



3.75 in.  
95.25 mm

5.9 in.  
149.86 mm

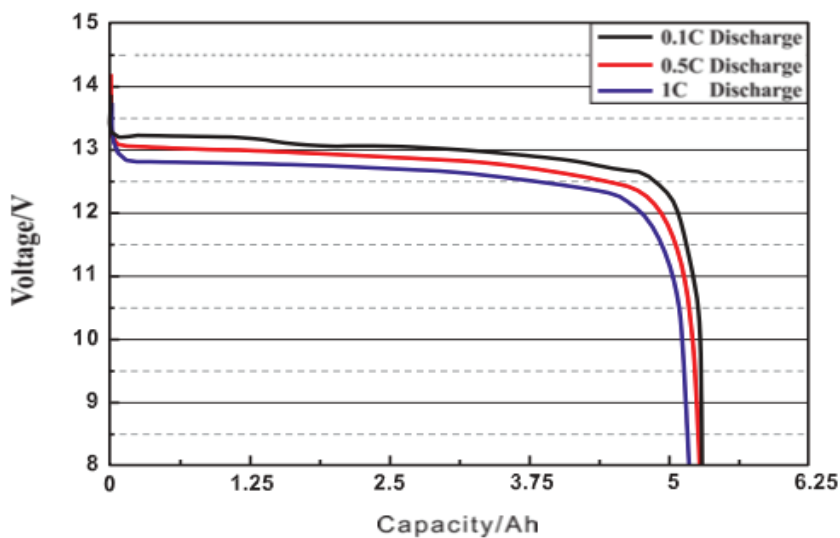
2 in.  
50.8 mm

## CYCLE LIFE

CAPACITY AT DIFFERENT CYCLES AT 100% DOD

100 cycles	99.7
500 cycles	96.3
1000 cycles	90.8
1500 cycles	85.4
2000 cycles	80.1

## 12V 5AH LITHIUM ION BATTERY



Amp Hours: 5AH

Voltage: 12.8V Nominal

Peak Amps: 50

Life Expectancy: 3000-5000 Cycles

Weight (Battery Only): 1.8lbs. / 0.82kg

Efficiency: 99%

Minutes at 5A: 60

Max Continuous Charge: 0.5C = 2.5A

Max Continuous Discharge: 1C = 5A

Operating Temperature: -4 + 158 F / -20 + 70 C

Auto Low Voltage Cutoff: 8V

Auto Over Voltage Cutoff: 16V

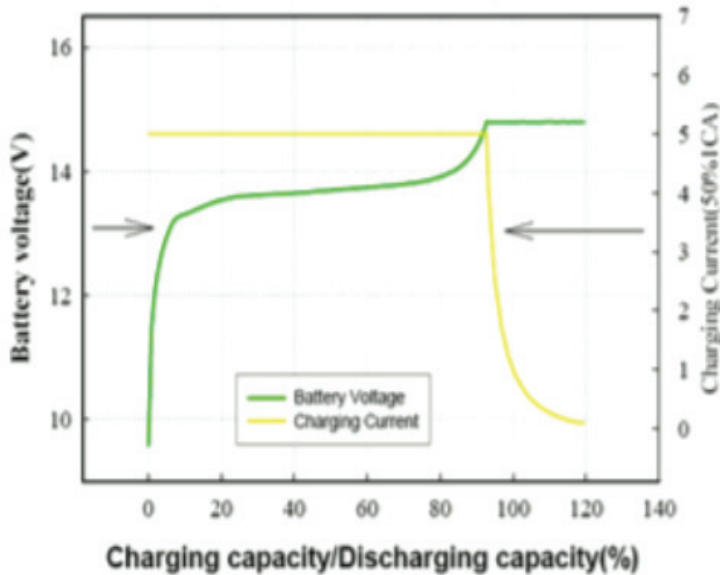
Charge Voltage: CC/CV 14.6V / Float 13.8V

