

MOTOMA®

Power into the Future

200A
12V

100A
12V

LITHIUM IRON PHOSPHATE BATTERY (LiFePO4 Battery Pack)



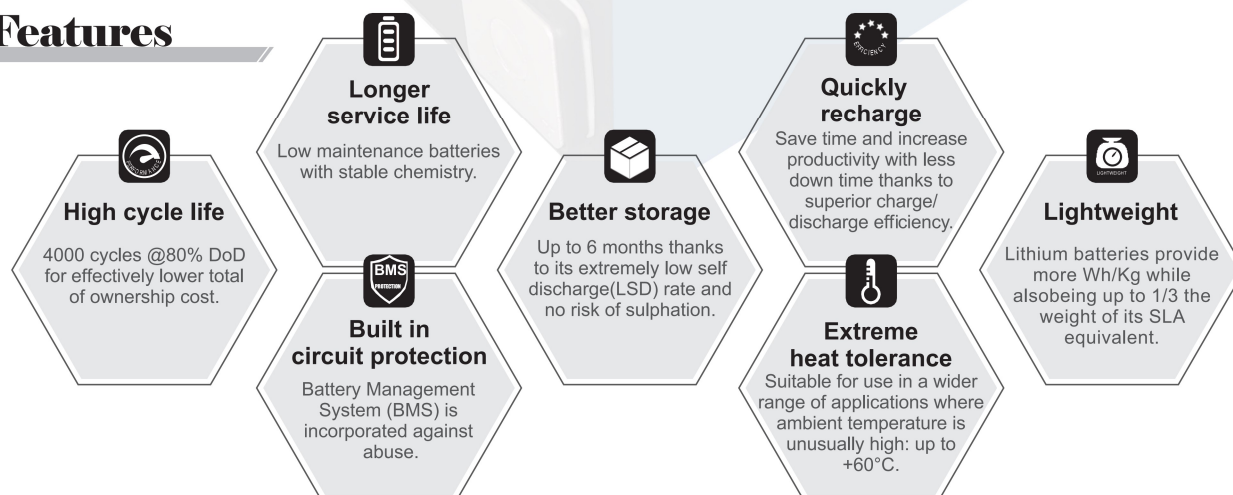
Introduction

MOTOMA BLUE series LFP battery designed with 10 years or more service life for general purpose, which designed with advanced technology, built in intelligent BMS for more safe, with SOC design.

Technical Parameter

Battery Model	M47	M48
Nominal voltage	12.8V	12.8V
Capacity	100Ah	200Ah
Nominal capacity	1.28kWh	2.56kWh
Operating voltage range	10V~14.6V	10V~14.6V
Maximum charging current	100A	100A
Maximum discharging current	100A	100A
Charging temperature range	0°C~45°C	0°C~45°C
Discharging temperature range	-20°C~60°C	-20°C~60°C
Dimension	330x172x215mm	522x240x218mm
Weight	12Kg	23Kg
IP level	IP67	IP67
Cycle life @ DOD 80%	4000 times	4000 times
Terminal type	F12/F14	F23

