12.8V 12.0Ah

RBIF12-12/30

LiFePO4 Lithium Battery

LIVEN LVIF Series-LiFePO4

High performance, completely maintenance-free, low self-discharge.
Floating & standby use: up to 10 years @25ºC.
100% precise quality testing, stable quality and high reliable performance.
Uniform output voltage in all the discharge curve.
Provide full nominal capacity, even at high currents.
Energy density: up to 130Wh/kg.
Capacity density: up to 145Ah/kg.
Suitable for standby power and energy storage power use.
Long storage time.
Cycle use: Up to 2000 cycles at 100% DOD.

Applications:

- Telecommunications
- Uninterruptible Power Supply (UPS)
- DC power supply
- Electric Power System (EPS)
- Emergency backup PS
- Wheelchairs and Scooters
- Golf trolleys and Golf cart
- Railway and Marine systems
- Electric tools
- Medical equipments

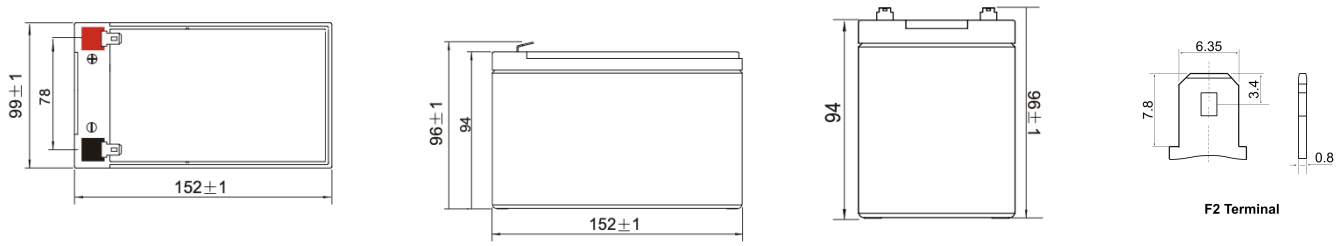
Dimensions:

Length	152±1mm (5.98in)
Width	99±1mm (3.89in)
Height	94±1mm (3.70in)
Total Height	96±1mm (3.78in)

Specifications:

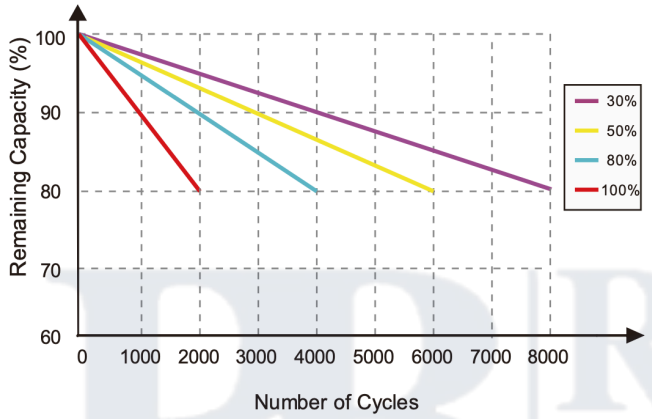
Nominal Voltage	12.8V
Nominal Capacity	12.0Ah @0.2C @25°C
Weight	Approx. 1.7Kg ±0.1kg (3.75lbs)
Energy	153.6W/h
Internal Resistance	≤ 30mΩ
Efficiency	99 %
Terminal	F2
Discharge	
Continuous Current	30A
Pulse Current	40A @15s
Recommended Volt. Disconnect	10V
BMS Cut-Off Voltage	8V
Reconnect Voltage	9.2V
Short Circuit Protection	200~600 μs
Charge	
Charge Voltage	14.4~14.8V
Recommended Float Voltage	13.8V
Recommended Charge Current	6A
Maximum Charge Current	12A
BMS Charge Cut-off Voltage	15.6V
Charge Method	CC/CV, use special LFP Charger
Max. Modules in Series/Parallel	4S/20P
Operation Temperature Range [1]	Discharge: -30°C~60°C Charge: 0°C~45°C
Storage Temperature Range	-40°C~60°C
BMS High Temperature Cut-off	80ºC
Humidity Range [1]	Charge/Discharge: RH= 85% [2] Storage: RH= 50% [2]
BP Protection - BMS Features [3]	OVP, UVP, SC, TEMP, BF
Cycle Life	>2000cycles @1C,100% DOD
Self Discharge	2% per Month
Battery Housing	ABS, UL-94 V-0
Housing Protection	IP56
Shipping Classification	UN3480, Class 9,UN38.3
Optional	Bluetooth/RS485/RS232/SMBus/CANBus/ SOC LED/LCD Indicator

