

VMAX LFP12300BH Battery Datasheet

Electrical

Nominal Voltage	12.8V (3.2V/cell)
Rated Capacity (20h @ 25C)	300AH
Rated Energy	3840Wh
Output Voltage Range	10.0V-14.6V
Cut-Off Voltage	10.0V
Max. Constant Discharge Current	200A
Max. 3sec Discharge Current	400A

Charging

Charging Voltage	14.4V - 14.6V (CC-CV)
Max. Constant Charging Current	200A
Charging Current	30A-200A (best @ 80A ~ 150A)
Recommended Charger Type	CC-CV until current <15A (0.05C)

Operating Temperatures

Charging Temperature	0C ~ 45C (+32F~ +113F)
Discharging Temperature	-20C ~ 55C (-4F ~ +130F)
Storage Temperature	0C ~ 30C (+32F ~ +86F) @ 40%~60% SOC

Performance Data

Efficiency	>98%
Cycle Life @80% DOD	~4000 @50A,>2000@100A, 25C (77F)
Design Life	~10 Years

Protection

Built-in BMS	Yes
Over-Charge Voltage Protection	Module: >14.8V, Cell: >3.7V
Over-Discharge Voltage Protection	Module: <10.0V, Cell: <2.5V
Over-Charge Current Protection	>220A w/1sec Delay
Over-Discharge Current Protection	>440A w/1sec Delay
Short-Circuit Protection	Yes
Cell Balance	Passive, 150mA
Over-Temperature Protection-Charging	<0C (32F), >55C (130F)
Over-Temperature Protection-Discharging	<-20C (-4F), >65C (150F)

Physical

Battery Case Material	ABS
Dimensions L x W X H	20.6" x 9.4" x 8.7"
Terminals	M8 Screw In (~5/16")
Weight	77lb
BCI Group	8D

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.

