

# 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-12.8-300(12.8V300Ah)

## BATTERY DATA SHEET

### Electrical Parameters

|                          |                               |
|--------------------------|-------------------------------|
| Nominal Voltage          | 12.8V                         |
| Rated Capacity           | 300Ah                         |
| Energy                   | 3840Wh                        |
| Resistance               | ≤40m Ω                        |
| Efficiency               | 99%                           |
| Cycle Life               | >2000cycles @ 0.5°C, 100% DOD |
| Self Discharge           | 2% per Month                  |
| Max. Modules in Parallel | 4S/4P                         |

### Mechanical Parameters

|                      |                                      |
|----------------------|--------------------------------------|
| Dimension(L x W x H) | 353x350x188mm±2mm<br>13.9x13.8x7.4"  |
| Weight               | 33kg(72.8lbs)                        |
| Terminal Type        | M8                                   |
| Battery Housing      | Metal Case                           |
| Housing Protection   | /                                    |
| Cell Type-Chemistry  | LiFePO <sub>4</sub> Cylindrical Cell |
| SOC Display          | LED Indicator                        |

### Discharge Parameters

|                               |                  |
|-------------------------------|------------------|
| Continuous Discharge Current  | 200A             |
| Pulse Discharge Current       | 600A(<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 | 75A        |
| Maximum Charge Current     | 150A       |
| BMS Charge Cut-off Voltage | 15.6V      |

### Compliance Certificate

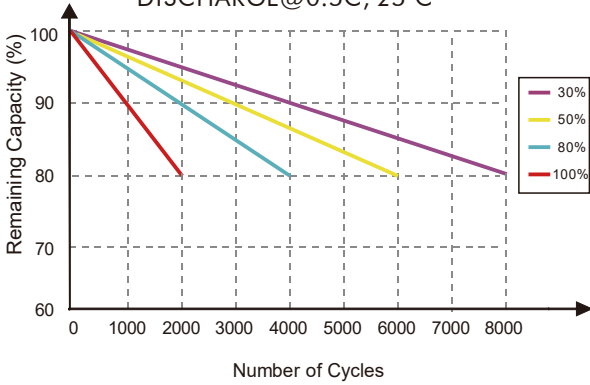
|                         |                         |
|-------------------------|-------------------------|
| Certifications          | UL1642(cell)            |
|                         | CE                      |
|                         | IEC62133 & CB           |
|                         | KC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

### Temperature Parameters

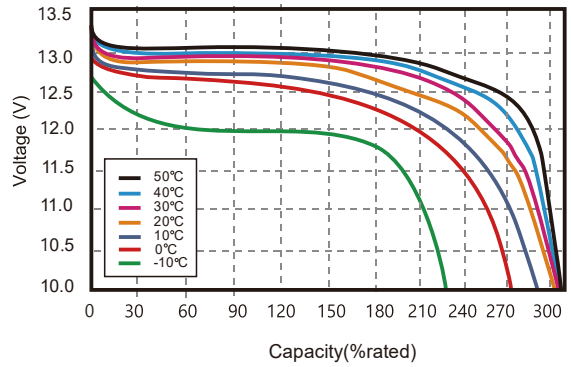
|                              |                            |
|------------------------------|----------------------------|
| Discharge Temperature        | -30 to 60°C (-22 to 140°F) |
| Charge Temperature           | 0 to 45°C (32 to 113°F)    |
| Storage Temperature          | -40 to 60°C (-40 to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



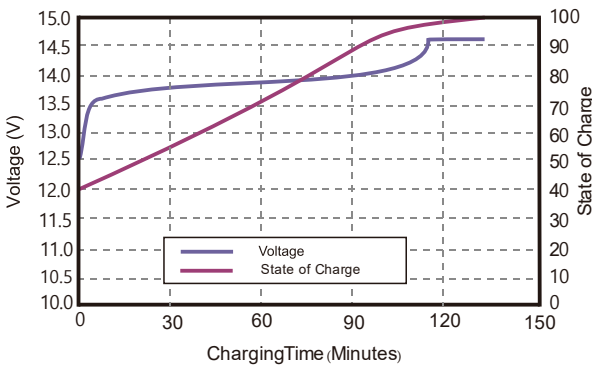
CYCLE LIFE vs. DEPTH OF DISCHARGE(DOD)  
DISCHARGE@0.5C, 25°C



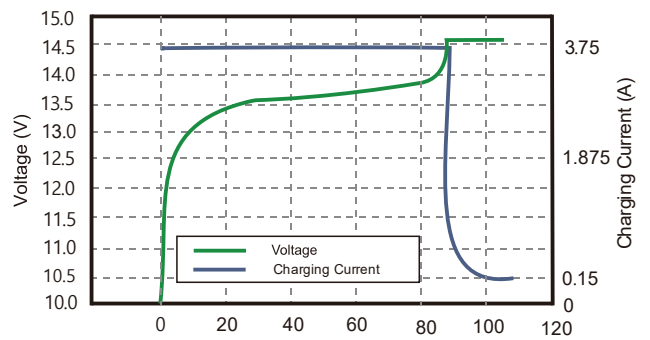
DISCHARGE CAPACITY at VARIOUS TEMPERATURES  
DISCHARGE @0.5C



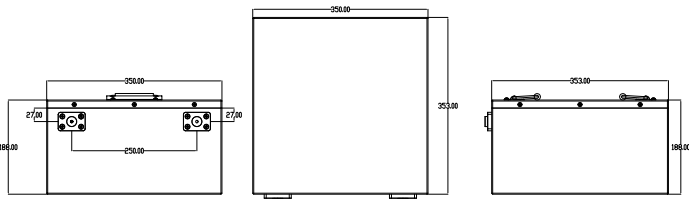
STATE OF CHARGE CURVE @0.5C, 25°C



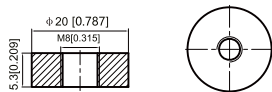
CHARGING CHARACTERISTICS @0.5C, 25°C



### Battery Dimension



M8 - 1.0x 8mm  
Terminal



### 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.

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