

DIYPOW 12V 100Ah LiFePO4 LITHIUM BATTERY

Optional:
Bluetooth®
 LCD Display

Crafted out of Lithium Iron Phosphate (LiFePO4) technology, this is a battery built to last. With 2,000+ recharge cycles (and up to 7,000 under ideal charging conditions), which can provide 5 X the lifespan than your typical SLA battery. Built in smart BMS, which can realize Bluetooth function and battery level display optional. The battery can support 8 units parallel connection.



SPECIFICATIONS

Nominal Voltage	12.8V
Rated Capacity	100AH
Stored energy	1280Wh
Cycle life@100%DOD	2000 Cycles
Approx. Weight	14 kg
Internal Resistance	≤45mΩ
Recommend continuous charge current	≤ 25 A
Recommend continuous discharge current	≤ 50 A
Max. Continuous charge Current	100A
Max. Continuous discharge Current	100A
Charge Cut-off Voltage	14.6V
Discharge Cut-Off Voltage	10.8V
Dimensions	L260mm×W168mm× H209mm
Parallel Connection	Up to 8 batteries
Operating Temperature Range	
Charge	4°F (-20°C) to 113°F (45°C)
Discharge	4°F (-20°C) to 140°F (60°C)
Recommended	59°F (15°C) to 95°F (35°C)
Self-Discharge Rate	≤3%/month
Life Expectancy (years)	15 years @25° C in 80%DOD
Self Discharge	Approx. 2% per month @ 25° C
Long Term Storage	Charge every 6 months
Short Circuit Protection	Automatically recover after removal of short
Terminal Type	Female Copper Insert M8 (M8/mm)



COMPLIED STANDARD

- ✓ IEC 62133
- ✓ UL 1642
- ✓ ISO9001
- ✓ ISO14001
- ✓ UN38.3

INTELLIGENT BMS FUNCTION

- Overcharge detection function
- Over discharge detection function
- Over current detection function
- Short detection function
- Temperature detection function
- Balance function

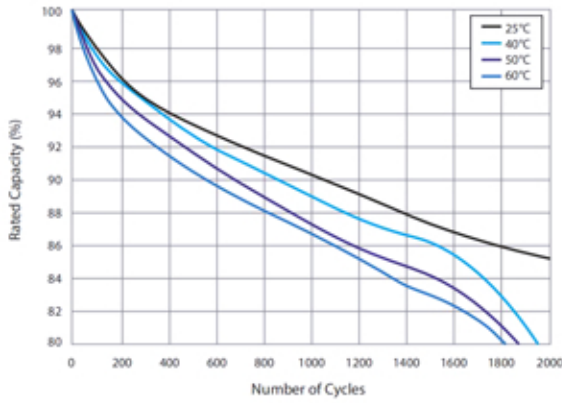
BLUETOOTH® ENABLED

Monitor the State of Charge (SoC), State of Health (SoH), current, capacity, temperature, number of cycles, and voltage levels of the battery and individual cells from APP.

