

Lithium Iron Phosphate (LiFePO4) Battery

Ontario-ONT12V-SYL-100AH

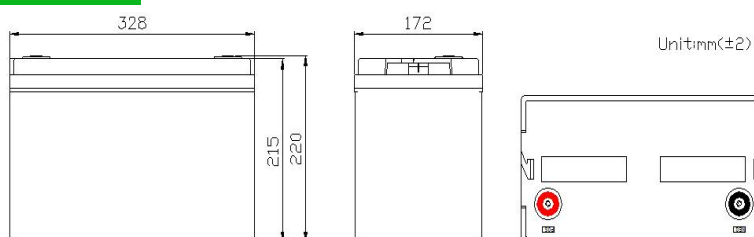
Features

- ◆ Using the technology of lithium iron phosphate cell, superior safety, thousands of cycles, 100%DOD, under normal conditions
- ◆ Built-in automatic protection for over-charge, over discharge, over current and over temperature
- ◆ Maintenance free
- ◆ Internal cell balancing
- ◆ Lighter weight: About 40% ~50% of the weight of a comparable lead acid battery
- ◆ Replacement for lead-acid battery
- ◆ Wider temperature range:-20℃~60℃
- ◆ Support up to 4pcs batteries in series, 10pcs batteries in parallel



Application

- ◆ UPS
- ◆ Solar & Wind power system
- ◆ Golf Cart
- ◆ Electric vehicle , E-bike, E-rickshaw etc.
- ◆ Lighting



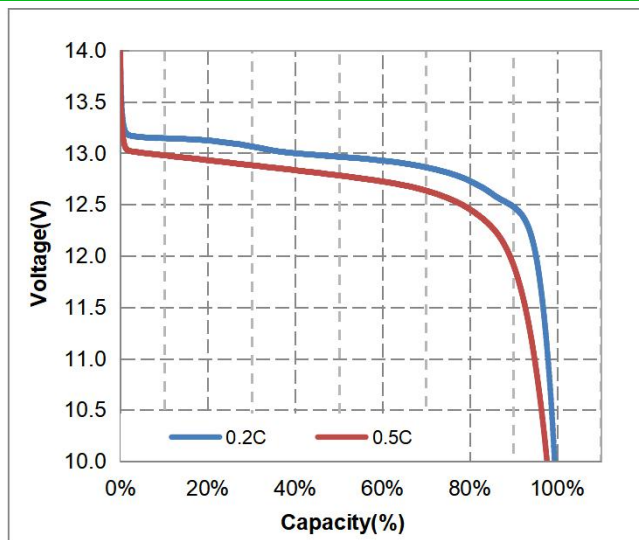
General Specifications

Electrical Characteristics	Nominal Voltage	12.8V
	Nominal Capacity	≥100Ah@0.2C
	Energy	≥1280Wh
	Internal Resistance	≤45mΩ
	Cycle Life	2000 Cycles @ 20A Charging / Discharging ,Until 70% Capacity
	Months Self Discharge	≤3.5% per month at 25℃
Standard Charging	Charge Voltage	14.0~14.4V
	Charge Mode (CC/CV)	At 0℃~45℃ temperature, charged to 14.4V at a constant current of 20A, and then,changed continuously with constant voltage of 14.4V until the current was not more than 2A
	Charger Current	20A
	Max.Charge Current	50A
Standard Discharge	Discharge Current	20A
	Max. Discharge Current	100A, BMS with Bluetooth function.
	Max.Pulse Discharge Current	200A(<3S)
	Discharge Cut-off Voltage	10.0V
Operating Condition	Charge Temperature	0℃ to 45℃(32°F to 113°F) @60±25% Relative Humidity
	Discharge Temperature	-20℃ to 60℃(-4°F to 140°F) @60±25% Relative Humidity
	Storage Temperature	0℃ to 45℃(32°F to 113°F) @60±25% Relative Humidity
	Storage Duration	12 months at 25℃
	Water Dust Resistance	IP55
Structure	Cell & Format	1FR32700 N60 & 4S17P, total 68pcs cells in one battery pack
	Plastic Case	ABS
	Dimension(L*W*H)	328*172*220mm
	Weight	Approx.13.5Kg
	Terminal	M8

