

LITHIUM IRON PHOSPHATE BATTERY (M87U)



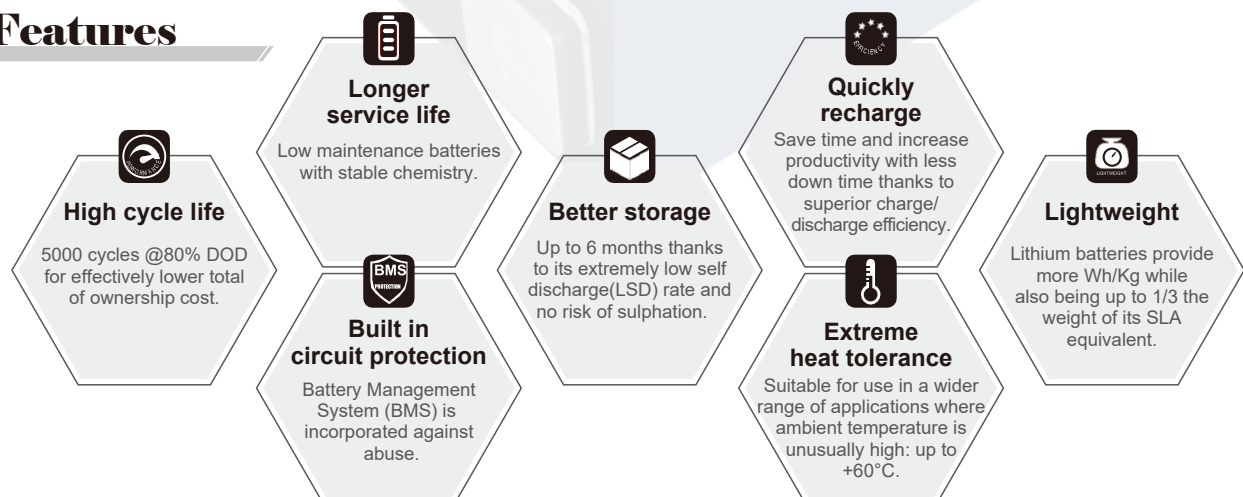
Introduction

Lithium Iron Phosphate can be used in most applications that use Lead Acid, GEL or AGM type batteries.

Technical Parameter

Battery Model	M87U	Charging Temperature Range	0°C~45°C
Nominal Voltage	51.2V	Discharging Temperature Range	-20°C~60°C
Capacity	100Ah	Dimension	530*440*132mm
Nominal Capacity	5.12kWh	Weight	46kg
Operating Voltage Range	43.2V~58.4V	IP Level	IP20
Maximum Charging Current	100A	Cell Cycle Life	5000 times
Maximum Discharging Current	100A	Communication Mode	RS485/CAN

Features





BMS

Built-in intelligent BMS for battery protection



Max. 10pcs batteries in parallel



Equipment with RS485 / CAN communication



Efficient & long-lasting service life

Applications

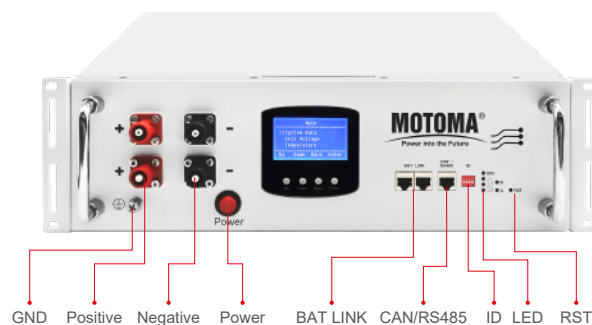
- Solar Storage
- Switching applications and more
- Base transceiver station
- Communication equipments
- Central office
- Telecommunication systems
- Electronic cash registers
- Microprocessor based office machine
- UPS