Max Series Connection: 4

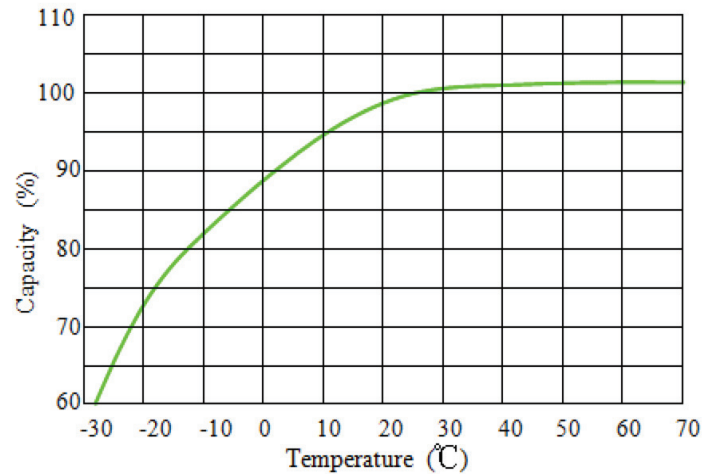
Max Parallel Connection: 4

Cell Type: Cylindrical LiFePO4

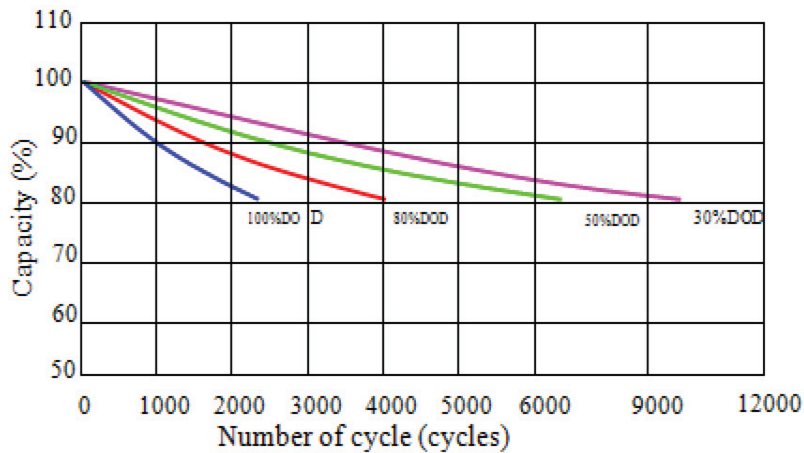
constant voltage charging characteristic  
(0.5CA, 25Celsius scale)



Temperature effects on capacity at 0.2C



Cycle life with DOD at 25°C, 0.2C



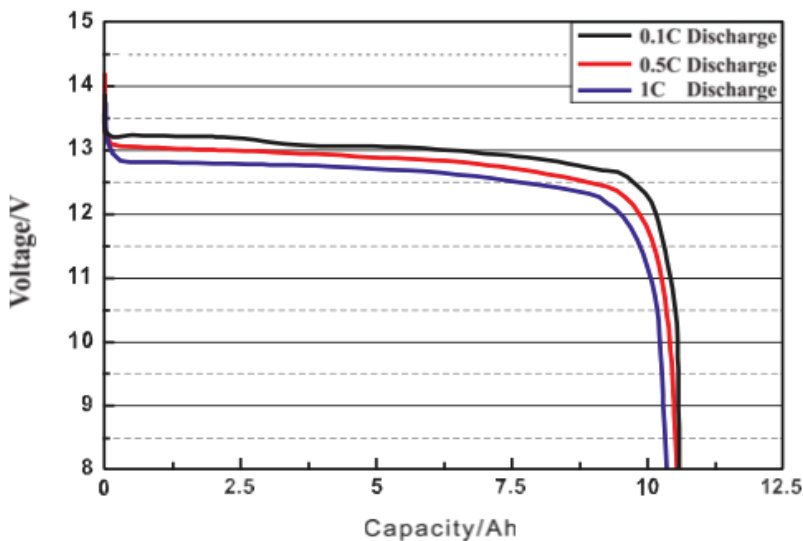


## CYCLE LIFE

### CAPACITY AT DIFFERENT CYCLES AT 100% DOD

100 cycles	99.7
500 cycles	96.3
1000 cycles	90.8
1500 cycles	85.4
2000 cycles	80.1

## 12V 10AH LITHIUM ION BATTERY



Amp Hours: 10AH

Voltage: 12.8V Nominal

Peak Amps: 200

Life Expectancy: 3000-5000 Cycles

Weight (Battery Only): 3.95lbs. / 1.79kg

Efficiency: 99%

Minutes at 10A: 60

Max Continuous Charge: 0.5C = 5A

Max Continuous Discharge: 1C = 10A

Operating Temperature: -4 + 158 F / -20 + 70 C

Auto Low Voltage Cutoff: 8V - 10V

Auto Over Voltage Cutoff: 15.8V

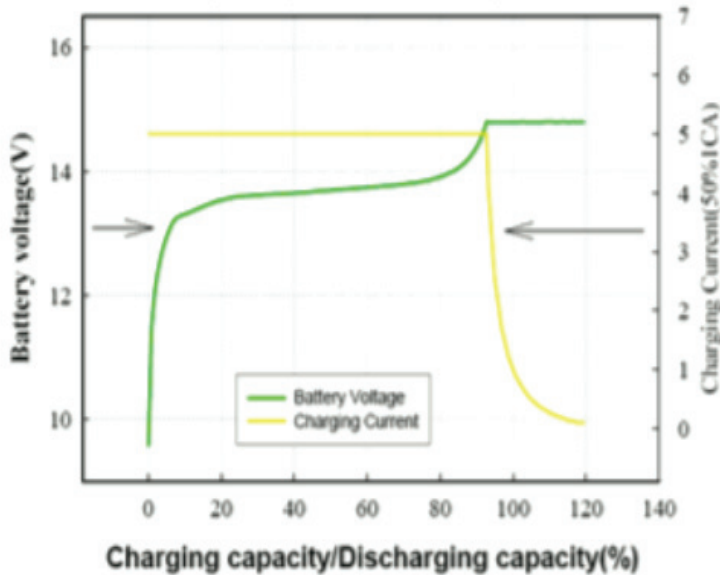
Charge Voltage: CC/CV 14.6V / Float 13.8V

