

# LITHIUM IRON PHOSPHATE BATTERY

**FEATURES** Lithium Iron Phosphate (LiFePO<sub>4</sub>): the Safest Lithium Technology.  
Integrated Battery Management System(BMS).  
RS485 Interface.  
SOC LED Indicator.

**PERFORMANCE** Long Cycle Life > 2000cycles @80% DOD.  
High Density, High Discharge Current, High Temperature Range.  
Low Weight, Free Maintenance.  
Fast Charging.  
Environment Friendly.



HA-LFP-12.8-80(12.8V80Ah)

## BATTERY DATA SHEET

### Electrical Parameters

Nominal Voltage	12.8V
Rated Capacity	80Ah
Energy	1024Wh
Resistance	≤15m Ω
Efficiency	99%
Cycle Life	>2000cycles @ 0.5°C, 100% DOD
Self Discharge	2% per Month
Max. Modules in Series/Parallel	4S/4P

### Mechanical Parameters

Dimension(L x W x H)	260x 168x 208 mm±2mm 10.24 x 6.61 x 8.19"
Weight	10.5kg(23.1lbs)
Terminal Type	M6
Battery Housing	ABS, UL-94 V-0
Housing Protection	IP65
Cell Type-Chemistry	LiFePO <sub>4</sub> Cylindrical Cell
SOC Display	LED Indicator

### Discharge Parameters

Continuous Discharge Current	100A
Pulse Discharge Current	320A(<5 seconds)
Recommended Volt. Disconnect	10V
BMS Discharge Cut-off Voltage	8V
Reconnect Voltage	9.2V
Short Circuit Protection	200~600 us

### Charge Parameters

Charge Method	CC-CV
Charge Voltage	14.4~14.8V
Recommended Float Voltage	13.8V
Recommended Charge Current	80A
Maximum Charge Current	160A
BMS Charge Cut-off Voltage	15.6V

### Compliance Certificate

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

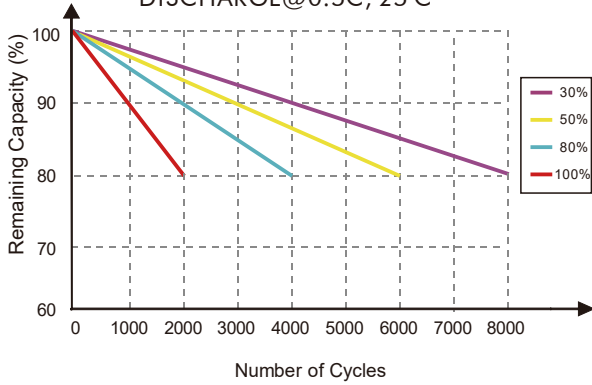
### Temperature Parameters

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)

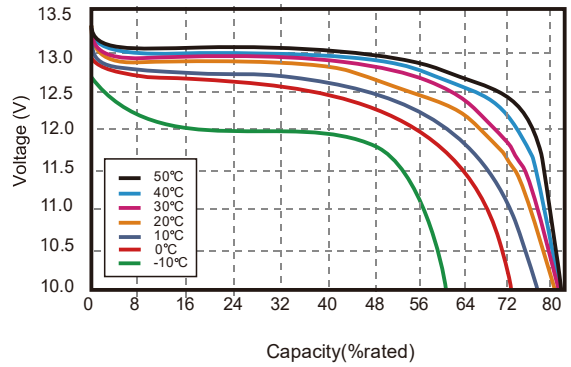


## Performance Characteristics

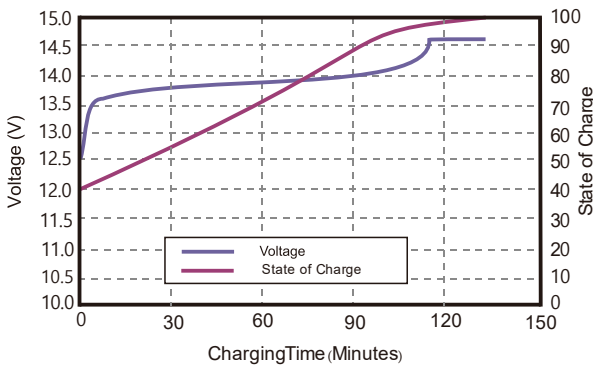
CYCLE LIFE vs. DEPTH OF DISCHARGE(DOD)  
DISCHARGE@0.5C, 25°C



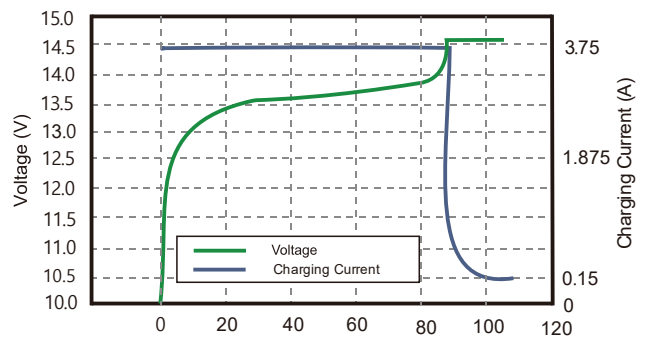
DISCHARGE CAPACITY at VARIOUS TEMPERATURES  
DISCHARGE @0.5C



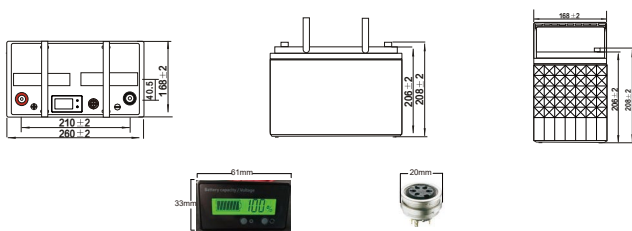
STATE OF CHARGE CURVE @0.5C, 25°C



CHARGING CHARACTERISTICS @0.5C, 25°C

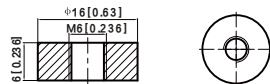


## Battery Dimension



M6 - 1.0x 6mm

Threaded Hole



## Battery Recycle



## 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

**NOTE:** Do Not Mix With Sealed Lead Acid Batteries When Recycling.

See Haidi User's Manual for Proper Operation.

© 2011, Haidi Energy Technology Co., Ltd. All Rights Reserved.