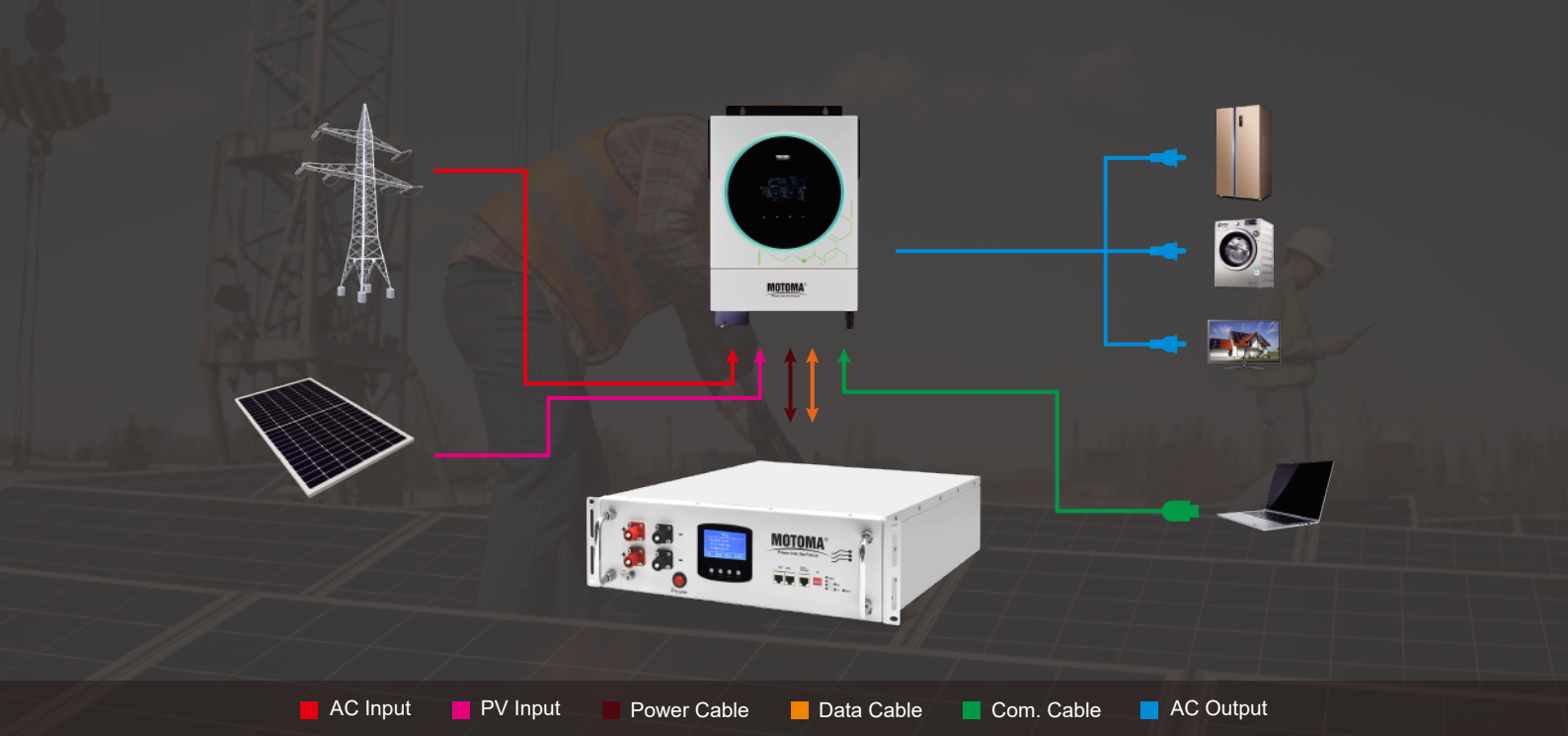
Dimensions

Length	530±1mm (20.87 inches)
Width	440±1mm (17.32 inches)
Height	132±1mm (5.20 inches)
Total Length	570±1mm (22.44 inches)

Cautions

- Do NOT short circuit, reverse polarity, crush or disassemble.
- Do NOT heat or incinerate.
- Do NOT immerse in any liquid.
- Store at 30-50% SOC. Recharging every 3 months is recommended. The storage area should be clean, cool, dry and ventilated.





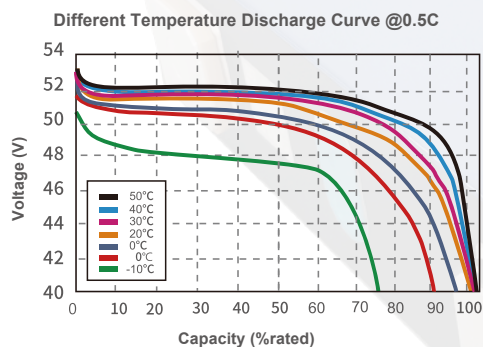
Charge Performance

Recommended Charge Current	30A
Maximum Charge Current	100A
Recommended Charge Voltage	57.6V
BMS Charge Cut-Off Voltage	58.4V (3.65V/Cell)
Reconnect Voltage	57.6V (3.6V/Cell)
Balancing Voltage	54.4V (3.4V/Cell)
Maximum Cells in Series	16(*Consult MOTOMA)

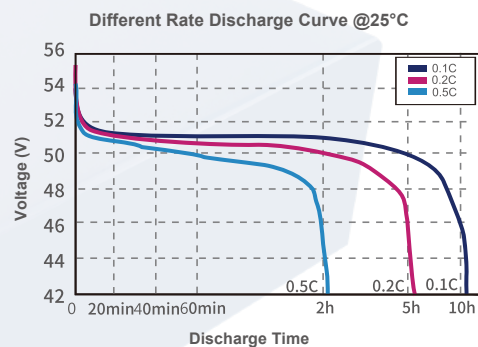
Discharge Performance

Maximum Continuous Discharge Current	100A
Peak Discharge Current	110A (1s)
BMS Discharge Cut-Off Current	150A (100ms)
Balancing open voltage	54.4V (3.40V/Cell)
Recommended Low Voltage Disconnect	48V(3.0V/Cell)
BMS Discharge Cut-Off Voltage	43.2V (1s)(2.7V/Cell)
Reconnect Voltage	49.6V (3.1V/Cell)
Short Circuit Protection	250~500 us

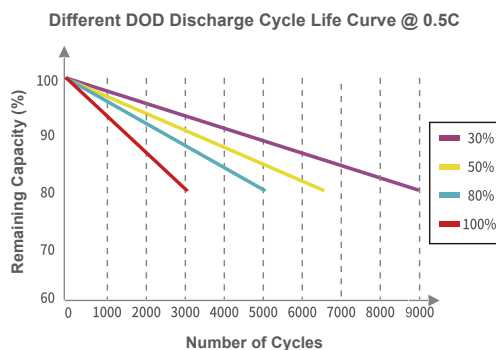
Different Temperature Discharge Curve



Different Rate Discharge Curve



Cycle Life Curve



Different Rate Charge Curve

