

## LITHIUM IRON PHOSPHATE BATTERY — B48LPi5

### ELECTRICAL PERFORMANCE

Nominal Voltage	51.2 V
Nominal Capacity	100 Ah
Capacity @ 20A	300 min
Energy	5120 Wh
Communication	CAN2.0/RS232/RS485
Resistance	≤45 mΩ @ 50% SOC
Efficiency	> 96%



### CHARGE PERFORMANCE

Recommended Charge Current	20A
Maximum Charge Current	100A
Recommended Charge Voltage	57.6V
BMS Charge Cut-Off Voltage	<58.4 V (3.65V/Cell)
Reconnect Voltage	>57.6 V (3.6V/Cell)
Balancing Voltage	<57.6 V (3.6V/Cell)
Maximum Batteries in Parallel	16 (*Consult Supplier)

### MECHANICAL SPECIFICATION

Dimension (L x W x H)	482 x 480 x 133 mm 19.0 x 18.9 x 5.2"
Approx. Weight	44 kg
Terminal Type	DIN POST
Terminal Torque	80 ~ 100 in-lbs (9 ~ 11 N-m)
Case Material	SPPC
Enclosure Protection	IP65

### DISCHARGE PERFORMANCE

Maximum Continuous Discharge Current	100 A
Peak Discharge Current	110 A (3s)
BMS Discharge Cut-Off Current	150 A (300ms)
Balancing open voltage	55.2V (3.45V/Cell)
Recommended Low Voltage Disconnect	44 V (2.75V/Cell)
BMS Discharge Cut-Off Voltage	>32.0V (2s) (2.0V/Cell)
Reconnect Voltage	>40.0 V (2.5V/Cell)
Short Circuit Protection	250 ~ 500 μs

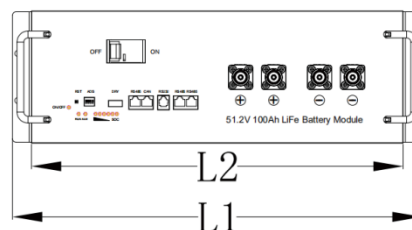
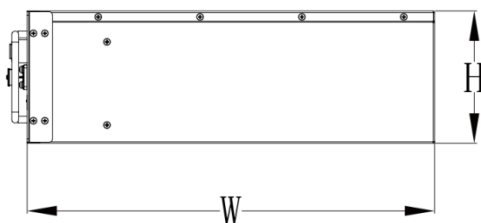
### TEMPERATURE PERFORMANCE

Discharge Temperature	-4 ~ 131 °F (-20 ~ 55 °C)
Charge Temperature	-4 ~ 113 °F (0 ~ 45 °C)
Storage Temperature	23 ~ 95 °F (-5 ~ 35 °C)
BMS High Temperature Cut-Off	149 °F (65 °C)
Reconnect Temperature	131 °F (55 °C)

### COMPLIANCE

Certifications	CE (battery) UN38.3 (battery) UL1642 & IEC62133 (cells)
Shipping Classification	UN 3480, CLASS 9

