

# LITHIUM IRON PHOSPHATE BATTERY

**FEATURES** Lithium Iron Phosphate (LiFePO4): the Safest Lithium Technology.  
Integrated Battery Management System(BMS).  
Bluetooth/RS485/RS232/SMBus/CANBus (Optional).  
SOC LED/LCD Indicator(Optional).

**PERFORMANCE** Long Cycle Life > 2000cycles @ 100% DOD.  
High Density, High Discharge Current, High Temperature Range.  
Low Weight, Free Maintenance.  
Fast Charging.  
Environment Friendly.



HD12.8-150(12.8V150Ah)

## BATTERY DATA SHEET

### Electrical Parameters

Nominal Voltage	12.8V
Rated Capacity	150Ah
Energy	1920Wh
Resistance	≤ 15m Ω
Efficiency	99%
Cycle Life	>2000cycles @0.2C,100% DOD
Self Discharge	2% per Month
Max. Modules in Series/Parallel	4S/20P

### Discharge Parameters

Continuous Discharge Current	150A
Pulse Discharge Current	450A(5 ms)
Recommended Volt. Disconnect	10V
BMS Discharge Cut-off Voltage	8.8V
Reconnect Voltage	10.8V
Short Circuit Protection	200~600 us

### Compliance Certificate

Certifications	UL1642(cell)
	CE
	IEC62133 & CB
	KC
	BIS
Shipping Classification	UN3480, Class 9, UN38.3

### Mechanical Parameters

Dimension(L x W x H)	483 x 170 x 238 mm
	19.02 x 6.69 x 9.37"
Weight	16.5kg(36.38lbs)
Terminal Type	M8
Battery Housing	ABS, UL-94 V-0
Housing Protection	IP56
Cell Type-Chemistry	LiFePO4 Cylindrical Cell
SOC Display(Optional)	LED/LCD Indicator

### Charge Parameters

Charge Method	CC-CV
Charge Voltage	14.4~14.8V
Recommended Float Voltage	13.8V
Recommended Charge Current	75A
Maximum Charge Current	150A
BMS Charge Cut-off Voltage	15.6V

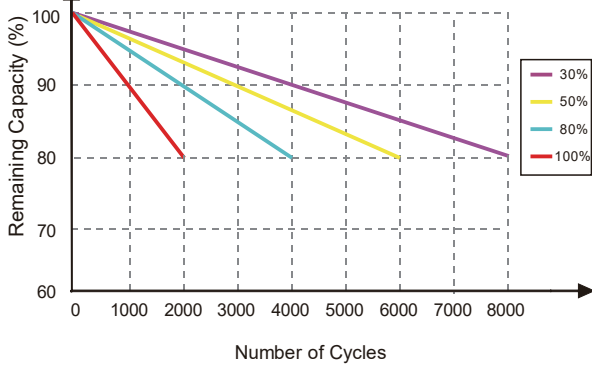
### Temperature Parameters

Discharge Temperature	-30 to 60°C (-22 to 140°F)
Charge Temperature	0 to 45°C (32 to 113°F)
Storage Temperature	-40 to 60°C (-40 to 140°F)
BMS High Temperature Cut-off	80°C(176°F)

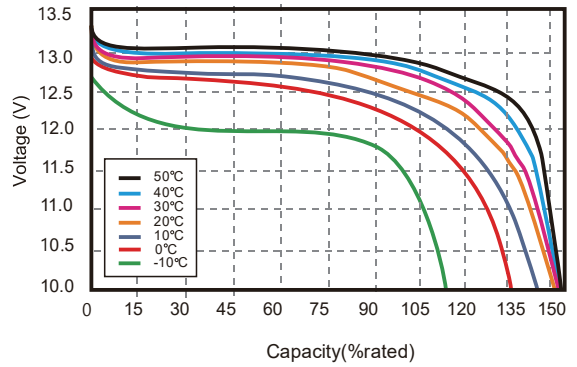


**Performance Charateristics**

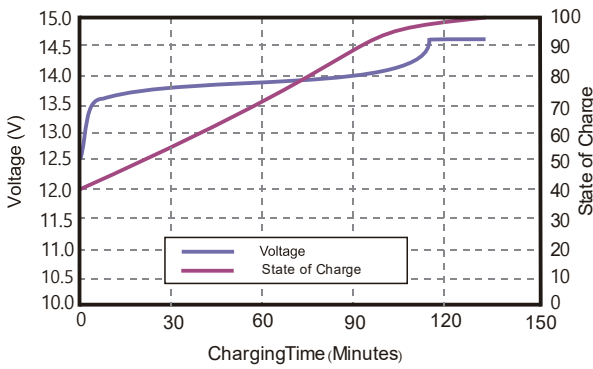
**CYCLE LIFE vs.DEPTH OF DISCHARGE(DOD)**  
DISCHARGE@0.2C, 25°C



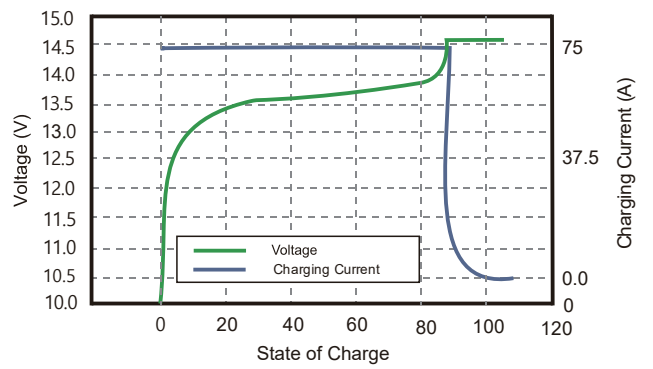
**DISCHARGE CAPACITY at VARIOUS TEMPERATURES**  
DISCHARGE @0.2C, 25°C



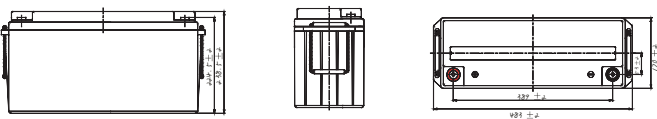
**STATE OF CHARGE CURVE @0.2C, 25 C**



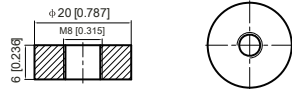
**CHARGING CHARACTERISTICS @0.2C, 25 C**



**Battery Dimension**



M8 - 1.0x 8mm  
Terminal



**Battery Applications**

- + Data Center UPS
- + Telecom Backup Power
- + Military Power Supply
- + Solar Energy Storage System
- + Solar Street LED Lightings
- + Autonomously Guided Vehicles (AGVs)
- + Industrial Robotics & Handling Equipment
- + Aerial Work Platform
- + Floor Cleaning Machines
- + Power Tools, Lawn Mower
- + Electric Bike & Motorcycles
- + Electric Mobilities( E-scooters, Wheelchair)
- + Golf Trolley & Golf Carts
- + Medical Devices
- + Electric Ships
- + Passenger Vehicles

**Battery Recycle**



**NOTE:** Do Not Mix With Sealed Lead Acid Batteries When Recycling.  
See Lulukabaraka User's Manual for Proper Operation.  
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