Max Series Connection: 4

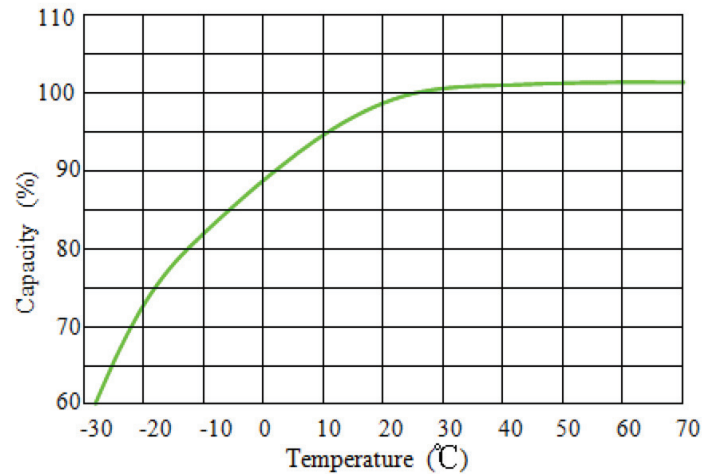
Max Parallel Connection: 4

Cell Type: Cylindrical LiFePO<sub>4</sub>

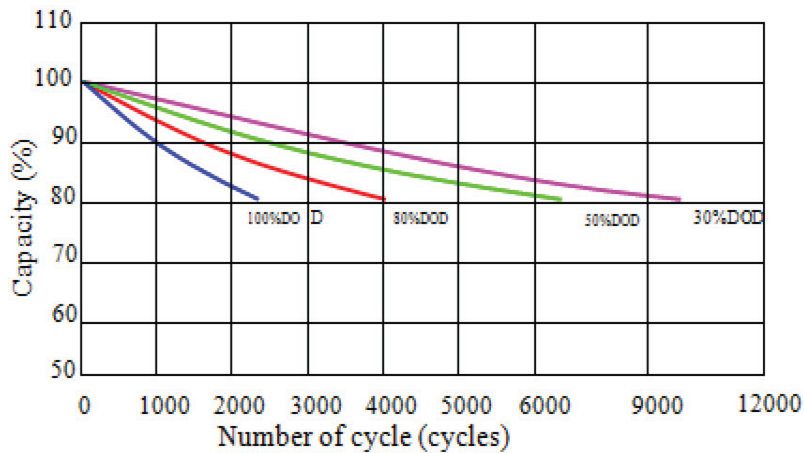
constant voltage charging characteristic  
(0.5CA, 25Celsius scale)



Temperature effects on capacity at 0.2C



Cycle life with DOD at 25°C, 0.2C





2.99 in.  
75 mm

7.13 in.  
180 mm

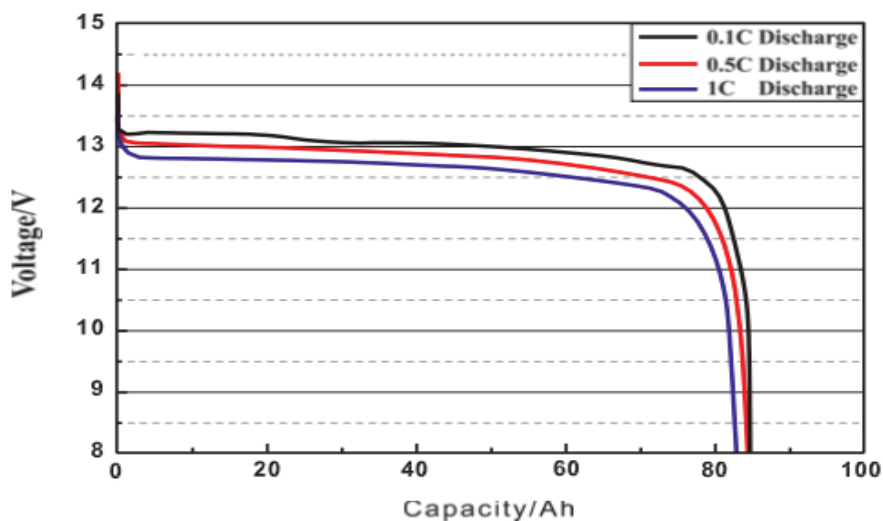
6.54 in.  
165 mm

## CYCLE LIFE

CAPACITY AT DIFFERENT CYCLES AT 100% DOD

100 cycles	99.7
500 cycles	96.3
1000 cycles	90.8
1500 cycles	85.4
2000 cycles	80.1

## 12V 20AH LITHIUM ION BATTERY



Amp Hours: 20AH

Voltage: 12.8V Nominal

Peak Amps: 200

Life Expectancy: 3000-5000 Cycles

Weight (Battery Only): 6lbs. / 2.72kg

Efficiency: 99%

Minutes at 20A: 60

Memory: None

Max Continuous Charge: 1C = 20A

Max Continuous Discharge: 0.5C = 10A

Operating Temperature: -4 + 158 F / -20 + 70 C

Auto Low Voltage Cutoff: 8V - 10V

Auto Over Voltage Cutoff: 15.8V

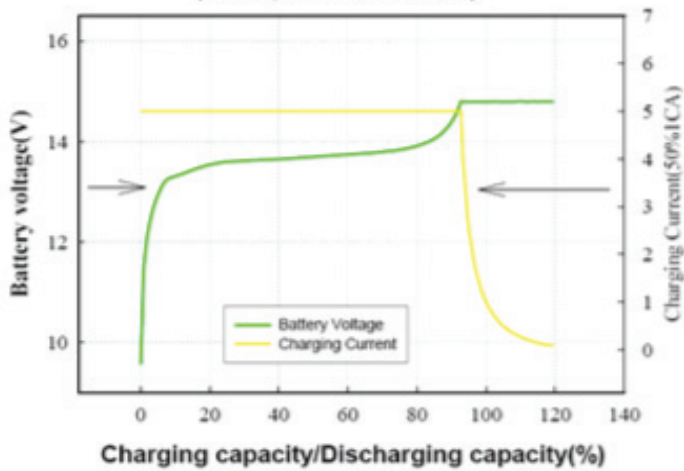
Charge Voltage: CC/CV 14.6V / Float 13.8V