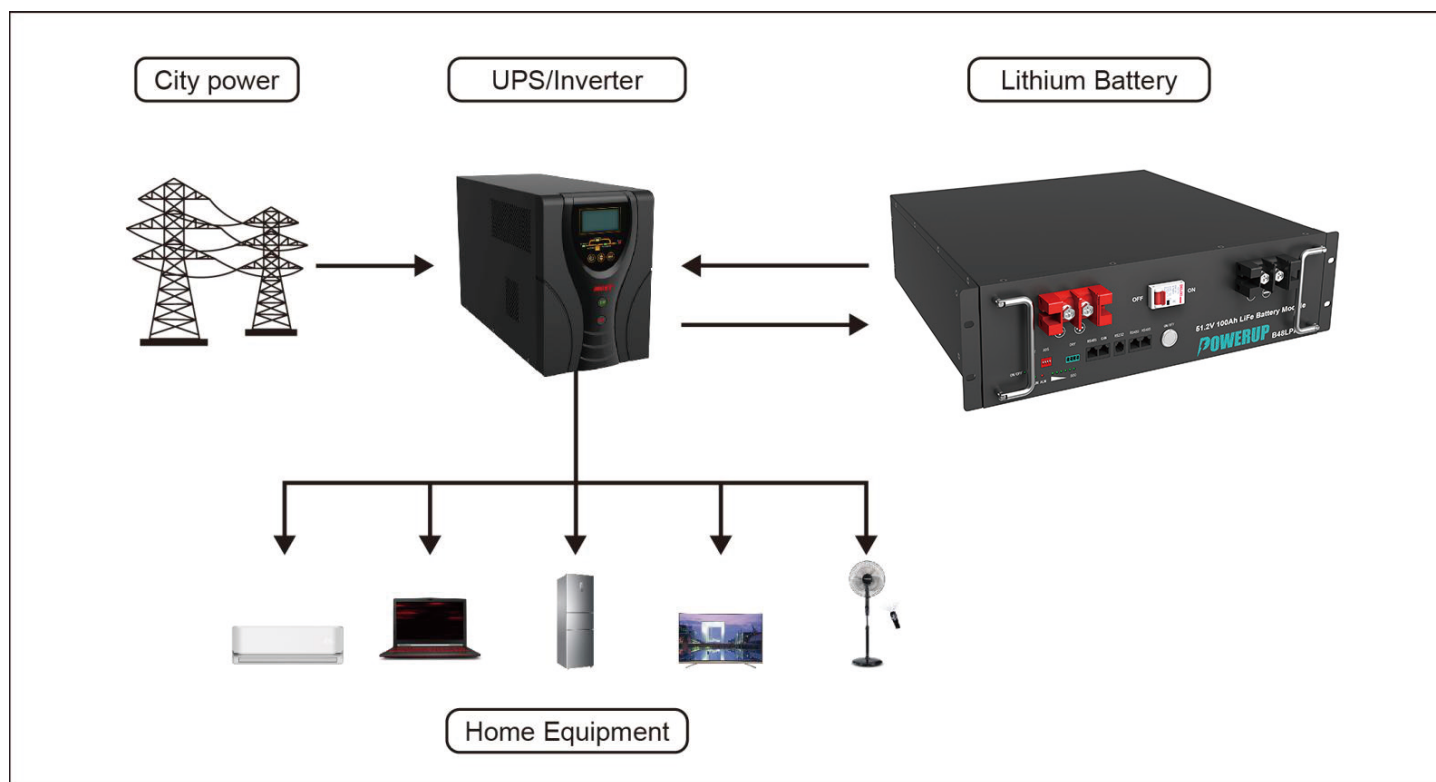
### OUTLINE DIMENSION



L1 mm(")	L2 mm(")	W mm(")	H mm(")
482(19.0)	438 (17.2)	480 (18.9)	133(5.2)=3U

## LITHIUM IRON PHOSPHATE BATTERY — B48LP15

### DIAGRAM



### FEATURES & BENEFITS



#### High cycle life

2000-7000 cycles for effectively lower total of ownership.



#### 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.



#### Quickly 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.

### APPLICATIONS

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

Suitable applications include:

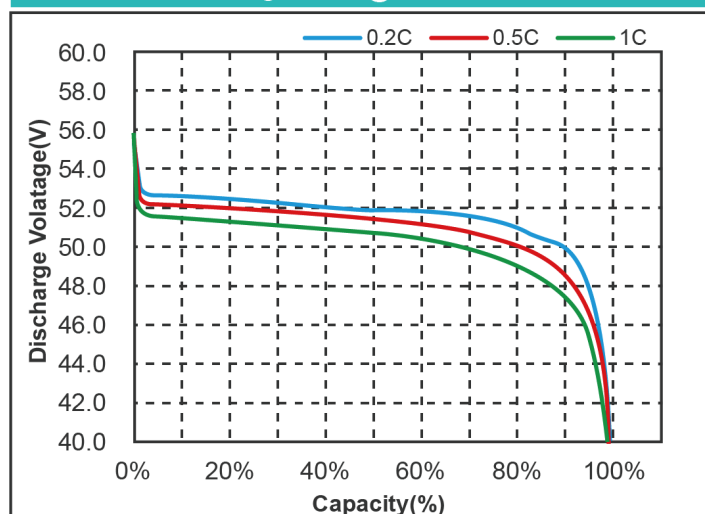
- Solar Storage
- Switching applications and more
- Base transceiver station
- Communication equipments
- Central office
- Telecommunication systems
- Electronic cash registers
- Microprocessor based office machine
- UPS

### CAUTIONS

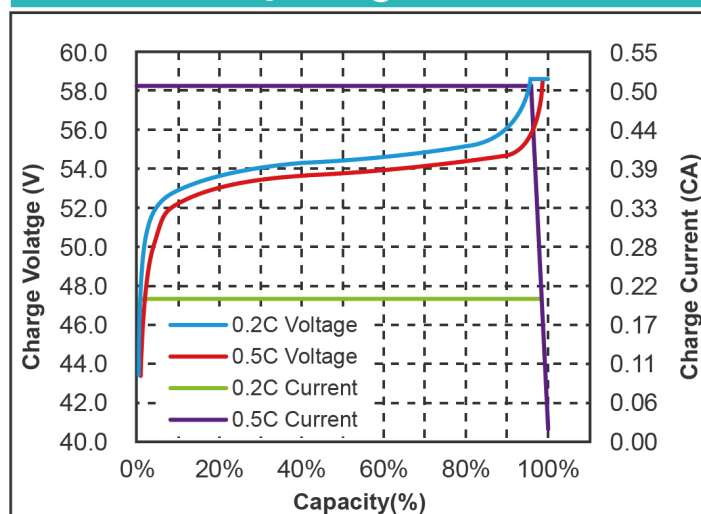
- Do NOT short circuit, reverse polarity, crush or disassemble.
- Do NOT heat or incinerate.
- Do NOT immerse in any liquid.
- Store at 30~50% SOC. Recharging every 3 months is recommended. The storage area should be clean, cool, dry and ventilated.

