RoveLite

LFP12-50

12.8V 50Ah LiFePO4

Lithium Iron Phosphate
Deep Cycle Battery

ROVON

Quality
Guarantee
-
5 Years



Lighter Weight
About 40% of the weight of a comparable lead acid battery.
Easy to replace lead acid batteries.

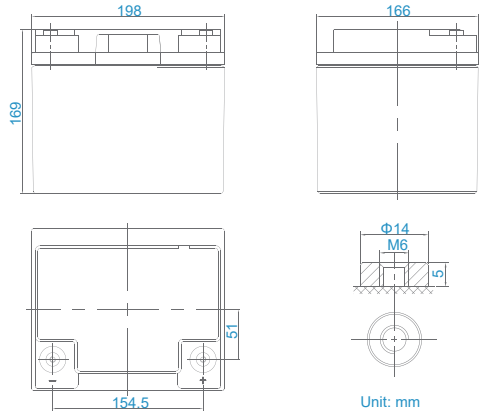
Higher Power
Delivers twice power of lead acid battery.
Higher discharge rate, while maintaining high energy capacity.

Longer Cycle Life
Offers up to 20 times longer cycle life and
five times longer float/calendar life than lead acid battery.

Superior Safety
Lithium Iron Phosphate chemistry eliminates the risk of explosion or combustion due to high impact, overcharging or short circuit.

Specification	
Nominal Voltage	12.8V
Nominal Capacity	50Ah / 640Wh
BMS	Integrated
Cycle Life	>5000 cycles @0.5C / 50%DOD
Monthly Self-discharge	<3%
Efficiency of Charge	100% @0.5C
Efficiency of Discharge	96~99% @0.5C
Charge Voltage	14.2~14.6V
Charge Mode	0.2C to 14.6V, then change to 0.02C (CC/CV)
Recommended Charge Current	12A
Max. Charge Current	50A
Charge Cut-off Voltage	14.6V±0.2V
Max. Continuous Discharge Current	50A
Peak Discharge Current	150A (1~3S)
Discharge Cut-off Voltage	10V±0.5V
Charge Temperature	0°C~55°C @60±25% Relative Humidity
Discharge Temperature	-20°C~60°C @60±25% Relative Humidity
Storage Temperature	-20°C~45°C @60±25% Relative Humidity
Protection Class	IP65
Approx. Dimensions	198mm*166mm*169mm
Approx. Weight	5.6kg
Terminal	M6
Maximum Modules in Series	4
Monitoring Option	Bluetooth with Smartphone App

Physical Dimensions (mm)

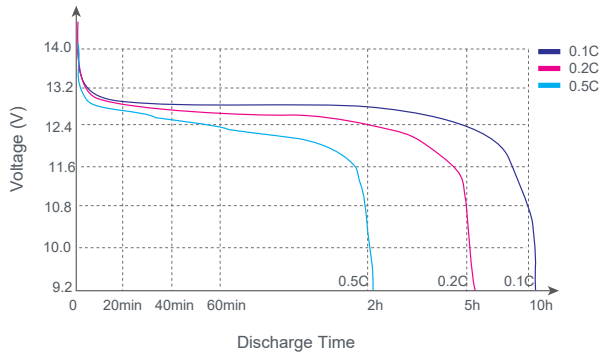


Typical Applications

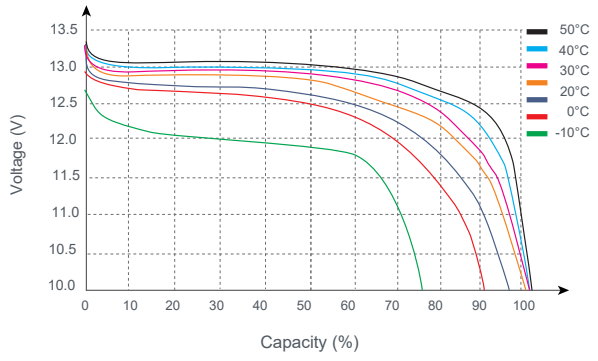
- Wheelchairs and scooters
- Solar/wind energy storage
- Back-up power for small UPS
- Golf trolleys & buggies
- Electric bikes
- Tools

LFP12-50 12.8V 50Ah

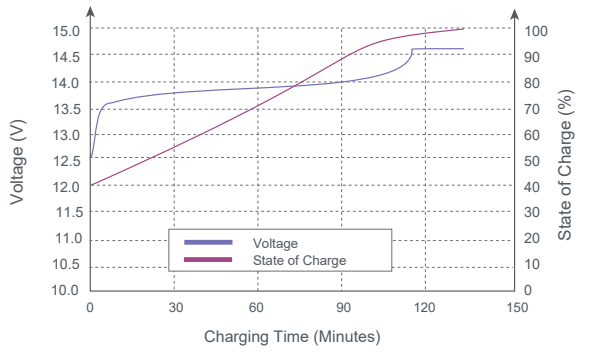
Different Rate Discharge Curve (25°C)



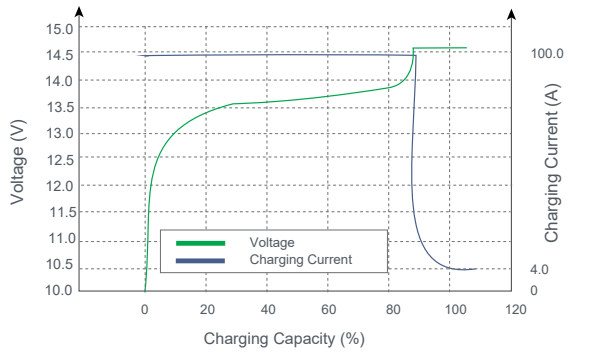
Different Temperature Discharge Curve (0.5C)



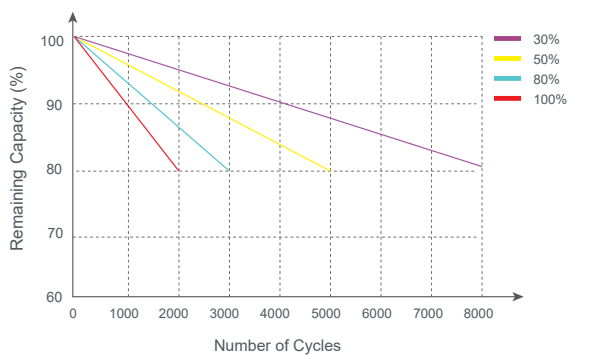
State of Charge Curve (0.5C, 25°C)



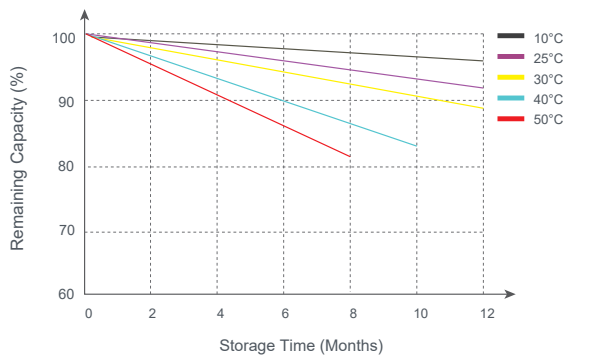
Charging Characteristics (0.5C, 25°C)



Different DOD Discharge Cycle Life Curve (0.5C)



Different Temperature Self Discharge Curve



Specifications are subject to change without prior notice. ROVON reserves the right to interpret and update this information.