

## PSL-1275 12.8 Volt 7.5 AH

Lithium Iron Phosphate (LiFePO<sub>4</sub>)  
Rechargeable Battery

**Power-Sonic Batteries Engineered With Vision. Built With Care.**



Power-Sonic Corporation has been a leading force since 1970 in the supply of high quality cost effective batteries.

We market an extensive range of rechargeable batteries worldwide. These batteries envelop a broad spectrum of electronic and industrial applications, either as the prime or standby power source.

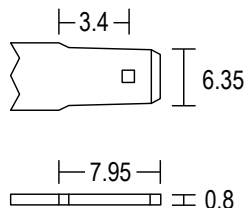
Power-Sonic is dedicated to continual product development to improve the performance and reliability of our product range. New batteries are constantly being introduced to meet the ever evolving needs of industry.

We are a 100% US owned private company. The corporation has an enviable record of growth and financial stability.

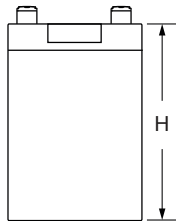
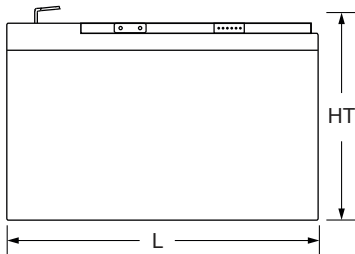
Providing our customers with reliable, yet economical, products is the corner stone of the Power-Sonic mission

### Terminals (mm)

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



### Physical Dimensions: in (mm)



**L: 5.95 (151) W: 2.56 (65) H: 3.70 (94) HT: 3.86 (98)**

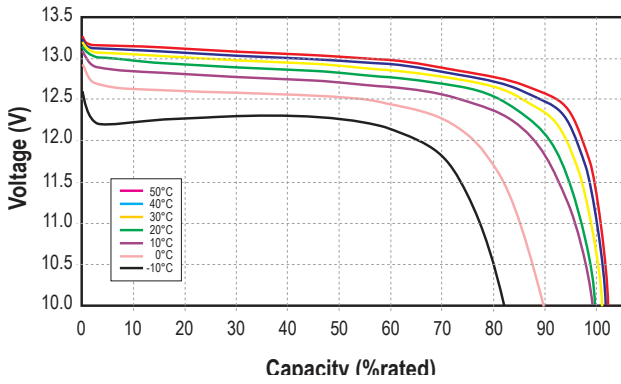
Tolerances are +/- 0.04 in. (+/- 1mm) and +/- 0.08 in. (+/- 2mm) for height dimensions. All data subject to change without notice.

### About Lithium Iron Phosphate (LiFePO<sub>4</sub>) Batteries

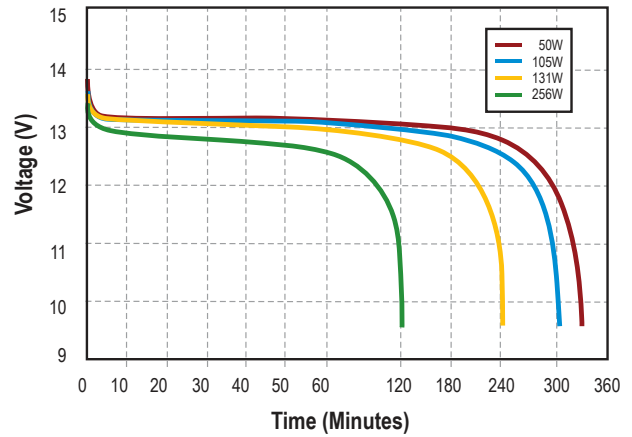
- Compact and only 40% of the weight of comparable capacity SLA batteries. Making it much easier to handle and transport.
- Extraordinary cycle life ~ 2,500.
- 2½ hours recharge time (C/2) under recommended conditions.
- Integrated battery management system (BMS) controls the parameters of the battery to provide optimum safety and performance. Among other functions, the BMS balances the battery cells and protects against overcharging or overdischarging.
- Rugged plastic case and cover, flame retardant (FR) to UL94 V-0
- Safe and stable chemistry. The use of lithium iron phosphate greatly reduces the risk of combustion or explosion due to high impact, overcharging or short circuit situations.
- The battery will communicate with most smart charging systems.
- The SMBus provides access to a battery history log.
- External fuel gauge.
- The battery cells are manufactured with internationally patented lithium iron phosphate powder from Phostech.

Performance Specifications	General Parameters	Comments
<b>Nominal Voltage</b>	12.8 volts	
<b>Rated Capacity @ 2-hr Rate (77 ° F/25 ° C)</b>	7.5 AH	Standard discharge (0.2C) after Standard charge (0.2C)
<b>Minimum Capacity @ 2-hr Rate (77 ° F/25 ° C)</b>	7.0 AH	
<b>Dimensions (in./mm)</b>		
<b>Length</b>	5.95 / 151	
<b>Width</b>	2.56 / 65	
<b>Height</b>	3.86 / 98	
<b>Cycle Life</b>	Residual capacity is more than 60% of rated capacity	Charge CC@0.2C to 14.6V then CV until current to 0.05C; Rest 30 min., Discharge @ 0.2C to 10V. Temperature 60±9 ° F (20±5 ° C). Carry out 2000 cycles.
<b>Approximate Weight lbs./kg.</b>	2.42/1.10	
<b>Internal Resistance at 50% SOC</b>	N/A	
<b>Discharge Cut-Off Voltage</b>	8.8V	
<b>Charging Cut-Off Voltage</b>	15.6V	
<b>Terminals</b>	F2	
<b>Standard Charge</b>	0.2C constant current (CC) charge to 14.6V, then constant voltage (CV) 14.6V charge until charge current declines to ≤0.05 C	
<b>Standard Discharge</b>	Constant Current 0.2 C, Cut-off Voltage 10.0V	
<b>Assembly Method</b>	IFR18650EC - 1.5AH	4S6P
<b>Maximum Continuous Charge Current</b>	7.5A	
<b>Maximum Continuous Discharge Current</b>	15A	
<b>Operating Temperature Range Charge</b>	32 ° F - 131 ° F (-0 ° C - 55 ° C)	60±25% Relative Humidity at Shipment Date
<b>Discharge Temperature Range</b>	14 ° F - 140 ° F (-10 ° C - 60 ° C)	
<b>Storage Temperature Range</b>		60±25% Relative Humidity at Shipment Date
<b>Short Circuit Protection</b>	Replaceable 30A fuse	
<b>LED Indicator</b>	4 LED lights showing state of charge	
<b>Protocol</b>	SMBus	

