

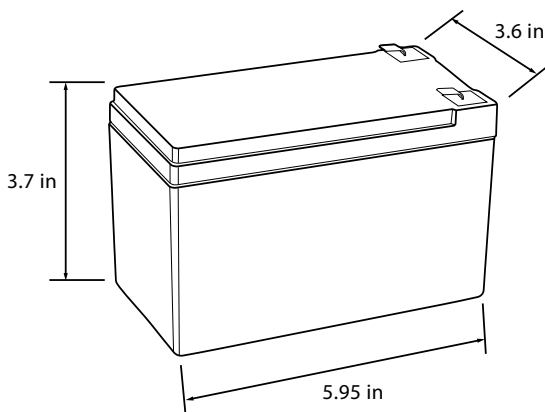
### Overview

The ExpertPower LiFePO4 12v12Ah rechargeable battery is optimized for low rate applications which require high energy density.

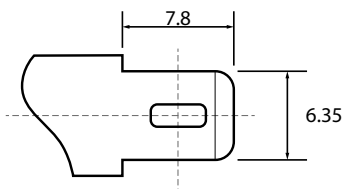
### Features

- High energy density
- Automatic protection with internal battery management system
- Low self-discharge rate
- Long cycle life
- Excellent performance in all operating temperatures

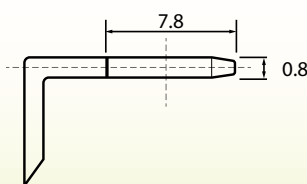
### Battery Dimensions:



### Terminal Dimensions:



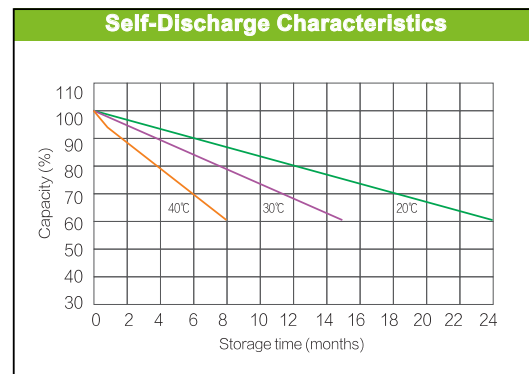
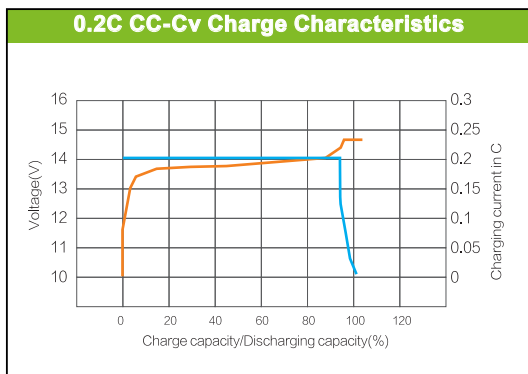
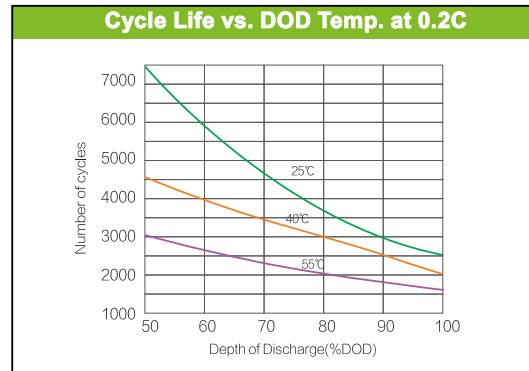
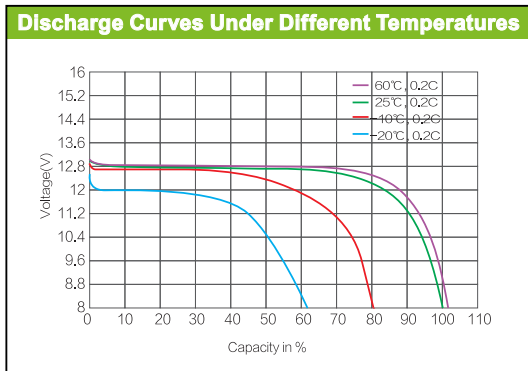
Top View



Side View

### Battery Specifications:

Nominal Characteristics	
Nominal Voltage /V	12.8V
Nominal Capacity /Ah (25°C , 0.2C)	≥ 12Ah
Mechanical Characteristics	
Weight	3.5 lbs
Dimensions L×W×H	5.94 x 3.86 x 3.7 in
Terminal	F2
Electrical Characteristics	
Voltage Window	9.2 – 14.6V
Charge Voltage	14.4V
Standby Voltage	13.8A
Max. Continue Discharge Current	10A
Max. Permanent Discharge Current	35A 10Sec.
Max. Continue Charge Current	6A
Operation Conditions	
Cycle Life (+20°C 0.2C 100%DOD)	>2500 Cycles
Operating Temperature	Discharge: - 4 – 140°F Charge: 32 – 140°F
Storage Temperature	32 – 86°F
Storage Duration	12 Months at 77°F
Safety Standard	UI1642 at cell level



## BMS - Battery Management System:

Protection		Protection Condition		Recovery
Current	Charging	< 25A	Temperature Protection	a. Discharge > 2A or b. 45 ± 10S or c. < 140°F and > 32°F or d. Charge Current < 10A
		25 ~ 35A	Delay 15 ± 2S	
		≥ 35A	Delay 3 ± 1S	
	Discharging	< 30A	Temperature Protection	
		30 ~ 40A	Delay 15 ± 2S	
		40 ~ 86A	Delay 3 ± 1S	
		86 ~ 200A	Delay 100 ± 50mS	
	≥ 200A	Delay 2 ~ 3mS		
Voltage	Charging	Battery	≥ 14.8V, Delay 1 ~ 2S	a. ≤ 14.0V or b. Discharge > 2A a. ≤ 3.5V or b. Discharge > 2A
		Single Cell	≥ 3.8V, Delay 1 ~ 2S	
	Discharging	Battery	≤ 9.2V, Delay 1 ~ 2S	
		Single Cell	≤ 2.2V, Delay 1 ~ 2S	
Temperature	Battery	# of Sesnsor(s)	Charging: ≥ 149°F or < 23°F	< 140°F > 32°F
		1	Discharging: ≥ 149°F or < - 13°F	< 140°F and > 5°F
	BMS	# of Sesnsor(s)	≥ 176°F	≤ 149°F
		1		