Max Series Connection: 4

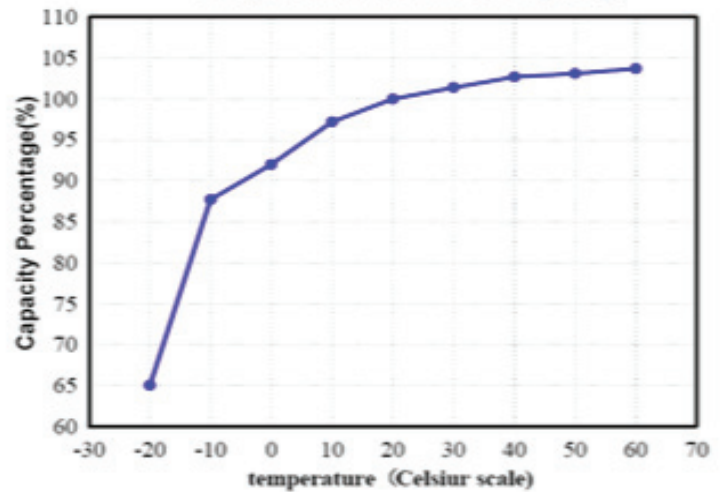
Max Parallel Connection: 4

Cell Type: Cylindrical LiFePO4

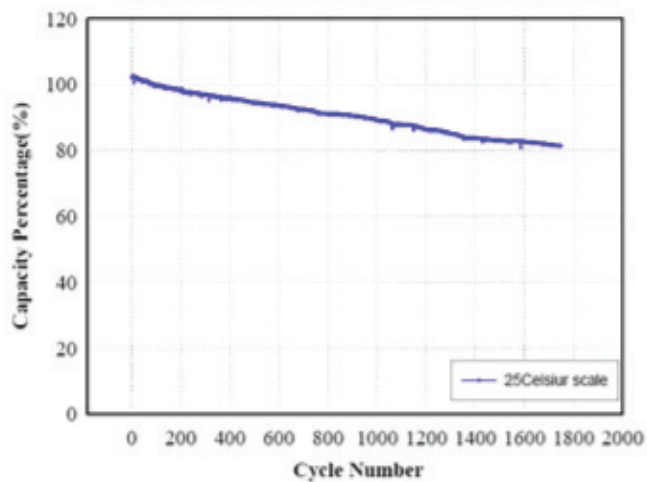
constant voltage charging characteristic  
(0.5CA, 25Celsius scale)



Temperature effects on capacity



Charging capacity/Discharging capacity (%)  
Cycle service life(100%Depth of discharge)







6.5 in.  
165.1 mm

6.8 in.  
172.72 mm

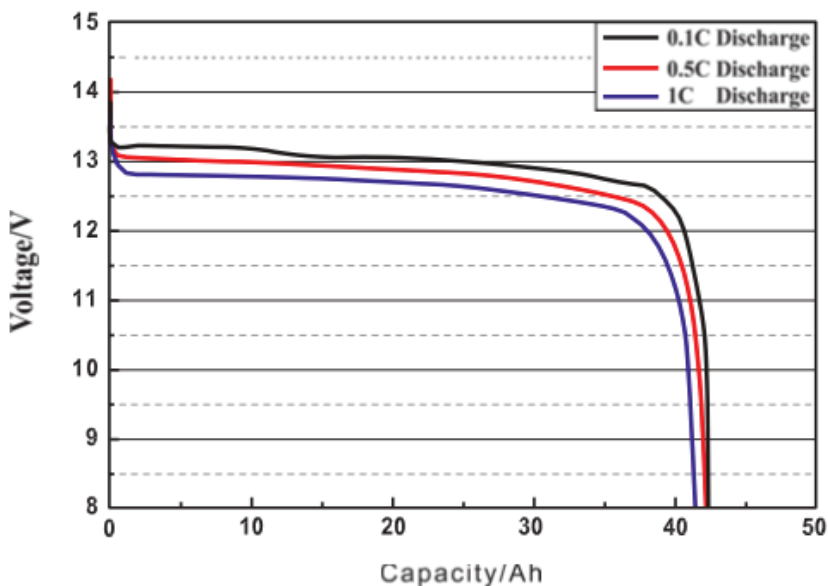
7.7 in.  
195.58 mm

## CYCLE LIFE

CAPACITY AT DIFFERENT CYCLES AT 100% DOD

100 cycles	99.7
500 cycles	96.3
1000 cycles	90.8
1500 cycles	85.4
2000 cycles	80.1

