

LITHIUM IRON PHOSPHATE BATTERY

FEATURES Lithium Iron Phosphate (LiFePO₄): 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-12.8-40(12.8V40Ah)

BATTERY DATA SHEET

Electrical Parameters

Nominal Voltage	12.8V
Rated Capacity	40Ah
Energy	512Wh
Resistance	≤30m 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)	197x 165x 170 mm ±2mm
	7.76 x 6.5 x 6.69"
Weight	5.3kg(11.66lbs)
Terminal Type	M6
Battery Housing	ABS, UL-94 V-0
Housing Protection	IP65
Cell Type-Chemistry	LiFePO ₄ Cylindrical Cell
SOC Display	LED Indicator

Discharge Parameters

Continuous Discharge Current	70A
Pulse Discharge Current	160A(<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	40A
Maximum Charge Current	80A
BMS Charge Cut-off Voltage	15.6V

Compliance Certificate

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

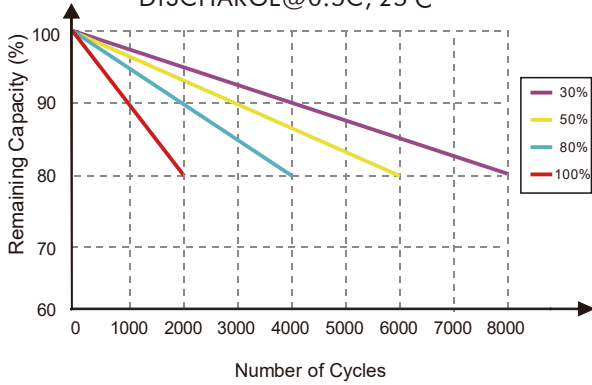
Temperature Parameters

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)

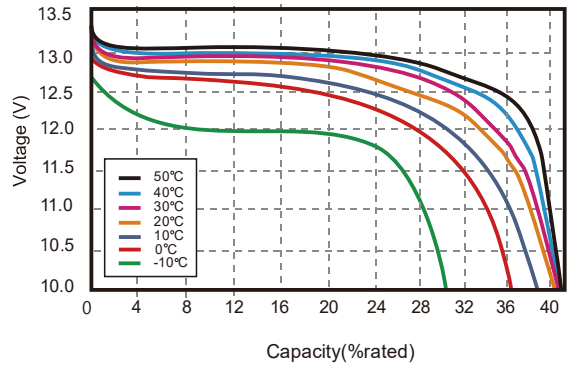


Performance Characteristics

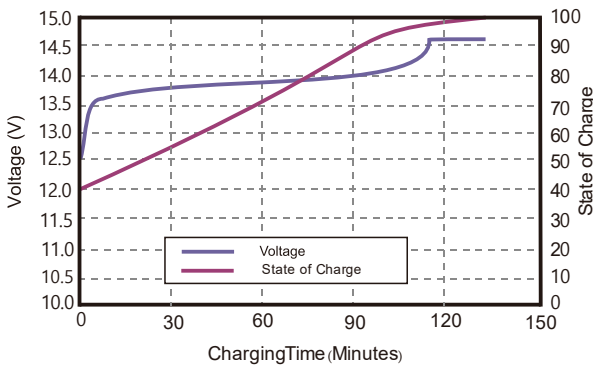
CYCLE LIFE vs. DEPTH OF DISCHARGE (DOD)
DISCHARGE @ 0.5C, 25°C



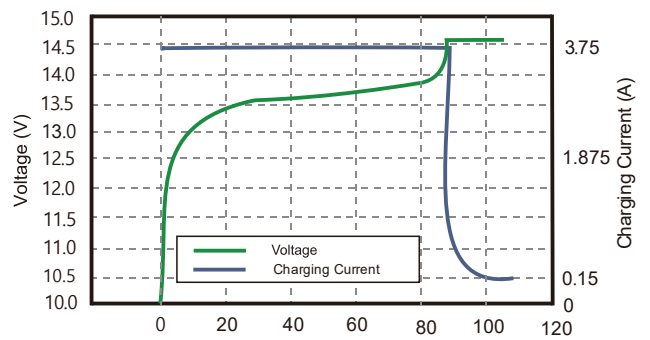
DISCHARGE CAPACITY at VARIOUS TEMPERATURES
DISCHARGE @ 0.5C



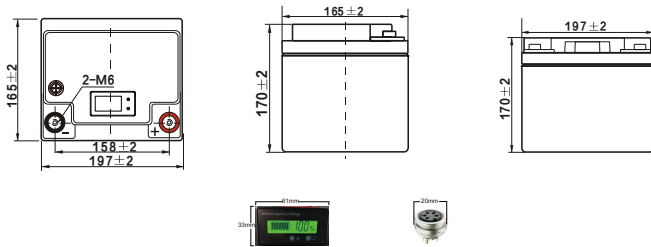
STATE OF CHARGE CURVE @ 0.5C, 25°C



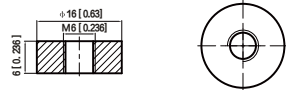
CHARGING CHARACTERISTICS @ 0.5C, 25°C



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.

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