

VMAX LFP1250B Battery Datasheet

General

Model	LFP1250B
Chemistry	LiFePO4 (LFP)
Nominal Voltage	12.8 V (3.2 V/cell)
Rated Capacity (20 h @ 25 °C)	50 Ah
Rated Energy	640 Wh
Built-in BMS	Yes
Efficiency	> 98%
Design Life	~10 years
Cycle Life @ 80% DOD	~4000 @ 15 A; > 2000 @ 25 A (25 °C / 77 °F)

Electrical

Output Voltage Range	10.0–14.6 V
Cut-Off Voltage	10.0 V
Max Constant Discharge Current	50 A
Max 3-sec Discharge Current	150 A

Charging

Charging Voltage	14.4–14.6 V (CC-CV)
Max Constant Charging Current	50 A
Recommended Charging Current	5–50 A (best @ 20–30 A)
Recommended Charger Type	CC-CV until current < 2.5 A (0.05 C)

Protection

Over-Charge Voltage Protection	Module > 14.8 V; Cell > 3.7 V
Over-Discharge Voltage Protection	Module < 10.0 V; Cell < 2.5 V
Over-Charge Current Protection	> 60 A (1-sec delay)
Over-Discharge Current Protection	> 160 A (1-sec delay)
Short-Circuit Protection	Yes
Cell Balance	Passive, 100 mA
Over-Temp Protection (Charge)	< 0 °C (32 °F) or > 55 °C (130 °F)
Over-Temp Protection (Discharge)	< –20 °C (–4 °F) or > 65 °C (150 °F)

Operating Temperatures

Charging Temp	0–45 °C (32–113 °F)
Discharging Temp	–20–55 °C (–4–130 °F)
Storage Temp	0–30 °C (32–86 °F) @ 40–60% SOC

Physical

Case Material	ABS
Dimensions (L × W × H)	7.7" × 5.2" × 7.2"
Terminals	M6 screw-in (~1/4")
Weight	13 lb

Information sourced from vmaxtanks.com on August 23, 2025 and is subject to change as products are updated.