## 12V 40AH LITHIUM ION BATTERY



Amp Hours: 40AH

Voltage: 12.8V Nominal

Peak Amps: 400

Life Expectancy: 3000-5000 Cycles

Weight (Battery Only): 15lbs. / 6.8kg

Efficiency: 99%

Minutes at 20A: 120

Max Continuous Charge: 1C = 40A

Max Continuous Discharge: 1C = 40A

Operating Temperature: -4 + 158 F / -20 + 70 C

Auto Low Voltage Cutoff: 8V - 10V

Auto Over Voltage Cutoff: 15.8V

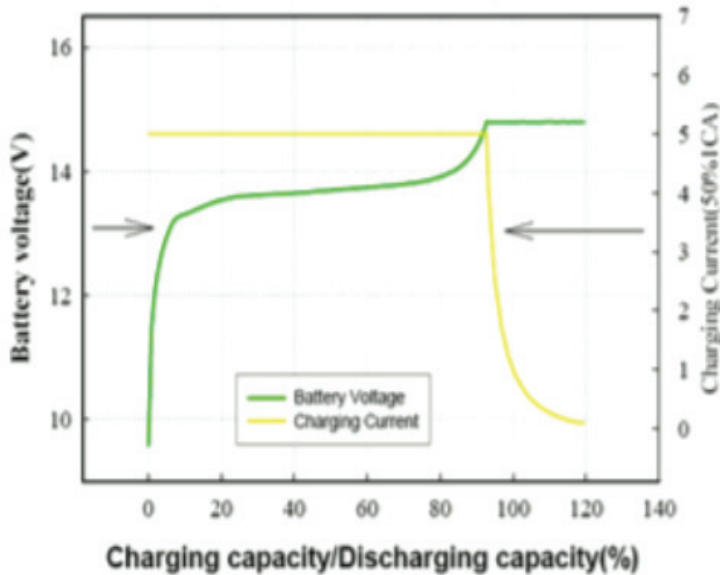
Charge Voltage: CC/CV 14.6V / Float 13.8V

Max Series Connection: 4

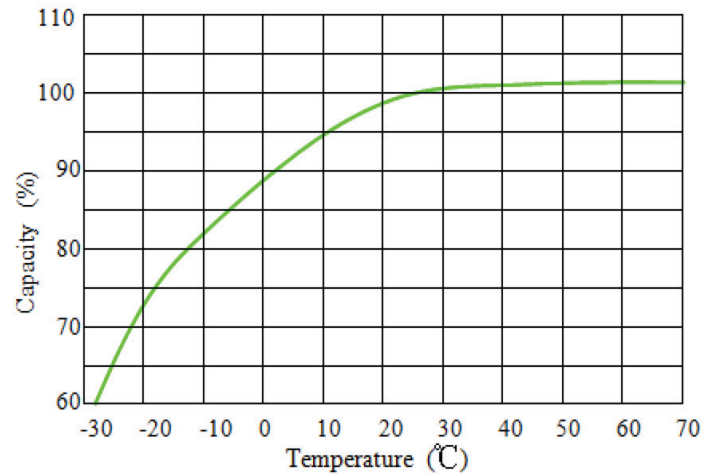
Max Parallel Connection: 4

Cell Type: Cylindrical LiFePO4

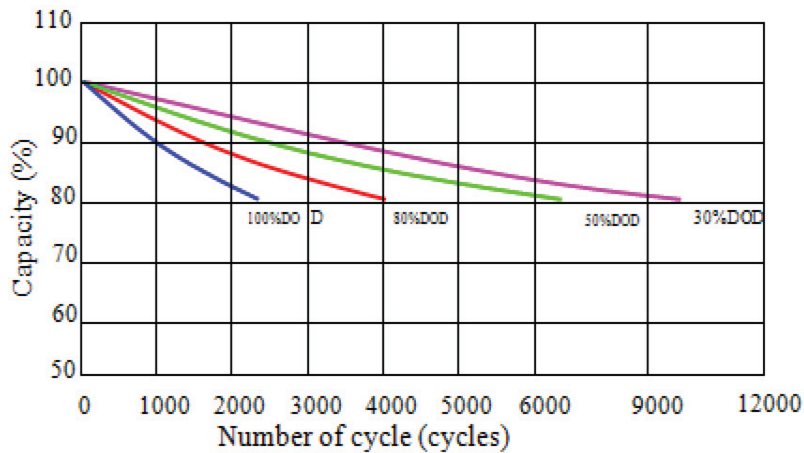
constant voltage charging characteristic  
(0.5CA, 25Celsius scale)



Temperature effects on capacity at 0.2C



Cycle life with DOD at 25°C, 0.2C







6.54 in.  
166 mm

6.73 in.  
171 mm

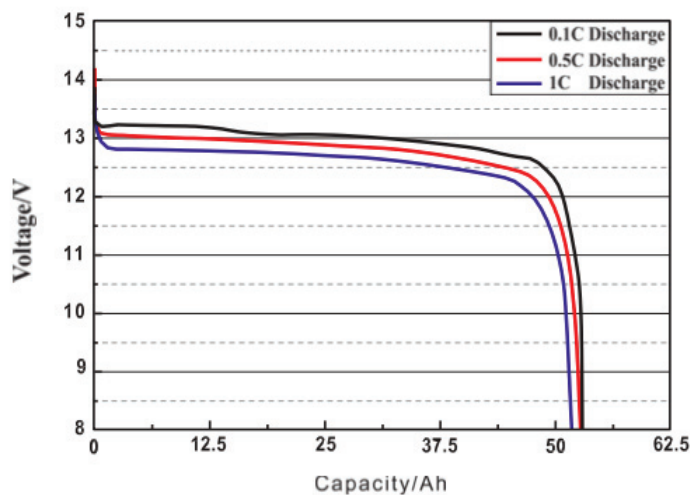
7.83 in.  
199 mm

## CYCLE LIFE

CAPACITY AT DIFFERENT CYCLES AT 100% DOD

110 cycles	99.7
500 cycles	96.3
1000 cycles	90.8
1500 cycles	85.4
2000 cycles	80.1

