

LITHIUM IRON PHOSPHATE BATTERY — LP18-4850
ELECTRICAL PERFORMANCE

Nominal Voltage	51.2 V
Nominal Capacity	50 Ah
Capacity @ 20A	150 min
Energy	2560 Wh
Communication	CAN2.0/RS232/RS485
Resistance	≤40 mΩ @ 50% SOC
Efficiency	>96%
Module Parallel	Up to 16 packs

CHARGE PERFORMANCE

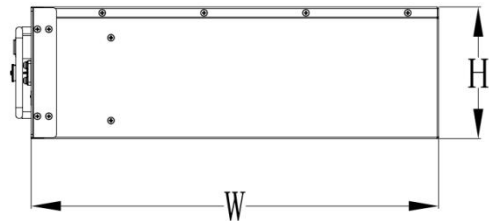
Recommended Charge Current	20A
Maximum Charge Current	50A
Recommended Charge Voltage	57.6V
BMS Charge Cut-Off Voltage	<58.4 V (3.65V/Cell)
Reconnect Voltage	>57.6 V (3.6V/Cell)
Balancing Voltage	<57.6 V (3.6V/Cell)
Maximum Batteries in Series (cells)	16 (*Consult MUST)

DISCHARGE PERFORMANCE

Maximum Continuous Discharge Current	50 A
Peak Discharge Current	60 A (3s)
BMS Discharge Cut-Off Current	75 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 μ s

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)	410 (16.1)	133 (5.2)


MECHANICAL PERFORMANCE

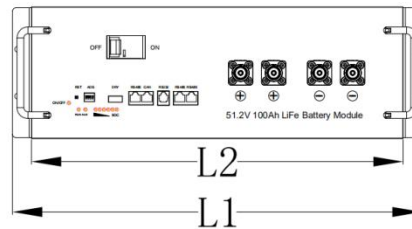
Dimension (L x W x H)	482 x 410 x 133 mm 19.0 x 16.1 x 5.2"
Approx. Weight	11.4 lbs (25 kg)
Terminal Type	DIN POST
Terminal Torque	80 ~ 100 in-lbs (9 ~ 11 N-m)
Case Material	SPPC
Enclosure Protection	IP65

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)

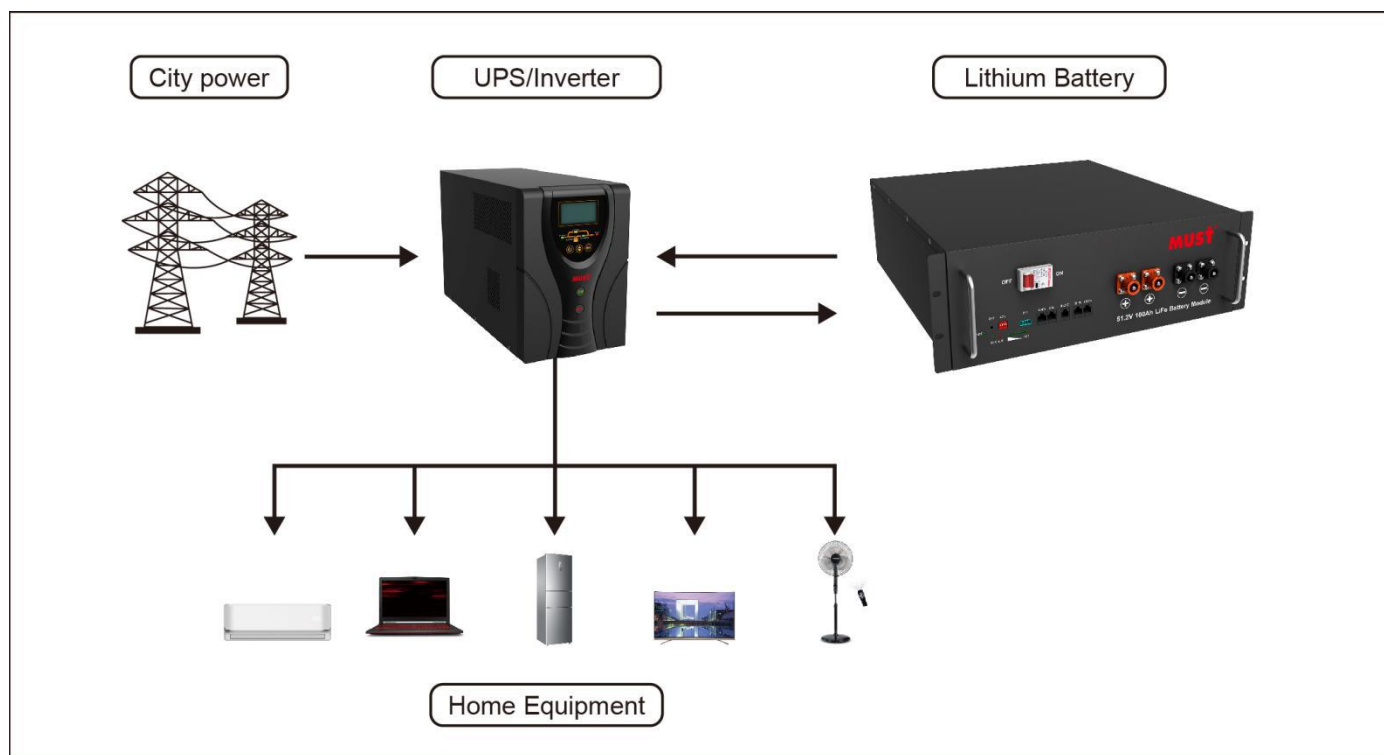
HEATING FOIL PERFORMANCE

Heating Temperature Range	-4 to 41 °F (-20 to 5 °C)
Heating Time	Approximately 1 hour @ 7.5 A
BMS Heating Foil Cut-Off	158 °F (70 °C)





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DIAGRAM





FEATURES & BENEFITS


- 
High cycle life
 4000 cycles @80% DoD for effectively lower total of ownership cost.


- 
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.