



## Lithium Iron Phosphate Battery Technical Data sheet

**12 Volt 100 Amp Hour  
175A Continuous Output (320A Peak)**

Item	Specification	Performance Criteria	Standard Conditions
1	Cells	3.2V 100ah - Prismatic LiFePO4 Cell case material	4 cells connected in series High grade lightweight nickel plated steel
2	Standard Capacity	C5 discharge rating to 10.5V - usable amp hours Total Energy Storage (Watt Hours)	100Ah (C5) 1280Wh
3	Voltage	Nominal Battery Voltage	12.8V
		Battery Recommended Bulk Charge Voltage range	14.2 - 14.6V
		Battery Recommended Float Voltage (DC)	13.6V
		Charge Profile (Constant Current/Constant Voltage - CC/CV)	LiFePO4 charge profile
		Single cell voltage balancing target voltage	3.65±0.025V
		Battery BMS Low voltage Protection	10.0±0.025V
		LV Protection BMS Recovery mode (Wake up)	Apply 10V & 1A or more to terminals from suitable LiFePO4 charger, switch mode power supply or connection of external parallel connected battery
4	Current	Over voltage BMS Protection	15.0V (auto recover at 14.6V)
		Single Current Equalization - cell balancing (mA)	35 ± 5mA
		Consumption Current (self-consumption)	≤25uA
		Recommended Charge Current for longest cycle life	30A (0.3C)
		Maximum Continuous Charging Current	100A (1C)
		Maximum Continuous Discharging Current	175A (1.75C)
		Maximum Peak Discharging Current (10 secs)	320A (3.2C)
5	Overcharge protection (single cell)	Over Charge Detection Voltage	3.75±0.025V
		Over Charge Detection Delay time (seconds)	1.0 - 1.6
		Over Charge Recovery Voltage	3.6±0.05V
6	Over discharge protection (single cell)	Over Discharge Detection Voltage	2.10V±0.0625V
		Time Delay for Over Discharge Detection	150±0.5mS
		Over Discharge Recovery Voltage	3.00±0.075V
7	OCP(over-current protection)	Over Current Detection Voltage	100mV±25mV
		Over Current Detection	320±100A
		Over Current Detection Delay Time	1.8±0.5S
		Recovery Mode	Turn off the load and battery restores automatically
8	Short-circuit protection	Test Status	External short circuit
		Detection Delay Time	200-400uS
		Recovery Mode	Turn off the load and battery restores automatically
9	Internal resistance	Protection Circuit (MOSFET)	≤20mΩ
10	Temperature °C	Operating Temperature Range	-40 ~ +85 °C
		Storage Temperature Range	-40 ~ +125 °C
		80% Depth of Discharge	2500+
11	Cycle Life (0.2C <sub>20</sub> A)	50% Depth of Discharge	4200+
		30% Depth of Discharge	5000+
		Case without bolt - L x W x H (mm)	328 x 171 x 215
12	Dimensions	Case + Terminal bolt (M8) - L x W x H (mm)	328 x 171 x 220
		Weight (kg)	10.9kg
13	Weight	Waterproof & Dustproof	IP65
14	IP rating	ISO 9001:2015 Certified ROHS Certified CE Certified Audited by SGS, Asia Inspections UN 38.3 - Transportation safety certified IMDG 2014 special provision - non dangerous goods	
16	Dimensions		