## 12V 50AH LITHIUM ION BATTERY



Amp Hours: 50AH

Voltage: 12.8V Nominal

Peak Amps: 500

Life Expectancy: 3000-5000 Cycles

Weight: 15lbs. / 6.80kg

Efficiency: 99%

Minutes at 50A: 60

Max Continuous Charge: 1C=50A

Max Continuous Discharge: 1C=50A

Operating Temperature: -4 + 158 F / -20 + 70 C

Auto Low Voltage Cutoff: 8V

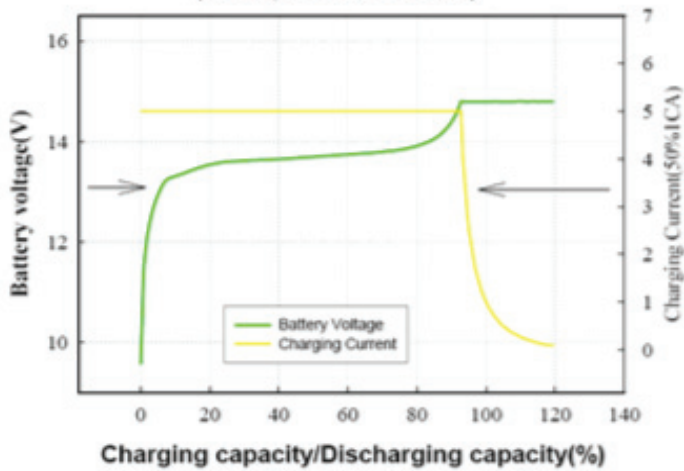
Auto Over Voltage Cutoff: 15.8V

Max Series Connection: 4

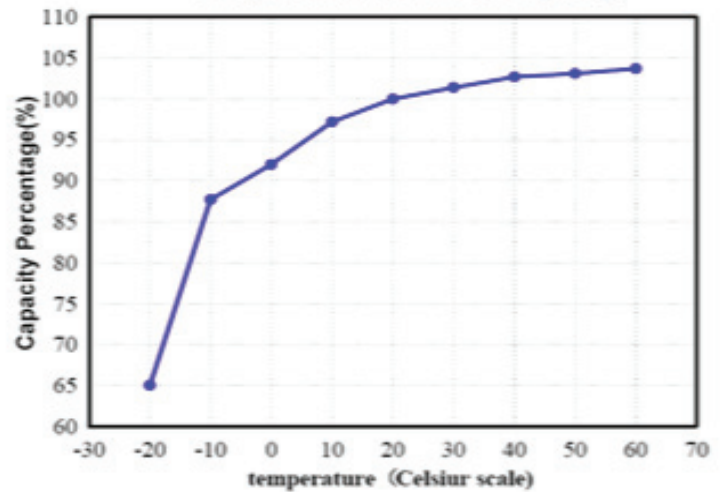
Max Parallel Connection: 4

Cell Type: Cylindrical LiFePO4

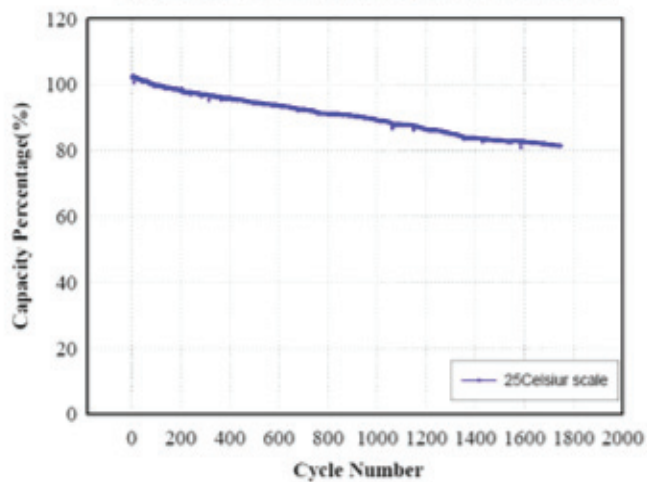
constant voltage charging characteristic  
(0.5CA, 25Celsius scale)



Temperature effects on capacity



Charging capacity/Discharging capacity (%)  
Cycle service life(100%Depth of discharge)



## RB72V70AH Series Model

Relion Battery provides safe lithium iron phosphate battery solutions for UPS application.

### OVERVIEW

The RB72V70AH back-up lithium iron phosphate battery system is developed for backup(on line) of UPS equipments. Under normal condition, grid AC power supply to the UPS loads and charge battery pack; When the AC power fail, the battery serves for UPS load, to ensure the UPS operates normally; when the AC power recovers again, the UPS recovers to AC mode and the battery will be charged back.

