M90 PRO

LITHIUM IRON PHOSPHATE BATTERY

MOTOMA®
Power into the Future

320Ah
51.2V

Features

Grade A+ Cells
Manufactured using the premium quality , fresh LiFePO4 raw materials for top-tier performance.

High Cycle Efficiency
Up to 8000 Cycles @ DOD 80% , ensuring a cost-effective ownership experience.

Advanced Touch Screen
Multi-language colorful touch screen for clear monitoring of battery parameters, with easy control over settings.

Extended Durability
Enjoy a longer lifespan with our low-maintenance, stable chemistry batteries.

Integrated Safety Measures
Enhanced with a built-in Battery Management System (BMS) to prevent misuse.

Heat Resilience Engineered for optimal
Engineered for optimal performance, even in extreme temperatures up to +60°C.

Superior Safety
Designed with advanced safety features to guarantee secure usage and storage.

Smart BMS Compatible with multiple inverter brands.

solis | victron energy | Deye | Growatt | GOODWE
SOFAR | victron energy | SUNGROW | SOLAX | SMA

Introduction

The MOTOMA M PRO Series LFP battery is an advanced energy solution designed to deliver a service life of 15 years or more, providing exceptional performance for a wide range of applications. With a lifespan of up to 8000 cycles, it ensures reliable and efficient energy storage for many years.

Equipped with a multi-language and colored touch LCD screen, the M PRO Series allows users to monitor the battery status, access detailed reports, and fully control settings. Its intelligent BMS ensures safety, along with SOC design and a communication protocol compatible with various inverter brands.

Applications

- Power Generation System (Solar and Wind Power System,etc.)
- Household Energy Storage System
- Auto Control System &ATM Machine
- Electronic Apparatus and Equipment
- Emergency Light & Emergency Backup
- Power Supply & Alarm / Security System
- Communication Power & DC Power
- Electric Power System (EPS)
- Uninterruptable Power System (UPS)

Certificates

TÜVRheinland CERTIFIED | ISO 9001:2015 | CE | UN38.3 PASSED

Technical Parameter

Battery Model	M90 PRO
Nominal Voltage	51.2V
Capacity	320Ah
Nominal Capacity	16.384kWh
Operating Voltage Range	43.2V~58.4V
Maximum Charging Current	200A
Maximum Discharging Current	200A
Charging Temperature Range	0°C~45°C
Discharging Temperature Range	-20°C~60°C
IP Level	IP20
Cell Cycle Life (0.5C/0.5C, RT 25℃)	8000 time
Communication Mode	RS485 / CAN / RS232
Battery Dimensions (LxWxH)	990*505*200 mm
Battery Weight (NW)	126.6 kg

Charge Performance

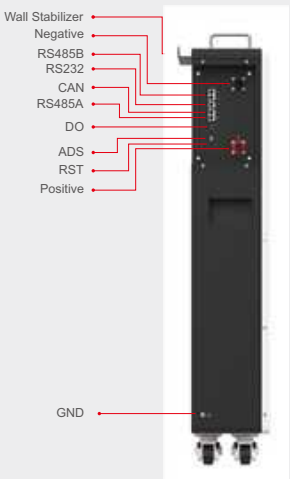
Recommended Charge Current	30A
Maximum Charge Current	200A
Peak Charge Current	210A (1s)
Recommended Charge Voltage	57.6V
BMS Charge Cut-Off Voltage	58.4V (3.65V/Cell)
Reconnect Voltage	54.08V (3.38V/Cell)
Balancing Voltage	54.4V (3.4V/Cell)
Balancing Current	40mA

Discharge Performance

Recommended Discharge Current	30A
Maximum Continuous Discharge Current	200A
Peak Discharge Current	210A (10s)
BMS Discharge Cut-Off Current	250A (500ms)
Recommended Low Voltage Disconnect	48V (3.0V/Cell)
BMS Discharge Cut-Off Voltage	43.2V (2.7V/Cell)
Reconnect Voltage	49.6V (3.1V/Cell)
Short Circuit Protection	250~500us

Packaging

Packaging Type	1 Battery / UN Wooden Box
Package Dimension (LxWxH)	1248x609x372 mm
Package Weight (GW)	156.6 KG



Grade A+ Cells

Up to 8000 Cycles @ DOD 80%

Multi-language colorful touch LCD screen

With State of Charge

Support high discharge current up to 200A

Max.15 pcs batteries in parallel

AC Input | PV Input | Power Cable
Data Cable | Com. Cable | AC Output

Technical Support for Lifetime

7 Years Warranty

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