

VMAX LFP12100MBH Battery Datasheet

VMAX

Battery Type	LiFePO4 Deep Cycle (Lithium Iron Phosphate)
Nominal Voltage	12.8V (3.2V/cell)
Rated Capacity (20hr @ 25°C)	100Ah
Rated Energy	1280Wh
Output Voltage Range	10.0V–14.6V
Charging Voltage	14.6V (CC-CV)
Cut-Off Voltage	10.0V
Cycle Life (@100% DOD)	~6,000 cycles @ 50A, 25°C (77°F)
Design Life	~10 years
Efficiency	>98%
Built-in BMS	Yes (with voltage, current, and temperature protection)

Electrical Performance

Max Constant Charging Current	100A
Recommended Charging Current	10A–50A (Best at 15–20A)
Max Constant Discharge Current	100A
Max 3-second Discharge Current	250A
Short-Circuit Protection	>1200A
Over-Charge Voltage Protection	Module >15V, Cell >3.75V
Over-Discharge Voltage Protection	Module <10.0V, Cell <2.5V
Over-Charge Current Protection	>120A (10s delay), >300A (1s delay)
Over-Discharge Current Protection	>120A (10s delay), >300A (1s delay)
Cell Balance	Passive, 600mA

Temperature Ranges

Charging Temperature	<0°C–45°C (32°F–113°F) *Heater turns ON below 0°C
Discharging Temperature	-20°C–65°C (-4°F–150°F)
Storage Temperature	-20°C–45°C (-4°F–113°F)
Heater ON	Cells <0°C, heater warms to ~40°C
Heater OFF	Cells >10°C, heater warms to ~70°C
Over-Temp Protection (Charging)	Below -5°C (23°F) or above 65°C (150°F)
Over-Temp Protection (Discharging)	Below -20°C (-4°F) or above 65°C (150°F)

Physical

Case Material	Heavy-duty ABS
Dimensions (L x W x H)	12.08" x 6.6" x 8.35" / 307mm x 168mm x 212mm (Group 27)
Terminals	M8 screw-in
Weight	25 lbs

Expansion Capabilities

Parallel wiring	Up to 4 batteries
Series wiring	Up to 4 batteries

Certifications & Safety

IP67 Waterproof	
CE Certified	

Information sourced from vmaxtanks.com August 2025 and is subject to change.