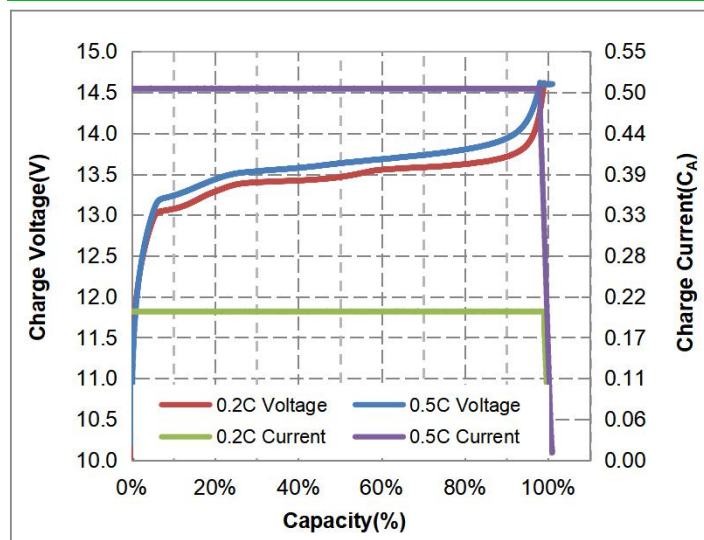
Lithium Iron Phosphate (LiFePO₄) Battery

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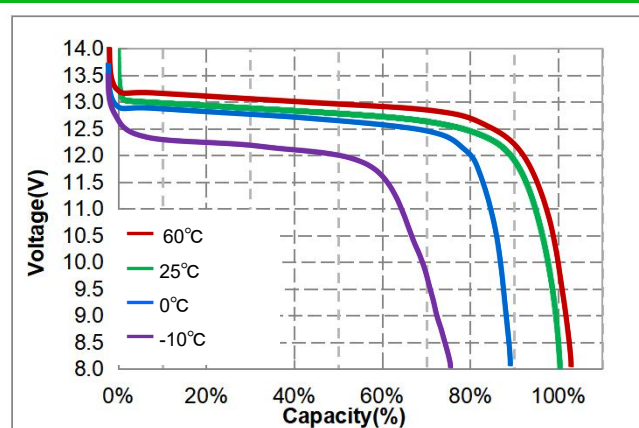
Different Rate Discharge Curve @ 25°C



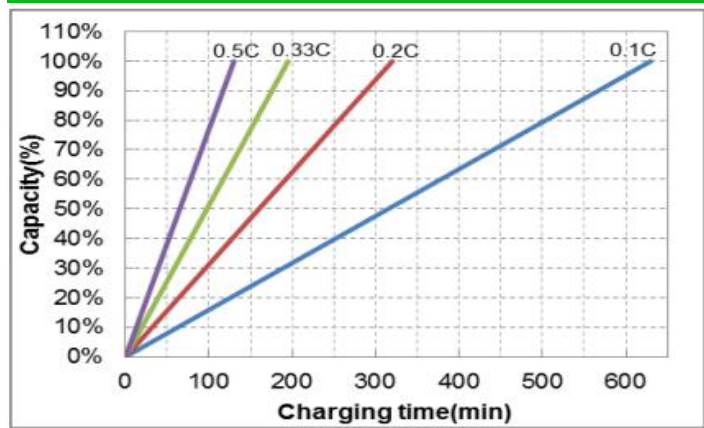
Charge Characteristics of capacity-voltage@0.2C&0.5C, 25°C