Technical Drawings:

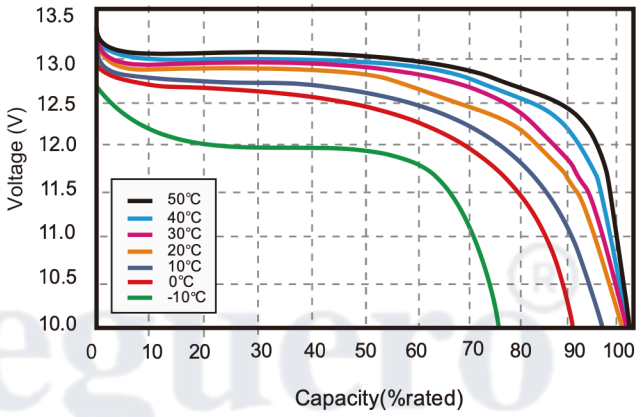


(1) *When the environment temperature is higher than 45ºC, please pay attention to ventilation and heat rejection.*
(2) *When humidity is higher than 85%, pay attention to protect, easily oxidized components note sealed.*
(3) *OVP=Over charge protection; UVP=Over discharge protection; SC=Short-circuit; TEMP=Temp. levels protection; BF=Balanced Function*

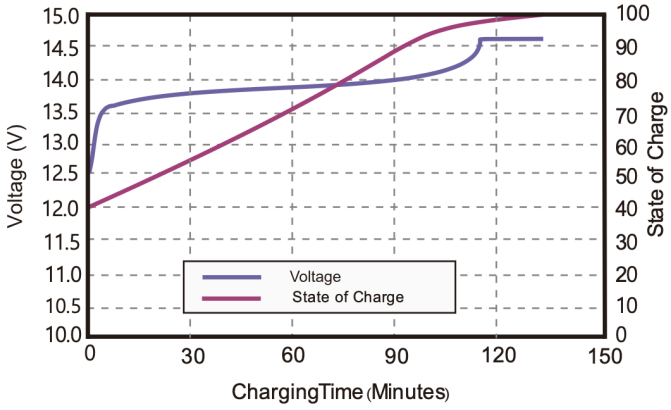
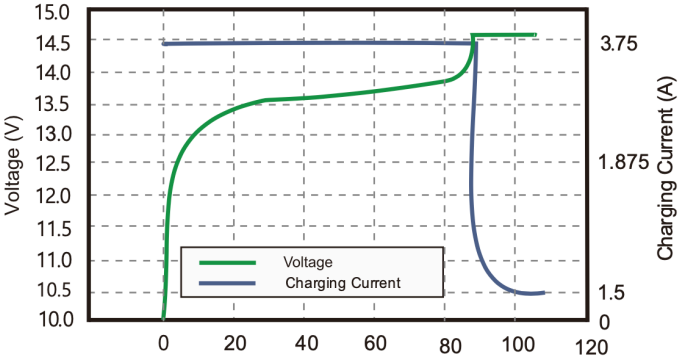
Cycle Life vs. Depth of Discharge (DOD)
Discharge @0.5C, 25ºC



Discharge Capacity at Various Temperatures
Discharge @0.5C



State of Charge Curve @0.5C, 25ºC



Charging Characteristics @0.5C, 25ºC