### FEATURES

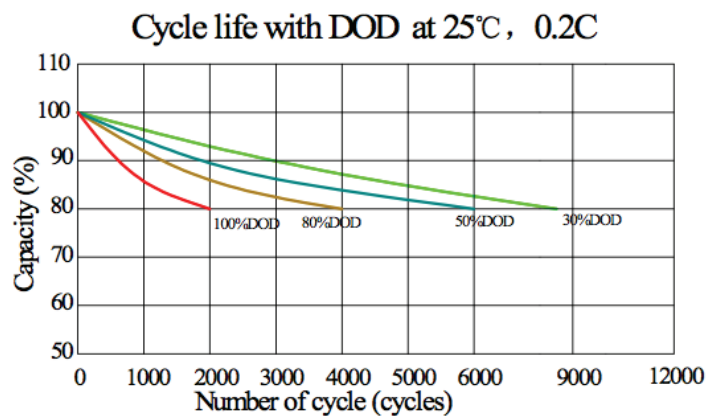
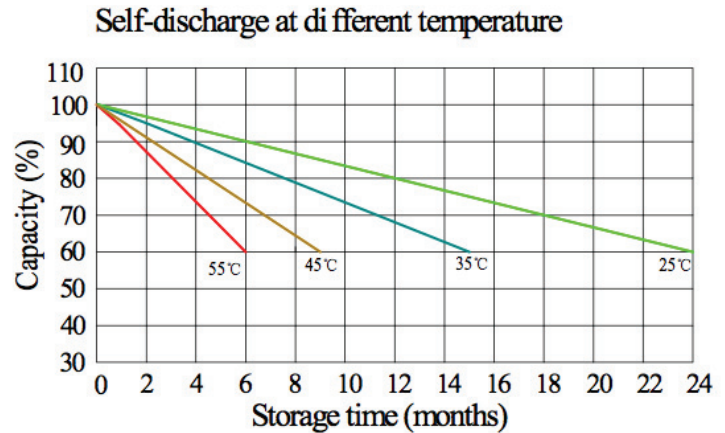
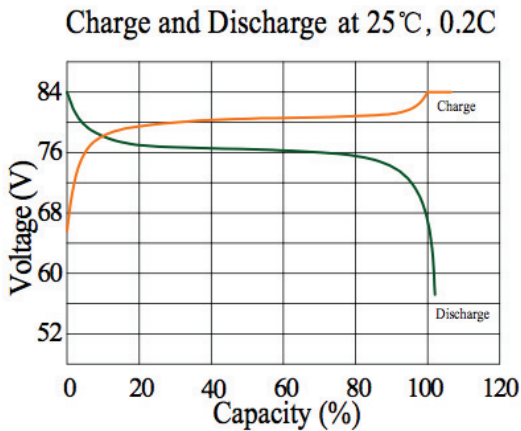
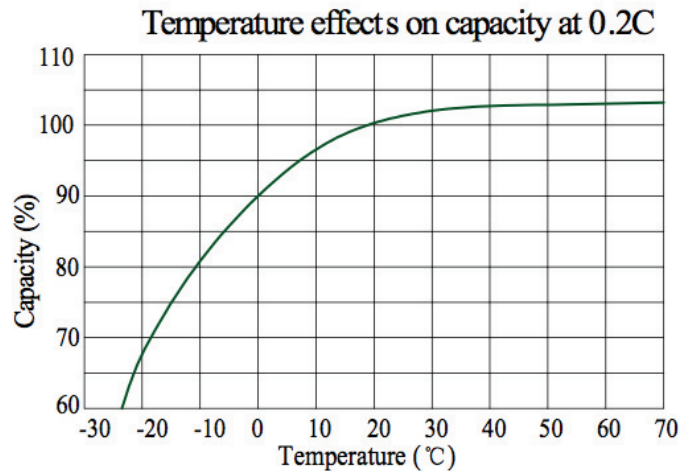
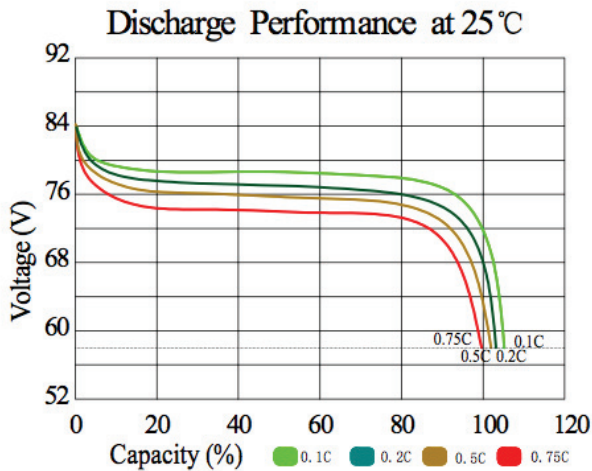
- Long life with thousands of cycles
- RS232,RS485 communication output for monitoring
- Built-in automatic protection for over-charge, over-discharge and over-temperature conditions
- State of charge and operating status indication
- Internal cell balancing
- Customized DO for 2 dry contacts definition
- External upgrading program interface
- Maintenance free

Nominal Voltage		76.8V
Nominal Capacity (25°C , 0.2C)		70Ah
Weight (Approximate)		73±0.3Kg
Energy	Normal energy (25°C , 0.2C)	5376 Wh
	Volumetric energy density	124.4Wh/L
	Gravimetric energy density	73.6Wh/kg
Dimensions (mm)	Width* Depth *Height	360mm*500mm*240mm
Standard Discharge 25°C	Max.cont.current	50 A
	Max.30S pulse current	100 A
	Cut-off voltage	57.6 V
Standard charge	Charge Voltage	84V
	Charging current	Max.35A
	Recommended charging current and time	35A for 2.5 hours
Round trip efficiency(%)		>98%
Calendar life	25°C	>10 years
Cycle life( 25°C,0.2C)		80% DOD 4000 cycles
Operating temperature range		-30°C~60°C
Recommended Storage temperature range		-30°C~70°C

## RB72V70AH Series Model

Relion Battery provides safe lithium iron phosphate battery solutions for UPS application.

