

MOTOMA®

Power into the Future

280Ah
51.2V

LITHIUM IRON PHOSPHATE BATTERY M89S

Introduction

MOTOMA M series LFP battery designed with 15 years or more service life for general purpose, which designed with advanced technology, built in intelligent BMS for more safe, with SOC design and communication protocol to match up with different brand inverters. Also motoma can supply customized upper computer software for BMS communication via RS232 to set parameters or read monitoring data.

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.
- LED Screen For Battery's parameters monitoring**
Multi-language colorful screen for clear monitoring of battery parameters, with easy control over settings.
- 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.

Applications

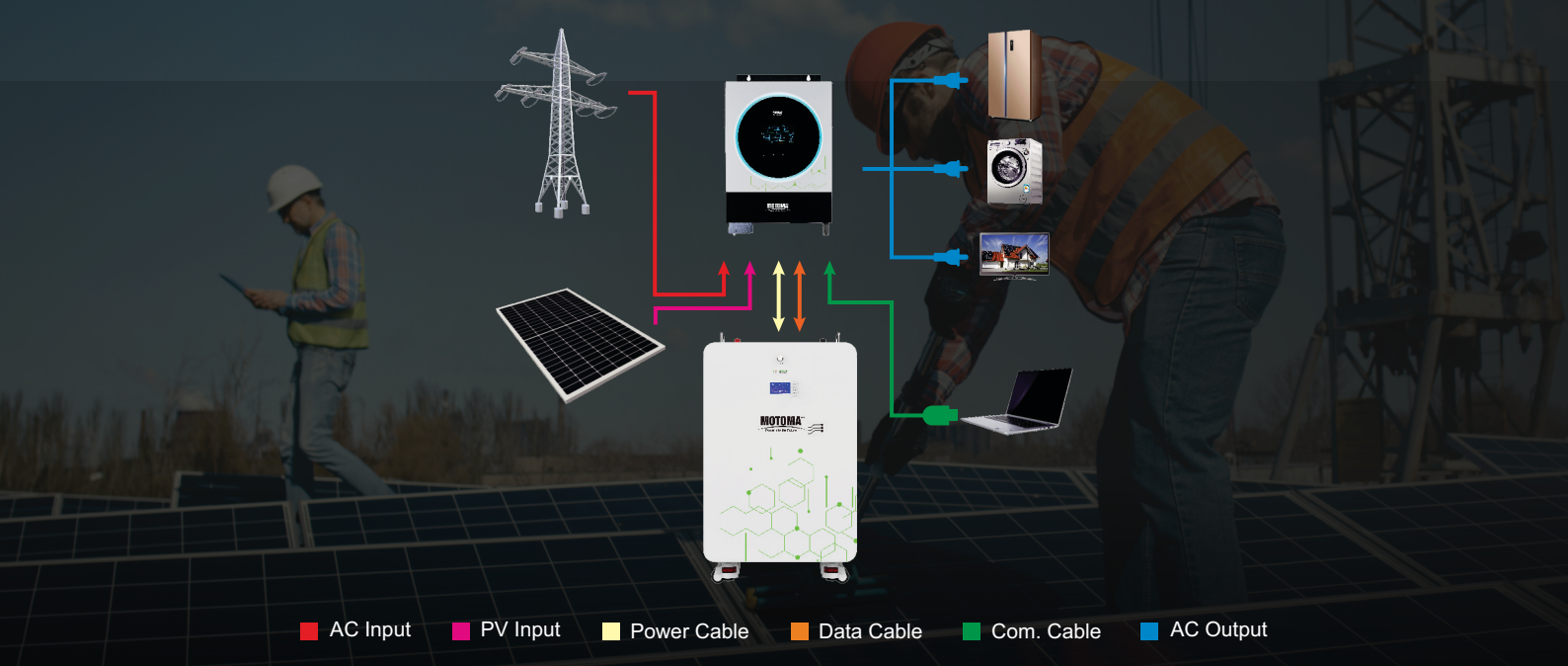
- ◆ Power Generation System (Solar and Wind Power System, etc.)
- ◆ Household Energy Storage System
- ◆ Auto Control System & ATM Machine
- ◆ Electronic Apparatus and Equipment
- ◆ Emergency Light & Emergency Backup
- ◆ Power Supply & Alarm / Security System
- ◆ Communication Power & DC Power
- ◆ Electric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

Smart BMS Compatible with multiple inverter brands.



Certificates





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



Grade A⁺ Cells

8000

Up to 8000 Cycles
@ DOD 80%



LED Screen For Real
Time Monitoring



With State of Charge



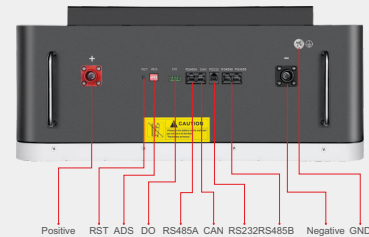
Support high discharge
current up to 200A



Max.15 pcs batteries
in parallel

Technical Parameter

Battery Model	M89S
Nominal Voltage	51.2V
Capacity	280Ah
Nominal Capacity	14.33kWh
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)	770*540*200mm
Battery Weight (NW)	120.1 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 Batteries / UN Wooden Box
Package Dimension (LxWxH)	1008*629*372 mm
Package Weight (GW)	149 KG



Technical Support for Lifetime



5 Years Warranty