Features





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)
- ◆

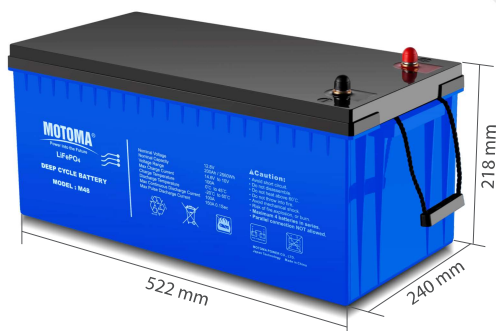
Dimensions

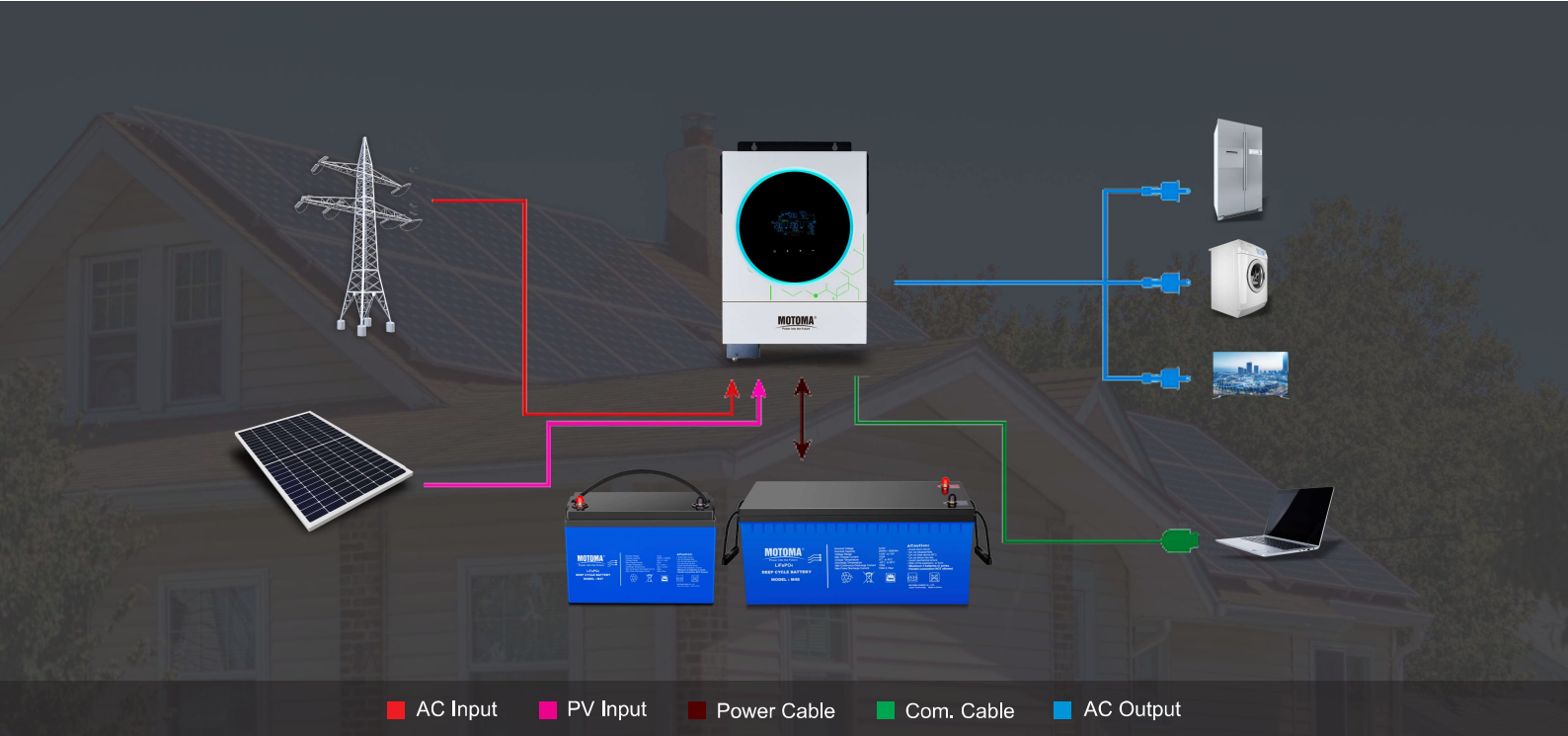
	M47	M48
Length	330±1mm (12.99 inches)	522±1mm (22.55 inches)
Width	172±1mm (6.77 inches)	240±1mm (9.44 inches)
Height	215±1mm (8.46 inches)	218±1mm (8.58 inches)
Total Height	221±1mm (8.70 inches)	224±1mm (8.82 inches)

M47 12V100Ah



M48 12V200Ah





Charge Performance

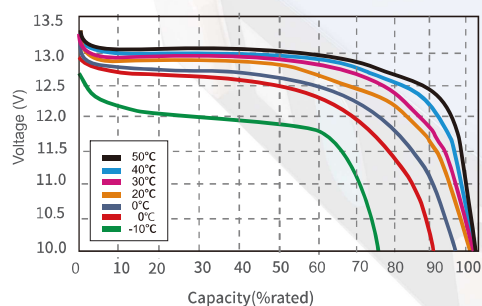
Recommended Charge Current	30A
Maximum Charge Current	100A
Peak Charge Current	110 A (1s)
Recommended Charge Voltage	14.4V
BMS Charge Cut-Off Voltage	<14.6V (3.65V/Cell)
Reconnect Voltage	>14.4V (3.6V/Cell)
Balancing Voltage	<13.52V (3.38V/Cell)
Balancing Current	40mA

Discharge Performance

Recommended Discharge Current	30A
Maximum Continuous Discharge Current	100 A
Peak Discharge Current	110 A (1s)
BMS Discharge Cut-Off Current	150 A (100ms)
Recommended Low Voltage Disconnect	12V (3.0V/Cell)
BMS Discharge Cut-Off Voltage	10.8V (1s) (2.7V/Cell)
Reconnect Voltage	>12.4V (3.1V/Cell)
Short Circuit Protection	250 ~ 500μs

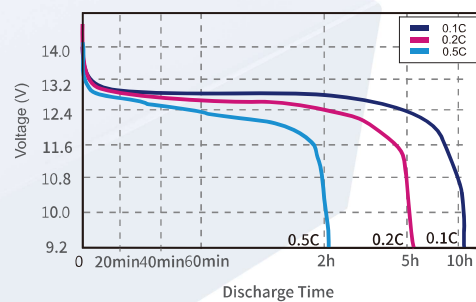
Different Temperature Discharge Curve

Different Temperature Discharge Curve @0.5C



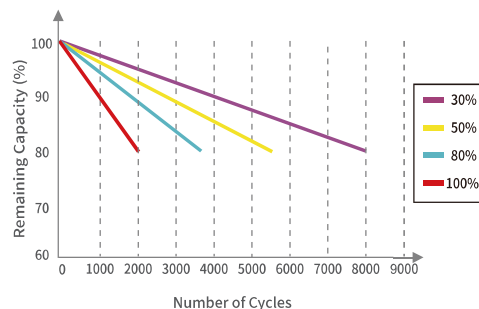
Different Rate Discharge Curve

Different Rate Discharge Curve @25°C



Cycle Life Curve

Different DOD Discharge Cycle Life Curve @ 0.5C



Self Discharge Characteristics Curve

Different Temperature Self Discharge Curve

