

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 @ 100% DOD.
High Density, High Discharge Current, High Temperature Range.
Low Weight, Free Maintenance.
Fast Charging.
Environment Friendly.



HA-LFP-51.2-50(51.2V50Ah)

BATTERY DATA SHEET

Electrical Parameters

Nominal Voltage	51.2V
Rated Capacity	50Ah
Energy	2560Wh
Resistance	≤25m Ω
Efficiency	99%
Cycle Life	>2000cycles @1C,100% DOD
Self Discharge	2% per Month
Max. Modules in Series/Parallel	1S/4P

Mechanical Parameters

Dimension(L x W x H)	522x 240x 224 mm±2mm
	20.6 x 9.4x 8.8"
Weight	26.6kg(58.52lbs)
Terminal Type	M8
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	120A
Pulse Discharge Current	200A(<5 seconds)
Recommended Volt. Disconnect	40V
BMS Discharge Cut-off Voltage	32V
Reconnect Voltage	36.8V
Short Circuit Protection	200~600 us

Charge Parameters

Charge Method	CC-CV
Charge Voltage	57.6~59.2V
Recommended Float Voltage	55.2V
Recommended Charge Current	60A
Maximum Charge Current	100A
BMS Charge Cut-off Voltage	62.4V

Compliance Certificate

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

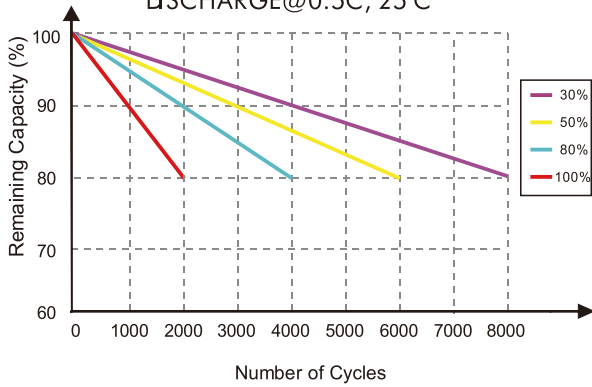
Temperature Parameters

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)

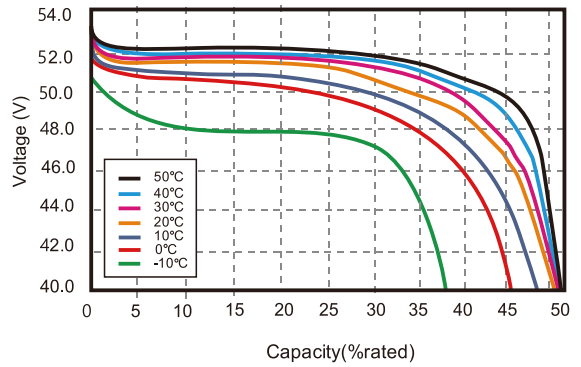


Performance Characteristics

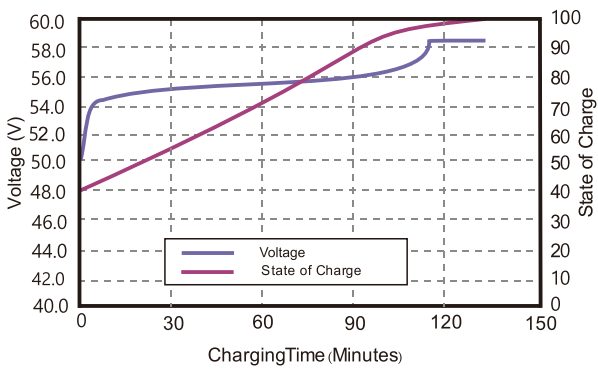
CYCLE LIFE vs. DEPTH OF DISCHARGE(DOD)
DISCHARGE @ 0.5C, 25°C



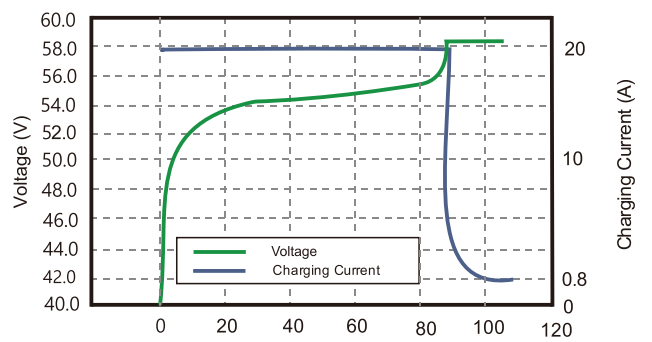
DISCHARGE CAPACITY at VARIOUS TEMPERATURES
DISCHARGE @ 0.5C, 25°C



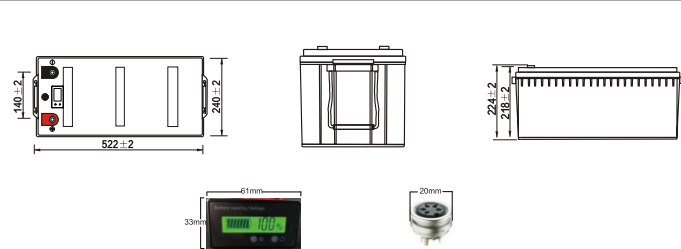
STATE OF CHARGE CURVE @ 0.5C, 25°C



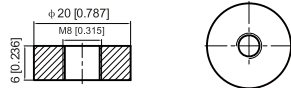
CHARGING CHARACTERISTICS @ 0.5C, 25°C



Battery Dimension



M8 - 1.0x 8mm
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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