Battery Specifications

SPECIFICATIONS	
Technology	Lithium Iron Phosphate
Nominal Voltage	12.8 V
Rated Capacity 77°F (25 ±5 °C)	250 Ah @ 50A (5hr run time); 237.5 Ah @ 125A (1hr 54 min run time; 230 Ah @ 250A (55 min run time)
Capacity Correction for Temperature Variations	-4 °F (-20°C) 60% 131°F (55°C) 95%
Maximum Discharge Current	100A (continuous) 120A (30 minutes) 200A (5 seconds)
Specific Energy Density	80 Wh/kg
Volumetric Energy Density	114.35 Wh/L
Internal Resistance	≤ 5 mΩ
Terminals	M8 insert Torque: 11-14.7 Nm (97.3 - 130 lbs)
Cycle Life - 77°F (25°C)	≤1500 @ 100% Depth of Discharge; ≥3000 @ 80%; ≥4500 @ 30%
Charge Voltage	14.6V
Maximum Charge Current	100A
Certifications	UN 38.3; CE; ETL
Charge Cut-off Voltage	14.6V
Discharge Cut-off Voltage	8.4V
O T	Charge: 32°F (0°C) to 131°F (55°C
Operating Temperature	Discharge: -4°F (-20°C) to 131°F (55°C)
Storage Temperature	1 Week: -4°F (-20°C) to 122°F (50°C)
	1 month: -4°F (-20°C) to 113°F (45°C)
	6 months ¹ : -4°F (-20°C) to 104°F (40°C)
Humidity	Operating: 5% to 90 % RH Storage: 45% to 85% RH
BMS Leakage Current	3mA

¹Max storage time before recharge is 6 month.



GP-LiFePO₄-250 Lithium Battery Quick Start Guide



\triangle	Only wire 4 batteries maximum in parallel
<u> </u>	Do not wire in series
<u>^</u>	Do not get wet
\triangle	Only suitable for 12-volt applications

Length	20.5 in / 520 mm
Width	9.5 in / 240 mm
Height	8.8 in / 223 mm
Weight	80 lbs / 36 kg
Carrying	Nylon Straps

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Wiring Guide

The illustrations below show how to properly wire lithium batteries. Batteries should be installed upright for mobile applications.

Battery Bank Terminal Connections

All battery interconnects, busbar and device connections to resist vibration by using nylon insert lock nuts, thread locking fluid, or lock washers (split lock or external tooth)

250Ah Lithium Battery Bank Parallel Connection

Note: Up to a maximum 4x 250Ah lithium batteries may be connected in parallel. Lithium batteries may not be connected in series. New batteries should never be connected to old batteries. All batteries should be charged to a minimum of 13V before connecting them together.

Torque battery terminals Minimum 1in gap inbetween batteries to 11-14.7 N*m (97.3-130 in*lbs) Connect positive terminals together Positive busbar Connect negative terminals together All busbar connections to external devices (inverter, converter, solar controller, etc.) to be All battery interconnects to be equal length and gauge equal length and gauge, sized appropriately for Ex) Inverter each device with suitable positive circuit Ex) Converter protection (fusing or breakers). Ex) Solar Controller Minimum 1in gap between batteries and battery enclosure walls All battery to busbar connections Negative busbar to be equal length and gauge

Split lock washer-

External toothlock washer -Do NOT stack smaller terminals under large ones

-Ensure correct strip length and that stripped wires are completely inserted into terminal before crimping

Terminals with open-end crimp barrels may be used to verify wires are fully inserted before crimping