





Rechargeable Lithium Battery 48V 30AH 1536Wh PSL HV – High Voltage 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

## **HIGH VOLTAGE SERIES**

Combining proven lithium technology with an intelligent battery management system (BMS), the Power Sonic PSL-HV 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-HV 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-HV range can be configured with unlimited parallel connections providing a solution for very high capacity applications.

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

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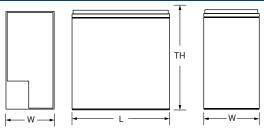
**POWER-SONIC EMEA** 

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PERFORMANCE SPECIFICATIONS	
Nominal Voltage	51.2 V
Nominal Capacity	30 AH
Stored Energy	1536 Wh
<b>Dimensions</b> Length (+/-2mm) Width (+/-2mm) Total Height (+/-4mm)	10.25" (260 mm) 7.10" (180 mm) 9.25" (235 mm)
Minimum Weight	36.6 lbs (16.60 kg)
Internal Resistance	≤10.0 mΩ
Max Continuous Discharge Current	90.0 A
Charge Cut-off Voltage	58.4 V
Recommended Charge Current	7.5 A - 15.0 A
Recommended Discharge Cut-Off Voltage	44 V
Cycle Charge (Intitial Current ≤ 0.25C)	57.6 V – 58.8 V
Cycle Life (@100% Depth of Discharge)	2000
Series Connection	No Series Connections
Parallel Connection	Up to Four in Parallel *
<b>Operating Temperature</b> Charge Discharge	0 to 55 °C -30 to 55 °C
Case	Sheet Metal

POWERPSSONC Marrie Briter House PSL-HV-48300-GC2 51.2V 30AH 1536WH

DIMENSIONS



## TERMINALS:

Anderson Style Connector

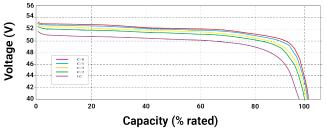








# DISCHARGE VOLTAGE PROFILES AT VARIOUS RATES 25°C AMBIENT TEMPERATURE



### CYCLE LIFE vs. VARIOUS TEMPERATURE 0.2C CHARGE/0.5C DISCHARGE @ 100% DOD



## **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**

- Golf Cart
- Mobility
- Solar
- Home Energy
- Sports & Recreation

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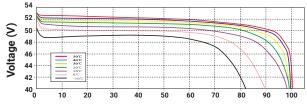
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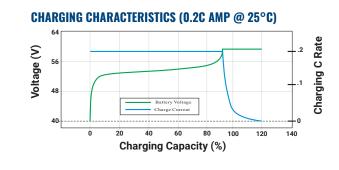
# **PSL-HV-48300-GC2**

Rechargeable Lithium Battery 48V 30AH 1536Wh PSL HV – High Voltage Series LiFePO4

# DISCHARGE VOLTAGE PROFILES AT 0.5C DISCHARGE RATE VARIOUS AMBIENT TEMPERATURES



Capacity (% rated)



## APPROVALS



UN 38.3 certified

## 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.

## power-sonic.com