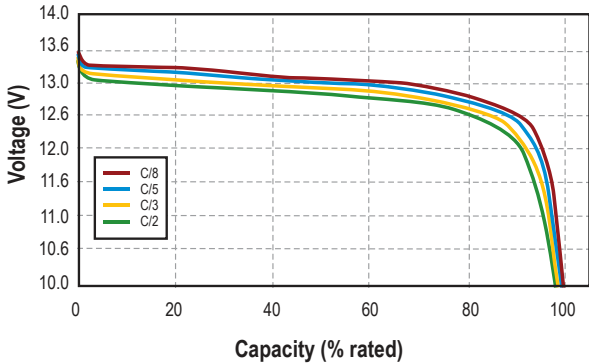
**Discharge Voltage Profiles @ 20A Discharge Rate**  
Various Ambient Temperatures



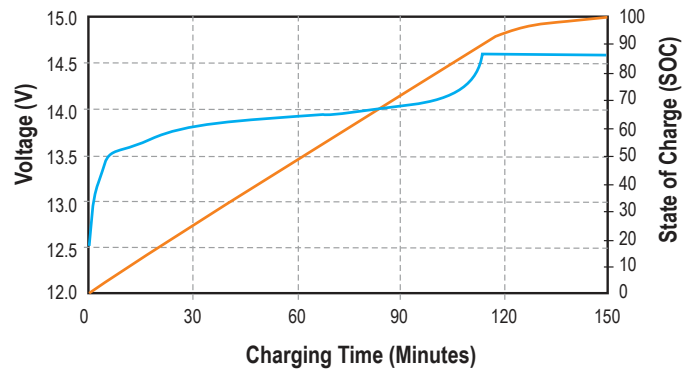
**Constant Power Discharge Characteristic**  
@ 23°C Ambient Temperatures



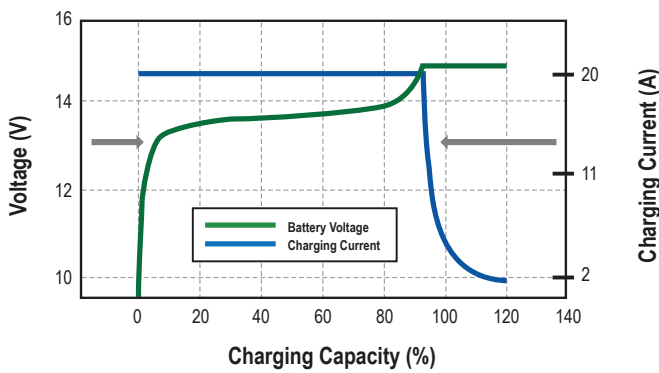
**Discharge Voltage Profiles @ Various Discharge Rate**  
23°C Ambient Temperatures



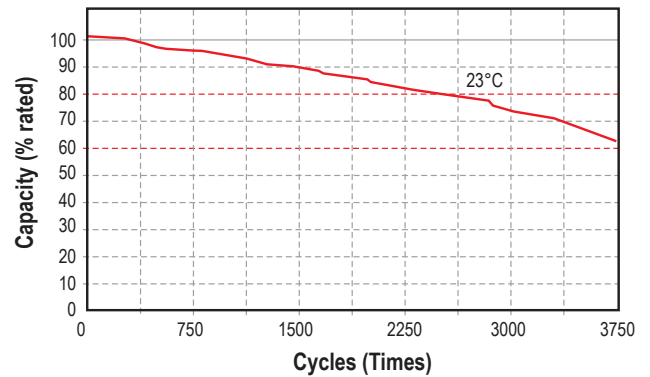
**Typical Voltage Profiles & SOC Profiles @ 0.5C Charging**  
23°C Ambient Temperatures



**Charging Characteristics (0.5C @ 25°C)**



**Discharge Capacity Performance**  
Charged: 0.5C to 14.6V, CV@14.6 to 1A  
Discharged: 0.5C to 10.5V



**Contact Information**

[www.power-sonic.com](http://www.power-sonic.com)

**DOMESTIC SALES**

Tel: +1-619-661-2020  
Fax: +1-619-661-3650  
national-sales@power-sonic.com

**CUSTOMER SERVICE**

Tel: +1-619-661-2030  
Fax: +1-619-661-3648  
customer-service@power-sonic.com

**TECHNICAL SUPPORT**

Tel: +1-619-661-2020  
Fax: +1-619-661-3648  
support@power-sonic.com

**INTERNATIONAL SALES**

Tel: +1-650-364-5001  
Fax: +1-650-366-3662  
international-sales@power-sonic.com

**CORPORATE OFFICE** • 7550 Panasonic Way • San Diego, CA 92154 • USA • Tel: +1-619-661-2020 • Fax: +1-619-661-3650