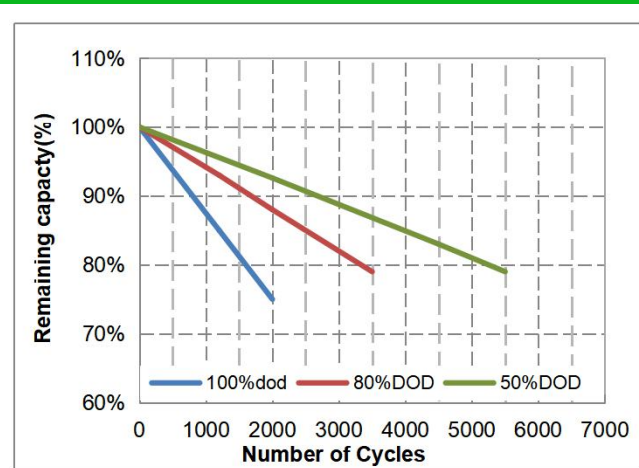
Different Temperature Discharge Curve @ 0.5C ,25°C



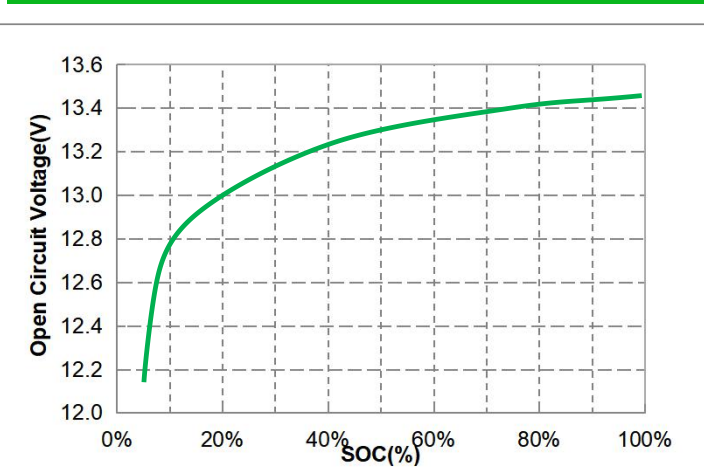
Charge Characteristics of time-voltage@ 25°C



Different DOD Discharge Cycle Life Curve @0.2C,25°C



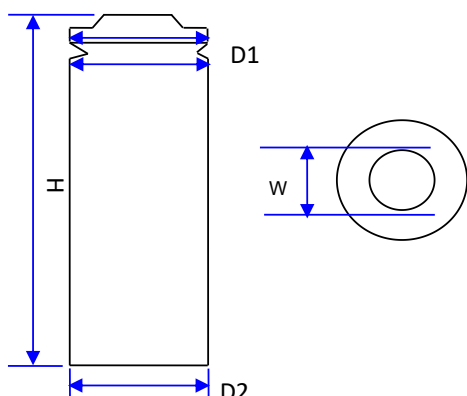
Open circuit voltage VS SOC%@25°C



Lithium Iron Phosphate (LiFePO₄) Battery

CELL DATA SHEET

CELL MODEL: IFR32700 N60



Item	Size(mm)	Tolerance(mm)
Width	15.92	±0.1
Height	70.5	0.4
		-0.2
Diameter 1	32.5	±0.3
Diameter 2	32.4	±0.1

Item	Parameters	Remarks
Nominal Voltage	3.2V	0℃ ~ 45℃
Nominal Capacity	6000mAh	@3A standard discharge
Battery Energy	19.2Wh	0℃ ~ 45℃
Internal Resistance	≤10mΩ	@AC 1 KHz
Standard Charge Current	3A	0℃ ~ 60℃
Rapid Charge Current	6A	0℃ ~ 60℃
Charge Limited Voltage	3.65V	0℃ ~ 60℃
Standard Discharge Current	3A	0℃ ~ 45℃
Rapid Discharge Current	6A	0℃ ~ 45℃
Max. Discharge Current	18A	Limited Voltage 2.0V
Max.Pulse Discharge Current	30A	<10ms
Discharge Cut-off Voltage	2.0V	@3A standard discharge
Approx. Weight	145g	±5g
Cycle Life	≥2000 times@3A working current	≥ 80% of Nominal Capacity
Storage Temperature	0℃ ~ 35℃	Within one year