

# DATA SHEET

72V180Ah - GT72V180-GC-A20



Lithium Iron Phosphate Battery

## BATTERY FEATURES & PERFORMANCE

### 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

## ELECTRICAL PARAMETERS

Nominal Voltage	73.6V
Rated Capacity	180Ah
Energy	13248Wh
Resistance	≤30m Ω
Efficiency	99%
Cycle Life	>2000 cycles @ 100% DOD
Self Discharge	2% per Month

## DISCHARGE PARAMETERS

Continuous Discharge Current	200A
Pulse Discharge Current	400A (<3 seconds)
Recommended Volt. Disconnect	50V
BMS Discharge Cut-off Voltage	40V
Reconnect Voltage	46V
Short Circuit Protection	200~600 us

## COMPLIANCE CERTIFICATE

Certifications	UL 1642 (Cell) CE IEC62133 & CB KC BIS
Shipping Classification	UN3480, Class 9, UN38.3

Manufactured and distributed by Grand Teton Energy Systems.

Performance may vary depending on application. All Specifications and operation conditions are subject to change without notice. This data is for evaluation purposes only. No guarantee is intended or implied by this data.

Version 001

## MECHANICAL PARAMETERS

Dimension (L x W x H)	38.18in x 16.33in x 10.55in
Weight	264.5lbs
Terminal Type	M8
Battery Housing	Metal
Housing Protection	IP56
Cell Type-Chemistry	LiFePO4 Battery Cell

## CHARGE PARAMETERS

Charge Method	CC-CV
Charge Voltage	82~84A
Recommended Float Voltage	69V
Recommended Charge Current	57.5A
Maximum Charge Current	90A
BMS Charge Cut-Off Voltage	86V

## TEMPERATURE PARAMETERS

Discharge Temperature	-20 to 60°C (-4 to 140°F)
Charge Temperature	0 to 45°C (30 to 113°F)
Storage Temperature	0 to 40°C (30 to 104°F)
BMS High Temperature Cut-Off	80°C (176°F)

## BATTERY RECYCLE



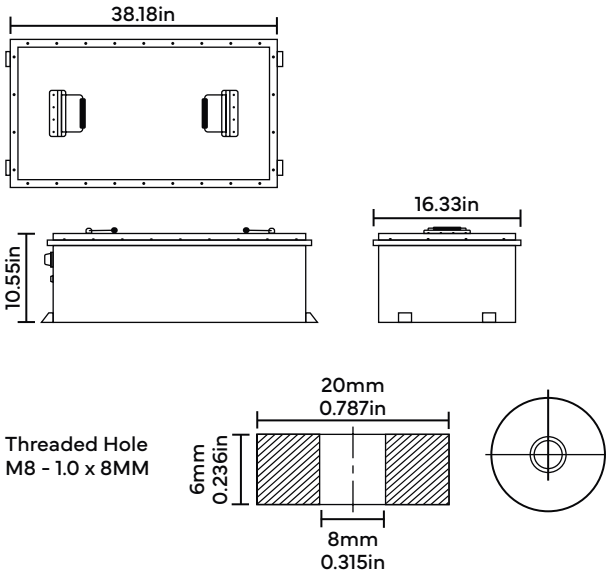
NOTE: Do Not Mix With Sealed Lead Acid Batteries When Recycling.  
See Grand Teton User's Manual for Proper Operation.  
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## BATTERY DIMENSIONS

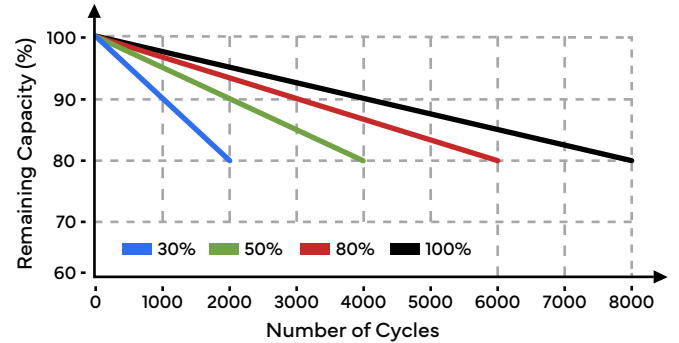


## BATTERY APPLICATIONS

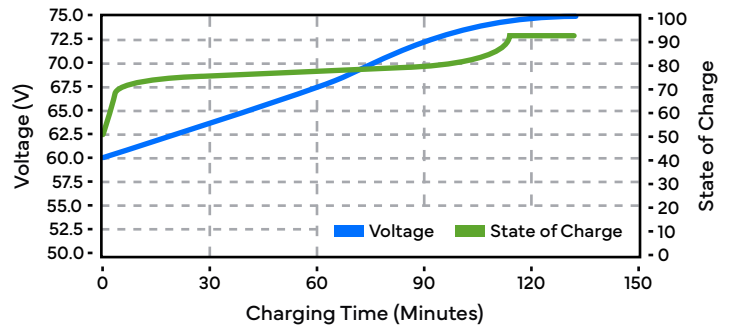
- ⚡ Data Center UPS
- ⚡ Telecom Backup Power
- ⚡ Military Power Supply
- ⚡ Solar Energy Storage System
- ⚡ Solar Street LED Lightings
- ⚡ Autonomously Guided Vehicles (AGVs)
- ⚡ Industrial Robotics & Handling Equipment
- ⚡ Aerial Work Platform
- ⚡ Floor Cleaning Machines
- ⚡ Power Tools, Lawn Mower
-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



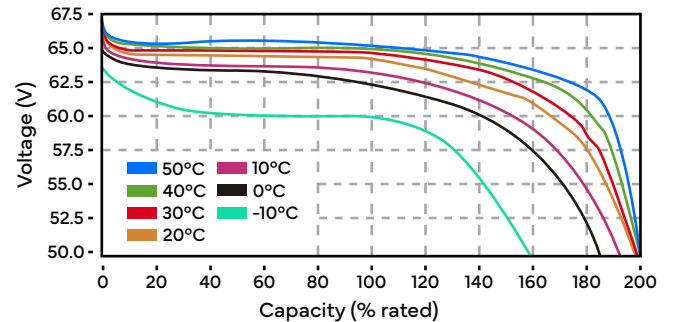
## PERFORMANCE CHARACTERISTICS



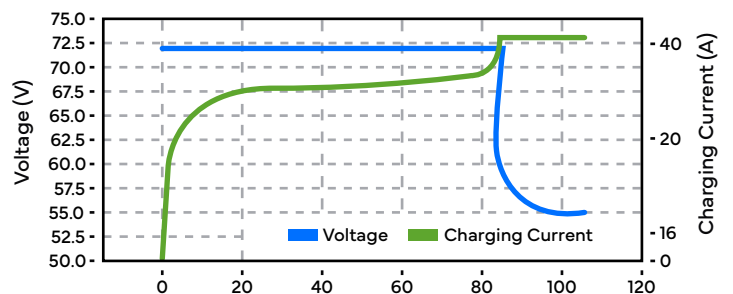
CYCLE LIFE vs. DEPTH OF DISCHARGE (DOD)  
DISCHARGE @ 0.5C, 25°C



STATE OF CHARGE CURVE @ 0.5C, 25°C



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



CHARGING CHARACTERISTICS @ 0.5C, 25°C