

VMAX LFP2450M Battery Datasheet

Electrical

Nominal Voltage	25.6V (3.2V/cell)
Rated Capacity (20h @ 25C)	50AH
Rated Energy	1280Wh
Output Voltage Range	20.0V–29.2V
Cut-Off Voltage	20.0V
Max. Constant Discharge Current	100A
Max. 3sec Discharge Current	200A

Charging

Charging Voltage	29.2V (CC-CV)
Max. Constant Charging Current	50A
Recommended Charging Current	5A–25A (Best @ 10A)
Recommended Charger Type	CC-CV until current <1A (0.02C)

Operating Temperatures

Charging Temperature	0°C ~ 45°C (32°F ~ 113°F)
Discharging Temperature	-20°C ~ 65°C (-4°F ~ 150°F)
Storage Temperature	-20°C ~ 45°C (-4°F ~ 113°F)

Performance Data

Efficiency	>98%
Cycle Life @80% DOD	~6000 @ 10A, 25°C (77°F)
Cycle Life @90% DOD	>4000 @ 10A, 25°C (77°F)
Design Life	~10 Years

Protection

Built-in BMS	Yes
Over-Charge Voltage Protection	Module: >30.8V, Cell: >3.85V
Over-Discharge Voltage Protection	Module: <18.4V, Cell: <2.3V
Over-Charge Current Protection	>55A w/ 15s Delay, >80A w/ 3s Delay
Over-Discharge Current Protection	>100A w/ 15s Delay, 200A w/ 3s Delay
Short-Circuit Protection	>200A
Cell Balance	Passive, 60 mA
Over-Temperature Protection – Charging	<-5°C (23°F), >65°C (150°F)
Over-Temperature Protection – Discharging	<-20°C (-4°F), >65°C (150°F)

Physical

Battery Case Material	ABS
Dimensions (L × W × H)	12" × 6.65" × 8.2"
Terminals	M8 Screw-In (~5/16")
Polarity	+ on L.H.S. & – on R.H.S.
Weight	25 lb
Group Size	27

Expansion Capabilities

Parallel Wiring	Acceptable for up to FOUR batteries
Series Wiring	Acceptable for up to FOUR batteries

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

