

Wire Energy With Technology



12V 50Ah

SPECIFICATIONS



2x

Twice the power of traditional batteries

3x

3 times longer service life

5

5-year quality guarantee

1/3

One-third the weight of lead-acid batteries

67

Protection degree up to IP67

**12.8V 50Ah
640Wh**

**Weight
6.3KG**

**Size
229x148x211mm**

Safety Certified Via:

EMC

EMC

UN38.3

ISO 9001:2015

MSDS

Lithium battery and storage system manufacturer



12V 50Ah

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Specifications	
Capacity	50Ah
Nominal Voltage	12.8 Volts
Full Charge Resting Voltage	13.32 Volts
Energy Storage	640Wh
Run time @ 25Amp load	2 Hours @ 77°F (25°C)
Self Discharge Rate	≤4%/Month
Charging	
Charging Temperate Range	32° ~ 131°F
Charge Method	CC/CV
Absorb Voltage(CC)	14.0 to 14.4 Volts
Maximum Current	30Amps @ 77°F (25°C)
Recommended Current	25Amps
Charge Efficiency	99%
Discharging	
Discharging Temperate Range	-4°~140°F (-20°C-60°C)
Discharge Current	50Amps Continuous
Discharge Current 3 seconds	≤150Amps
Discharge Cut-off Voltage	10Volts; Any cell (2.5 Volts)
Recommended Low Voltage Disconnect	12 Volts
Short Circuit Protection Release	Disconnect the load
Battery Protection	
BMS Control	PCM
Over Voltage, per Cell, Open	3.75 Volts ± 0.03 Volts (15.0V)
Over Voltage, per Cell, Release	3.55 Volts ± 0.05 Volts (14.2V)
Over Discharge, per Cell, Open	2.50 Volts ± 0.05 Volts (10V)
Over Discharge, per Cell, Release	2.70 Volts ± 0.05 Volts (10.8V)
Over Current	310Amps 320mS
Over Current Release	Disconnect the charger or load
Over Temperature	140°F (60°C)
Over Temperature Release	131°F (55°C)
Low Temperature Charge, Open	28.4°F

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Battery Protection	
Low Temperature Charge, Release	36°F
MOSFET Over Temperature, Open	194°F
MOSFET Over Temperature, Release	158°F
Mechanical	
Length	9.05' ' (229mm)
Width	5.82' ' (148mm)
Height	8.31' ' (211mm)
Weight	13.89 Pounds (6.3Kg)
Hardware	M6 Bolts, Washer, Lock Washer
Hardware Torque	54 in - lb. (6 N-m)
Miscellaneous	
Discharge Test	100% DOD @ 1C
Discharge Test Results	> 6000 cycles ~ 80% remaining Capacity
Storage Method	50% SoC, test @ 90 Days, recharge if below 13.0V
Storage Temperature Range(Recommended)	-4°F ~ 95°F (-20°C - 35°C)
Lithium ion Chemistry	Lithium Iron Phosphate (LiFePo4)
Cell Type	Nano Prismatic
Internal Impedance(50% SoC, 1kHz)	< 10mΩ

