



## PSL-BT-24400-G24

Rechargeable Lithium Battery **24V 40AH 1024WH**  
PSL BT – Bluetooth Series **LiFePO4**

### 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

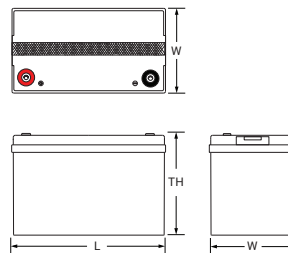
E: salesEMEA@power-sonic.com

\*PLEASE CONTACT POWER-SONIC TO CONNECT MORE THAN FOUR BATTERIES IN PARALLEL  
To ensure safe and efficient operation always refer to the latest edition of our Technical Manual, as published on our website.  
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### PERFORMANCE SPECIFICATIONS

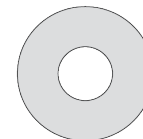
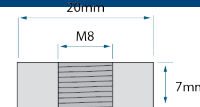
Nominal Voltage	25.6 V
Nominal Capacity	40 Ah
Stored Energy	1024 Wh
<b>Dimensions</b>	
Length (+/-2mm)	10.2" (260 mm)
Width (+/-2mm)	6.6" (168 mm)
Total Height (+/-4mm)	8.6" (218 mm)
Minimum Weight	20.5 lbs (9.3 kg)
Internal Resistance	TBD mΩ
Max Continuous Discharge Current	40.0 A
Charge Cut-off Voltage	29.2 V
Number of Series Cells	8
Recommended Charge Current	10.0 A - 20.0 A
Recommended Discharge Cut-Off Voltage	22 V
Cycle Charge (Initial Current ≤ 0.25C)	28.8 V – 29.2 V
Cycle Life (@100% Depth of Discharge)	2000
Series Connection	No Series Connections
Parallel Connection	Four Parallel Connections*
<b>Operating Temperature</b>	
Charge	0 to 55 °C
Discharge	-30 to 55 °C
Case	ABS

### DIMENSIONS



### TERMINALS:

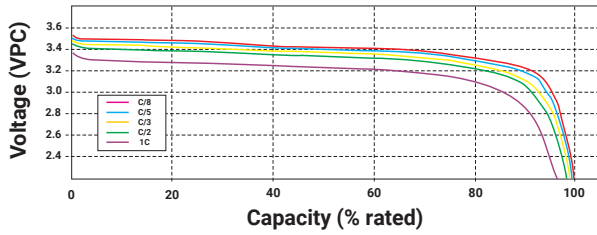
M8: Threaded insert with 8mm stud fastener



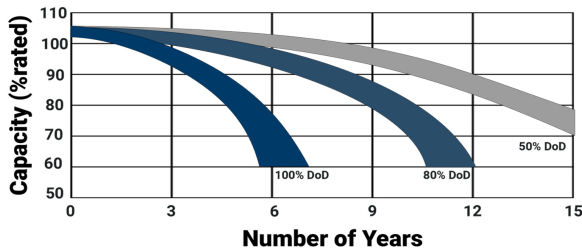
Torque: 11.0~14.7 Nxm



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



### YEARS OF SERVICE LIFE ONE CYCLE PER DAY @25°C



## 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

- Trolling
- Golf Cart
- Marine
- Home Energy
- Sports & Recreation
- Mobility

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E: customer-service@power-sonic.com

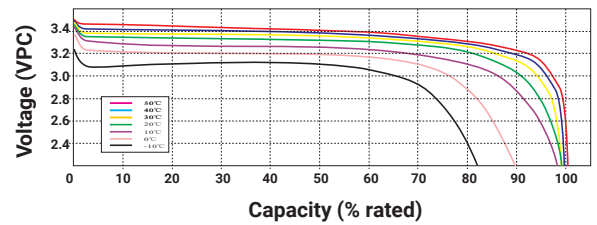
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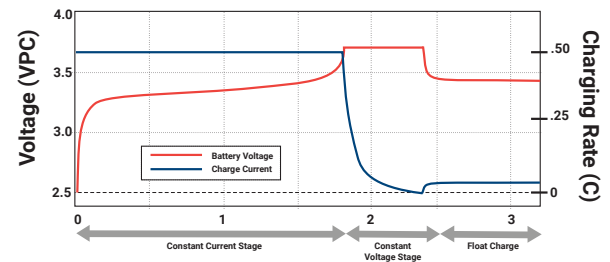
# PSL-BT-24400-G24

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PSL BT – Bluetooth Series LiFePO4

### VOLTAGE PROFILES AT VARIOUS AMBIENT TEMPERATURES C/2 DISCHARGE RATE



### CHARGING CHARACTERISTICS @ C/2 AND 25°C



## APPROVALS

- UN 38.3 certified
- UL 1642 cell certificate
- IEC 62133 cell certificate



## 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.