## LITHIUM IRON PHOSPHATE BATTERY — B48LPI5

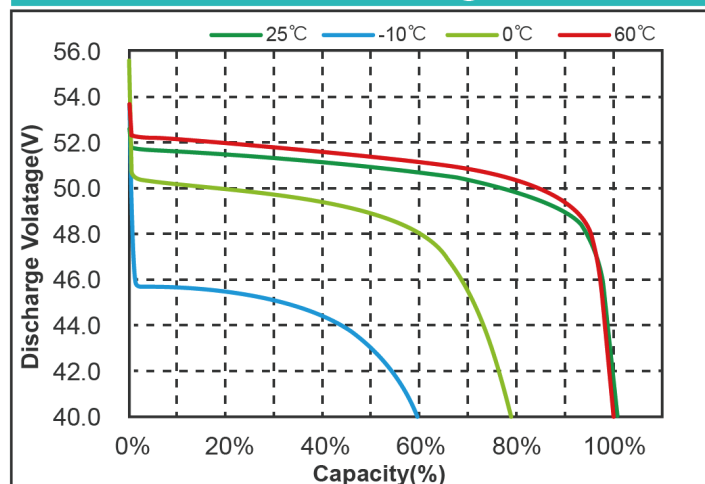
Different Rate Discharge Curve @25°C



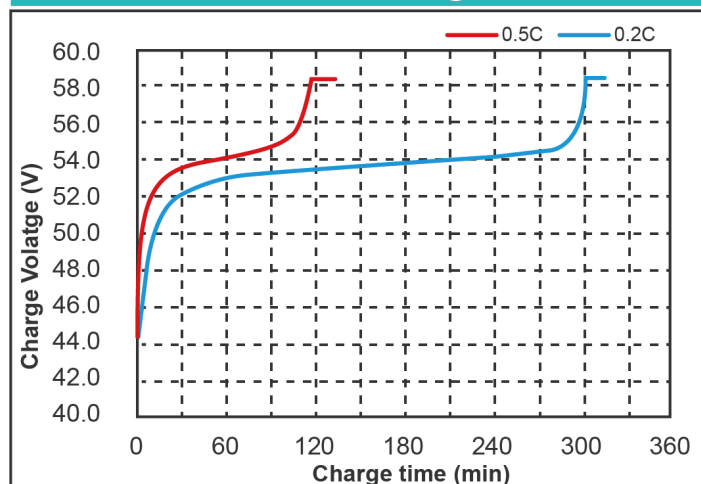
Different Rate Discharge Curve @25°C



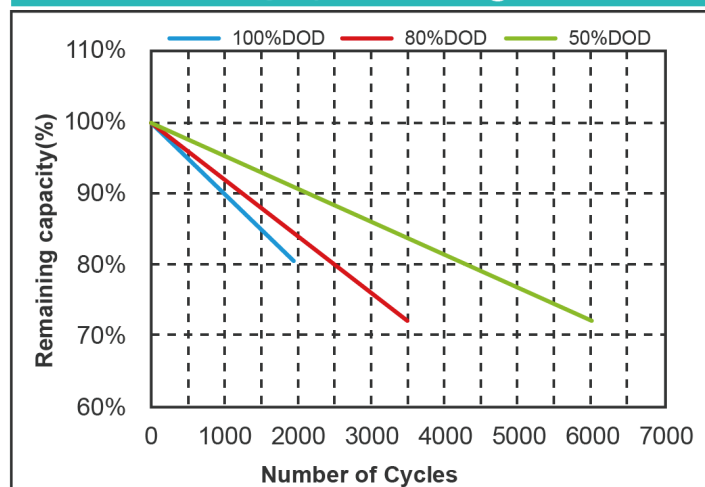
Different Temperature Discharge Curve @0.5C, 25°C



Charge Characteristics of time-voltage@0.2C&0.5C, 25°C



Different DOD Discharge Cycle Life Curve @0.2C, 25°C



Open circuit voltage VS SOC%@25°C

