED BATTERY SOLUTION













PSL-BT-48320-GC2

Rechargeable Lithium Battery
PSL BT – Bluetooth 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

BLUETOOTH® SERIES

Combining proven lithium technology with an intelligent battery management system (BMS), the Power Sonic PSL-BT 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-BT 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-BT range can be configured with four batteries in series or in parallel connections providing a solution for high voltage or capacity applications.

GLOBAL HEADQUARTERS (USA AND INTERNATIONAL EXCLUDING EMEA)

Power-Sonic Corporation 365 Cabela Dr Suite 300, Verdi, Nevada 89439 USA

T: +1 775 824 6500

E: customer-service@power-sonic.com

POWER-SONIC EMEA

(EMEA - EUROPE, MIDDLE EAST AND AFRICA)

Smitspol 4, 3861 RS Nijkerk, The Netherlands

T NL: + 31 33 7410 700 T UK: + 44 1268 560 686 T FR: + 33 344 32 18 17

E: salesEMEA@power-sonic.com

Nominal Voltage	51.2 V
Nominal Capacity	32 Ah
Stored Energy	1638.4 Wh
Dimensions Length (+/-2mm) Width (+/-2mm) Height (+/-2mm) Total Height (+/-4mm)	10.25" (259 mm) 7.12" (180 mm) 10.25" (259 mm) 11.00" (277 mm)
Minimum Weight	36.3 lbs (16.51 kg)
Internal Resistance	TBD mΩ
Max Continuous Discharge Current	90.0 A
Charge Cut-off Voltage	58.4 V
Number of Series Cells	16
Recommended Charge Current	8.0 A - 16.0 A
Recommended Discharge Cut-Off Voltage	44 V
Cycle Charge (Intitial Current ≤ 0.25C)	57.6 V - 58.4 V
Cycle Life (@100% Depth of Discharge)	2000
Series Connection	No Series Connections
Parallel Connection	Six Parallel Connections*

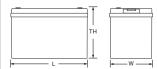
DIMENSIONS

Charge

Discharge Case



Operating Temperature



PERFORMANCE SPECIFICATIONS

TERMINALS:

DUAL M8 Terminal



0 to 55 °C

ABS

-30 to 55 °C















PSL-BT-48320-G2C2

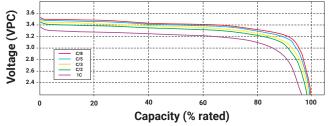
VOLTAGE PROFILES AT VARIOUS AMBIENT TEMPERATURES

C/2 DISCHARGE RATE

Capacity (% rated)

Rechargeable Lithium Battery **PSL BT - Bluetooth Series**

VOLTAGE PROFILES AT VARIOUS DISCHARGE RATES 25°C AMBIENT TEMPERATURE





CHARGING

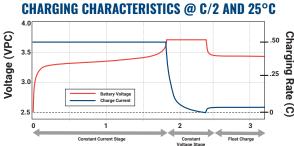
Cycle Applications: Apply constant voltage charge at 3.45 - 3.65 volts per cell at 20°C. Initial charging current should be set at less than C/4 Amps. Switch to float charge to avoid overcharging.

"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.

Voltage (VPC)

3.2

3.0 2.8 2.6



Charge Time (Hours)

APPLICATION

- **Golf Cart**
- Utilities
- Home Energy
- · Sports & Recreation

Mobility

GLOBAL HEADOUARTERS (USA AND INTERNATIONAL EXCLUDING EMEA)

Power-Sonic Corporation 365 Cabela Dr Suite 300, Verdi, Nevada 89439 USA T: +1 619 661 2020

E: customer-service@power-sonic.com

POWER-SONIC EMEA

(EMEA - EUROPE, MIDDLE EAST AND AFRICA)

Smitspol 4, 3861 RS Nijkerk, The Netherlands

T NL: + 31 33 7410 700 TUK: +44 1268 560 686 TFR: +33 344 32 18 17

E: salesEMEA@power-sonic.com

APPROVALS

- UN 38.3 certified
- IEC 62133 cell certificate
- IP67

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.