

12v 50Ah

DATA SHEET

PRODUCT FEATURES

- Ultra safe lithium iron phosphate (LiFePO₄) cells
- Integrated battery management system (BMS)
- Light weight and compact
- LCD Battery Voltage & Capacity Gauge
- Water and dust resistant (IP55)
- Highly durable sealed ABS plastic enclosure
- Drop-in 12v lead acid replacement
- Sealed and non-liquid (No fumes, no leaking, mount in any position)



TYPICAL APPLICATION

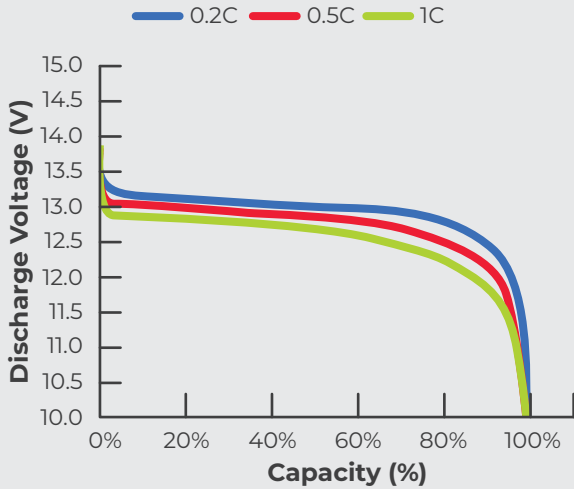
- Load shedding backup/UPS battery
- Long-life battery perfect for small 720W inverter chargers
- Camping fridge additional battery
- Solar storage battery

TECHNICAL SPECIFICATION

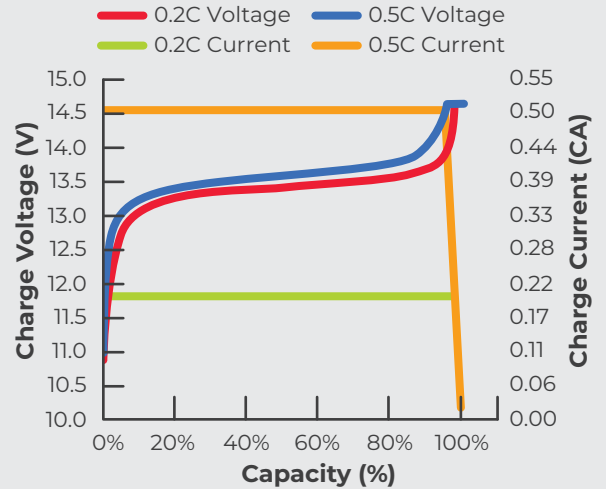
Usable Capacity	640 Wh	Nominal Voltage	12.8 VDC
Nominal Capacity	50Ah @ 0.2C	Operating Voltage Range	11.6 VDC – 14.4 VDC
Weight (kg)	6.8kg	Warranty Period	2 Years
Bulk Charging Voltage	14.4 VDC	Float Charging Voltage	13.8 VDC
Maximum Current	50A	Discharge Voltage Minimum	11.6v
Self-discharge Rate	< 3.5% per month	Cycle Life	2000 – 8000 depending on % DoD
Over-voltage Cut-out	14.6v	Under-voltage Cut-out	10.6v
Discharge Current	Max 50A (Burst 100A, <3s)	Charge Current	Max 50A
Battery Type	Lithium Iron Phosphate (LiFePO ₄)		
Dimensions (mm)	223 x 150 x 178 mm (L x W x H)		
Lifespan	100%DoD > 2000 cycles, 80%DoD > 3000 cycles, 50%DoD >5000 cycles (0.2C charging or discharging, 25°C)		
Protection	Over-voltage Under-voltage Short circuit Dust and water resistant		
Operating Temp Range	Charge: 0°C to 45°C Discharge: -20°C to 60°C		

LITHIUM IRON PHOSPHATE (LiFePO4) BATTERY

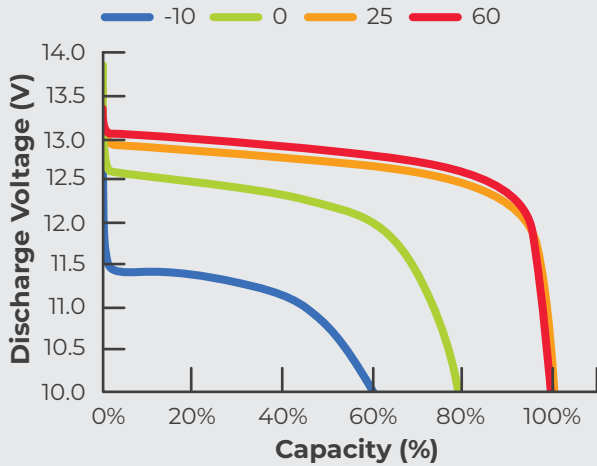
Different Rate Discharge Curve @25 °C



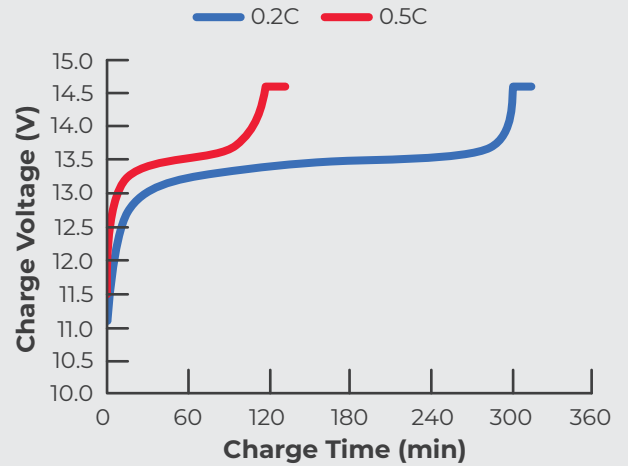
Charge Characteristics Of Capacity Voltage @0.2C & 0.5C, 25 °C



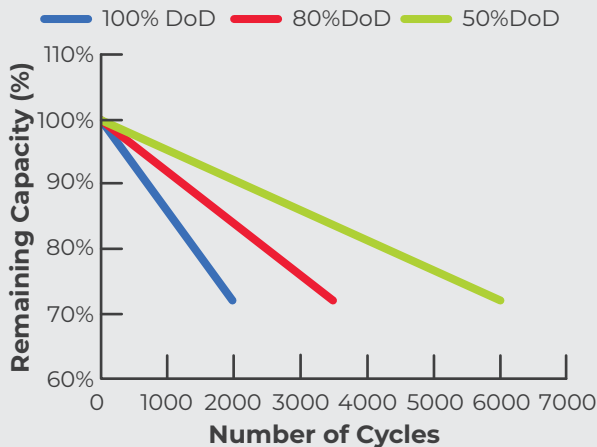
Different Temperature Discharge Curve @0.5C, 25 °C



Charge Characteristics Of Capacity Voltage @0.2C & 0.5C, 25 °C



Different DoD Discharge Cycle Life Curve @0.5C, 25 °C



Open Circuit Voltage VS SOC% @25 °C