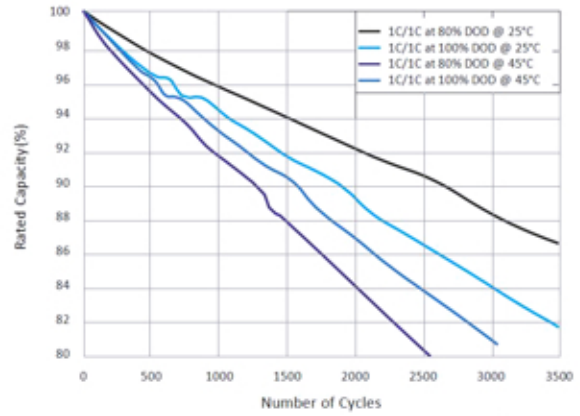
APPLICATIONS

AMR AGV Wind Mobility Data Center Transport Sports & Recreation SOLAR

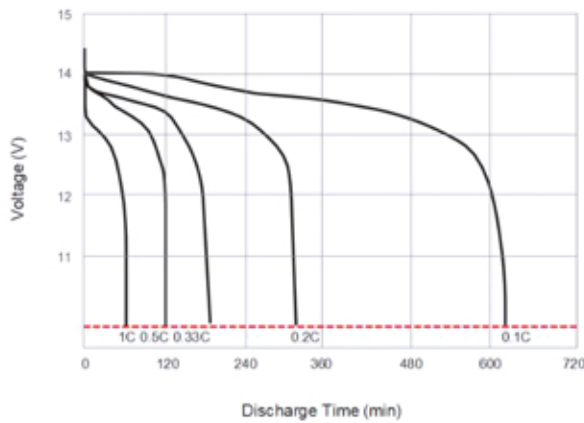
100% DOD Cycle Curves at Different Temperatures



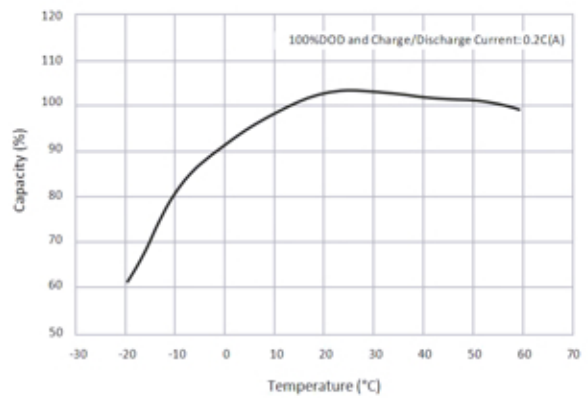
1C Cycle Curves at Different DOD&Temperatures



Discharge Time in Relation to Discharge Rate (25°C)



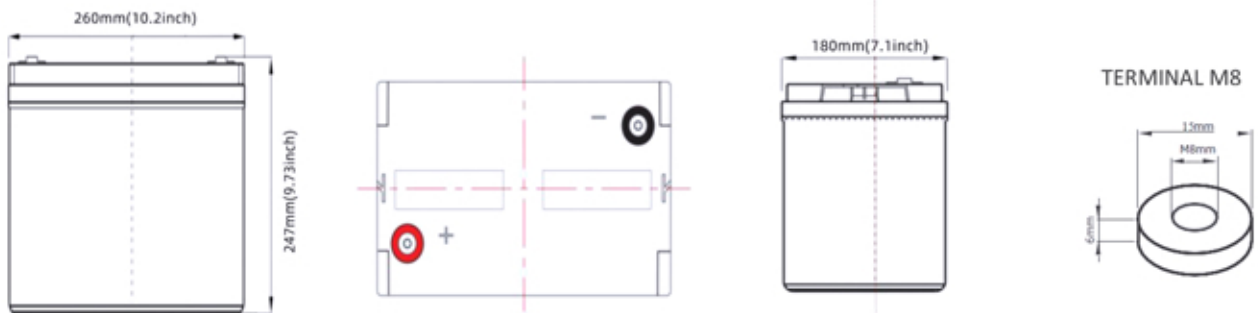
Temperature Effect in Relation to Battery Capacity



BENEFITS OF LITHIUM

Lithium offers several performance benefits versus its sealed lead acid (SLA) equivalent. A lithium battery's capacity is independent from the discharge rate and provides constant power throughout its discharge. The degradation of a lithium battery at a high temperature is significantly reduced in comparison to SLA. Lithium has ten times the cycle life as SLA at room temperature. Even at an elevated temperature, lithium still has increased cycle life over SLA at room temperature. Lastly, Lithium charging follows a similar charging profile as SLA, Constant Current Constant Voltage (CC/CV). However, lithium can be charged faster, without the need for a maintenance float charge.

BATTERY DIMENSIONS



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