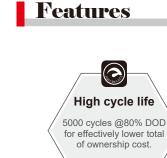


#### Introduction

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



# Longer service life

Low maintenance batteries with stable chemistry.



## Built in circuit protection

Battery Management System (BMS) is incorporated against abuse.



#### Better storage

Up to 6 months thanks to its extremely low self discharge(LSD) rate and no risk of sulphation.



#### recharge

Save time and increase productivity with less down time thanks to superior charge/ discharge efficiency.



## Extreme heat tolerance

Suitable for use in a wider range of applications where ambient temperature is unusually high: up to +60°C.



#### Lightweight

Lithium batteries provide more Wh/Kg while also being up to 1/3 the weight of its SLA equivalent.







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

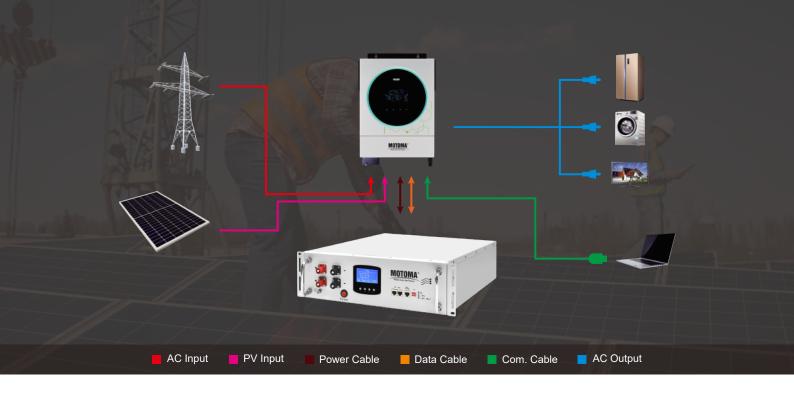
Length	530±1mm (20.87 inches)
Width	440±1mm (17.32 inches)
Heigth	132±1mm (5.20 inches)
Total Length	570±1mm (22.44 inches)

## **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.



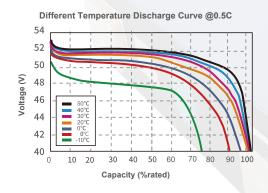




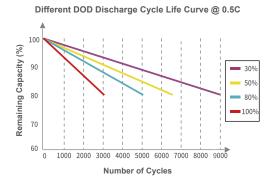
## Charge Performance

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)

#### Different Temperature Discharge Curve



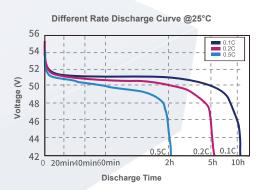
#### Cycle Life Curve



## 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 Rate Discharge Curve



#### Different Rate Charge Curve

