

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
Charge Cut-off Voltage	14.6V
Discharge Cut-off Voltage	8.4V
Operating Temperature	Charge: 32°F (0°C) to 131°F (55°C)
	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



	Only wire 4 batteries maximum in parallel
	Do not wire in series
	Do not get wet
	Only suitable for 12-volt applications

Length	20.5 in / 520 mm
Width	9.5 in / 240 mm
Height	8.8 in / 223 mm
BCI Group #	31
Weight	80 lbs / 36 kg
Carrying	Nylon Straps

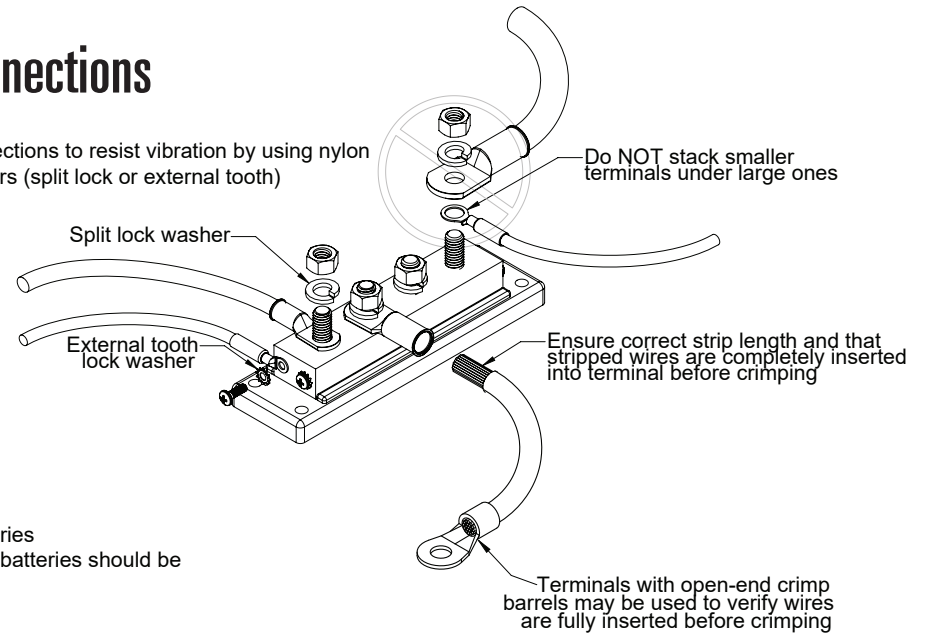
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Wiring Guide

The illustrations below show how to properly wire lithium batteries.

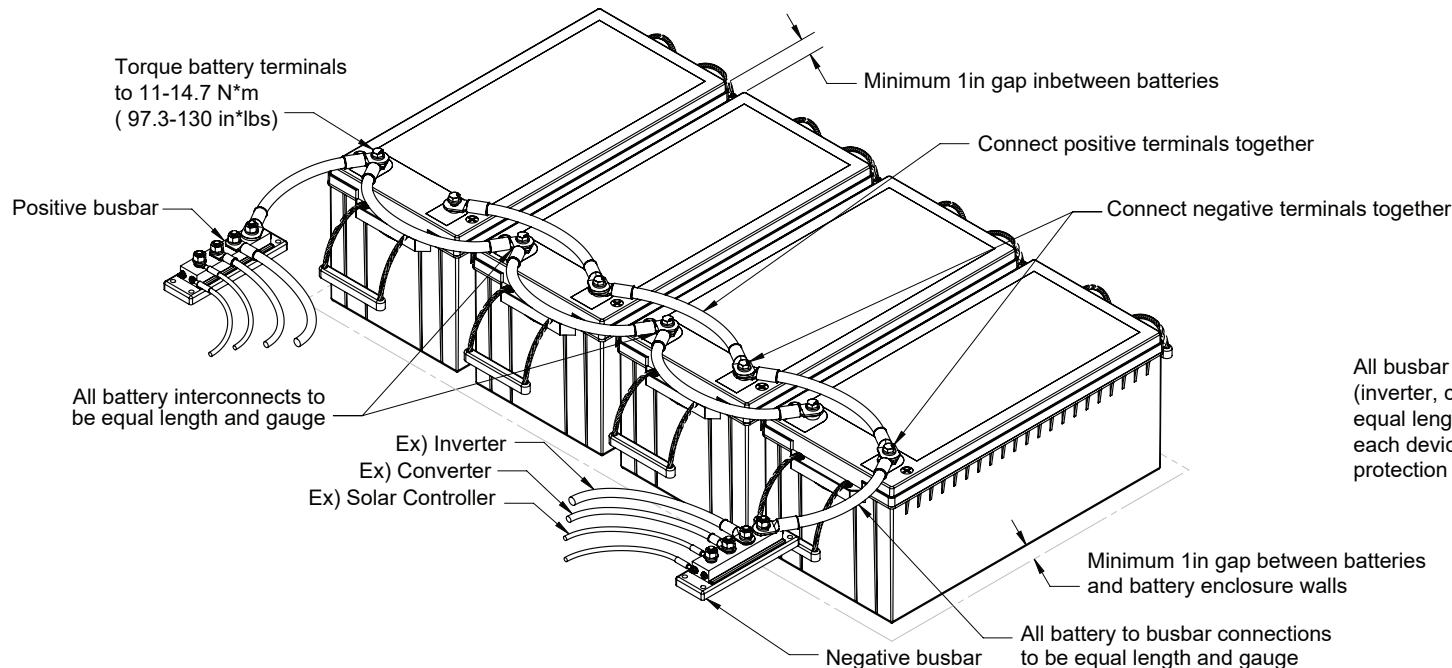
Battery Bank Terminal Connections

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.



All busbar connections to external devices (inverter, converter, solar controller, etc.) to be equal length and gauge, sized appropriately for each device with suitable positive circuit protection (fusing or breakers).