

# M90 PRO

## LITHIUM IRON PHOSPHATE BATTERY



320Ah  
51.2V

# MOTOMA®

Power into the Future

## 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.



## 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)
- ◆ Uninterruptible Power System (UPS)

## Certificates



UN38.3  
PASSED

## Technical Parameter

<b>Battery Model</b>	<b>M90 PRO</b>
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°C )	8000 Cycles @ DOD 80%
Communication Mode	RS485 / CAN / RS232
Battery Dimensions ( LxWxH )	990*505*200 mm
Battery Weight ( NW )	126.6 kg

## Charge Performance

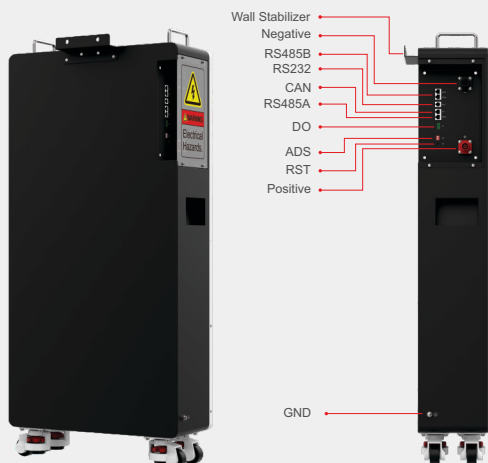
Recommended Charge Current	30A
Maximum Charge Current	200A
Peak Charge Current	210A (1s)
Recommended Charge Voltage	57.6V
BMS Charge Cut-Off Voltage	58.4V (3.65V/Cell)
Reconnect Voltage	54.08V (3.38V/Cell)
Balancing Voltage	54.4V (3.4V/Cell)
Balancing Current	40mA

## 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



A<sup>+</sup>

Grade A<sup>+</sup> Cells

8000

Up to 8000 Cycles  
@ DOD 80%



Multi-language  
colorful touch LCD screen

SOC

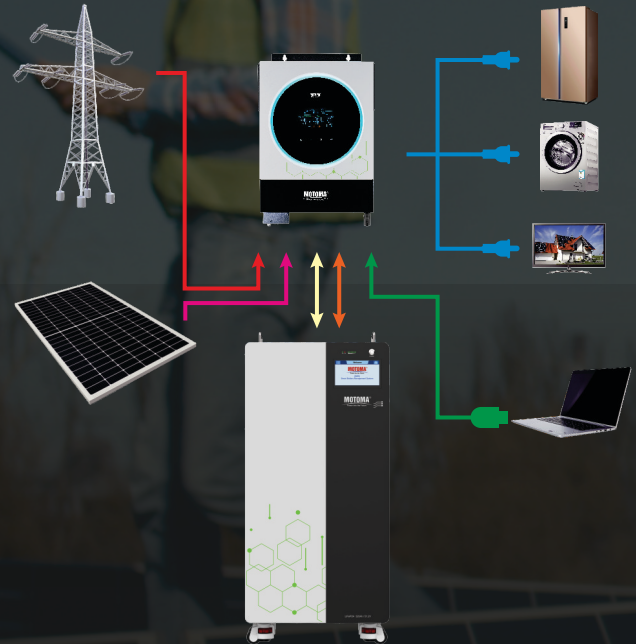
With State of Charge



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