

RV12100CH

Voltage:12.8 V | Capacity: 100 Ah | Energy: 1280 Wh

LITHIUM IRON PHOSPHATE BATTERY **LiFePO4**



Electrical Specification

Nominal Voltage	12.8 VDC
Nominal Capacity	100 Ah
Internal Resistance	< 10 mΩ
Self Discharge	≤ 3% per month
Max. Batteries in Parallel	8
Design Life	≥ 10 years
Short Circuit Current Duration	< 1 kA/100 us
Cycle Life	> 4500 (80% DOD, 0.5 C, 25 °C)

Discharge Specification

Max. Continuous Discharging Current	100 A
Peak Discharging Current	200 A@10 s

Charge Specification

Recommended Charging Current	≤50 A
Max. Continuous Charging Current	100 A
Recommended Charging Voltage	14 V ~14.4 V

Environment Specification

Storage Temperature Range	-4 °F ~140 °F (-20 °C ~ 60 °C)
Recommended Storage Temperature	50 °F ~104 °F (10 °C ~ 40 °C)
Operating Temperature	-4 °F ~ 122 °F (-20 °C ~ 50 °C) *If charging is required when the temperature is below 32 °F (0 °C), please connect the charger to enable the heating film. The battery starts charging when the cell temperature is heated to above 32 °F (0 °C).
Relative Humidity	5% ~ 95%

Mechanical Specification

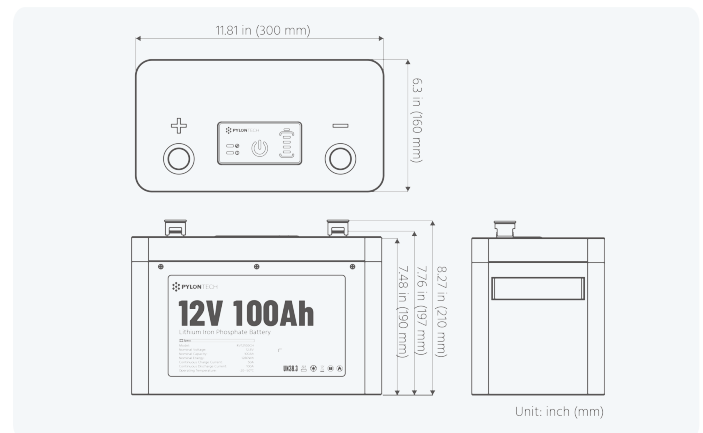
Dimensions(L × W × H)	11.81 × 6.3 × 8.27 in (300 × 160 × 210 mm)
Weight	Approx. 26.46 lbs (12 kg)
Terminal Type	M8 × 1.25 × 14 mm
Terminal Torque	8 ± 1 Nm
Case Material	Metal
Enclosure Protection	IP20
Cell Type-chemistry	LiFePO ₄
Cooling	Natural Cooling

Other

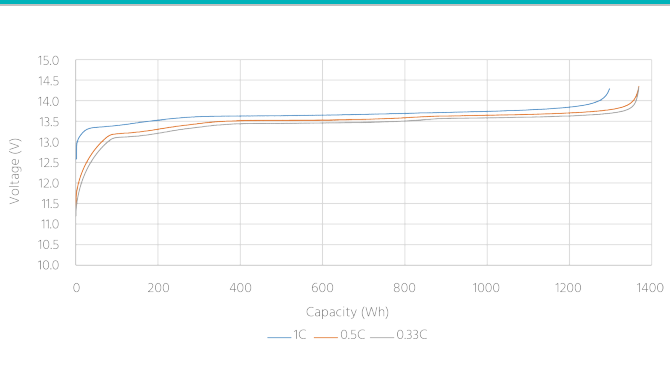
Certifications	UN38.3 MSDS
Max. Altitude	13123 ft (4000 m)

*Product performance is based on testing in a controlled environment. Your results may vary due to several external and environmental factors.

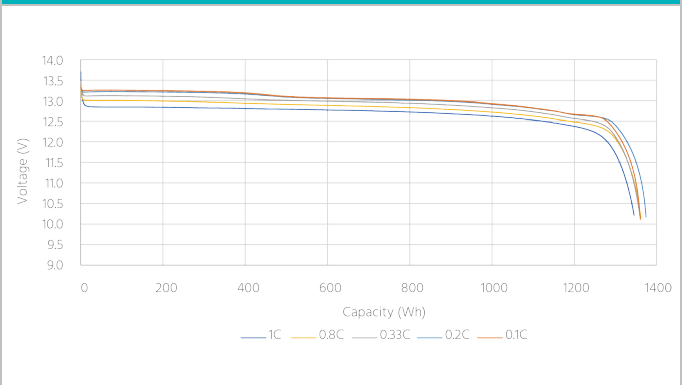
Dimensions



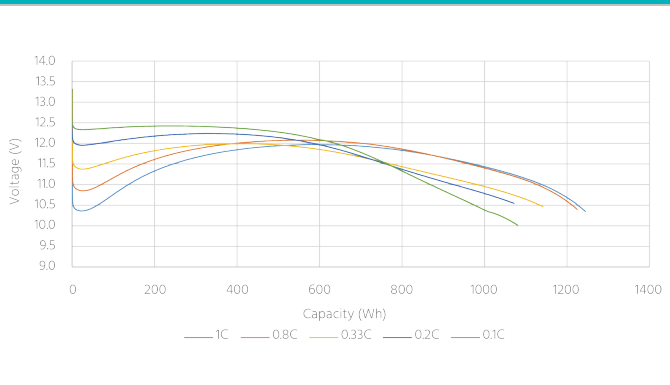
Charge at different rates at 77 °F (25 °C)



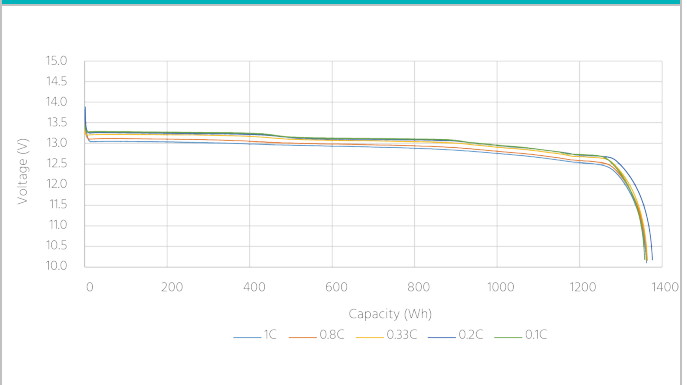
Discharge at different rates at 77 °C (25 °C)







Discharge at different rates at -4 °F (-20 °C)







Discharge at different rates at 122 °F (50 °C)



Key Features

-  **MORE CAPACITY**
100% of usable energy allows the battery to fully discharge.
-  **LIGHT WEIGHT**
50% lighter than lead-acid batteries of the same capacity.
-  **ENERGY EXPANSION**
Up to 8 batteries in parallel connection, building a 12 V 800 Ah battery system with a max. energy output of 10.24 kWh.
-  **LOW SELF-DISCHARGE LOSS**
Supports to be stored for over 12 months if it has been disconnected from other devices.

-  **LONG CYCLE LIFE**
More than 4500 cycles at a depth of discharge of 80%.
-  **REAL-TIME MONITORING**
The running indicator, alarm indicator and SoC indicators allow you to monitor battery status in real time.
-  **LOW-TEMPERATURE HEATING**
The heating film allows the battery to work in extreme cold.
-  **INTELLIGENT BMS**
The built-in BMS manages charging and discharging status, helps in balancing the individual cells, and provides multiple protections.