### PERFORMANCE CURVE





6.75 in.  
170.18 mm

12.75 in.  
323.8 mm

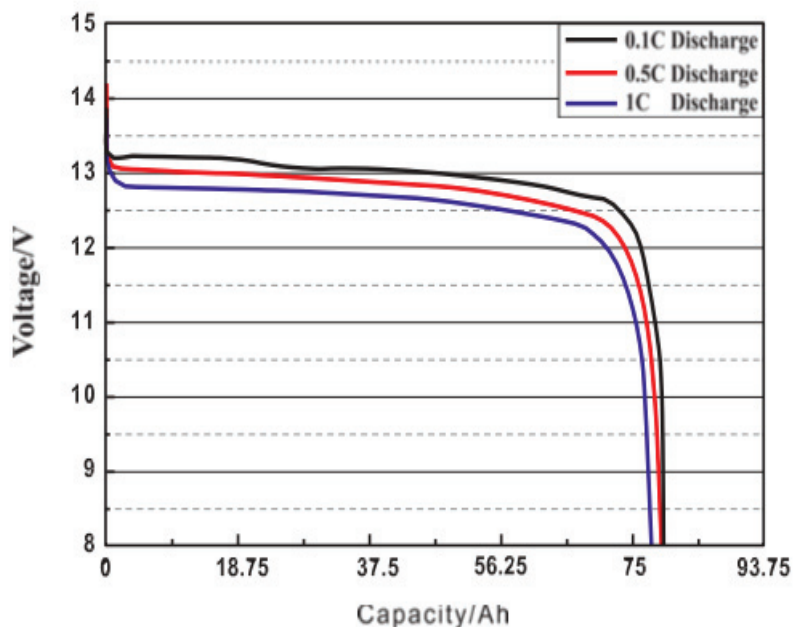
9.8 in.  
248.9 mm

## CYCLE LIFE

### CAPACITY AT DIFFERENT CYCLES AT 100% DOD

100 cycles	99.7
500 cycles	96.3
1000 cycles	90.8
1500 cycles	85.4
2000 cycles	80.1

## 12V 75AH LITHIUM ION BATTERY



Amp Hours: 75AH

Voltage: 12.8V Nominal

Peak Amps: 750

Life Expectancy: 3000-5000 Cycles

Weight (Battery Only): 26lbs. / 11.34kg

Efficiency: 99%

Minutes at 20A: 225

Max Continuous Charge: 1C = 75A

Max Continuous Discharge: 1C = 75A

Operating Temperature: -4 + 158 F / -20 + 70 C

Auto Low Voltage Cutoff: 8V - 10V

Auto Over Voltage Cutoff: 15.8V

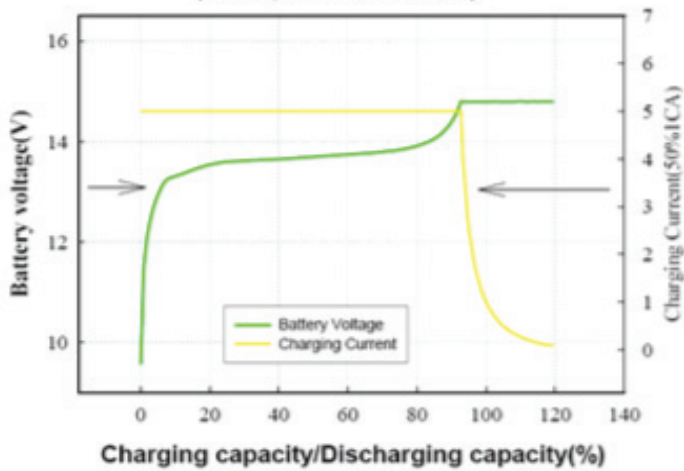
Charge Voltage: CC/CV 14.6V / Float 13.8V

Max Series Connection: 4

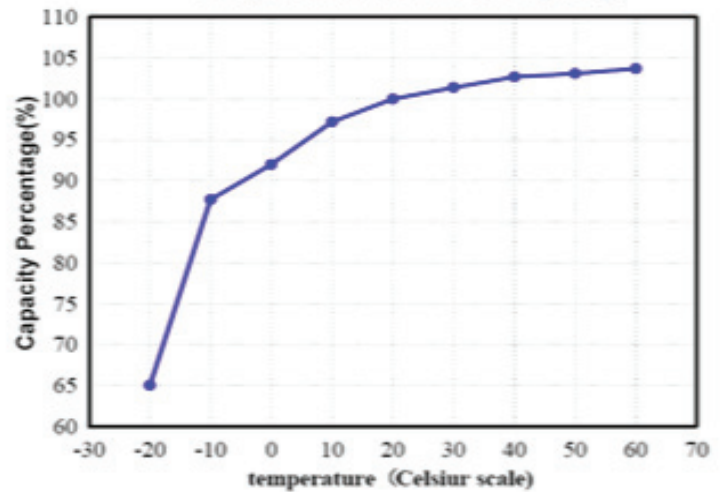
Max Parallel Connection: 4

Cell Type: Cylindrical LiFePO4

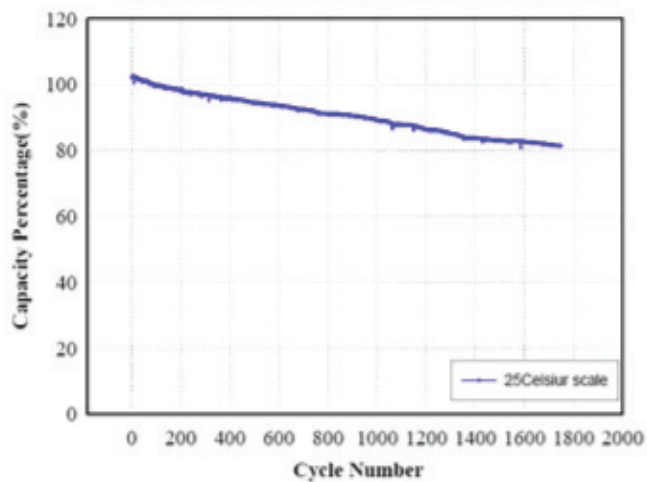
constant voltage charging characteristic  
(0.5CA, 25Celsius scale)



Temperature effects on capacity



Charging capacity/Discharging capacity (%)  
Cycle service life(100%Depth of discharge)







6.77 in.  
172 mm

12.13 in.  
308 mm

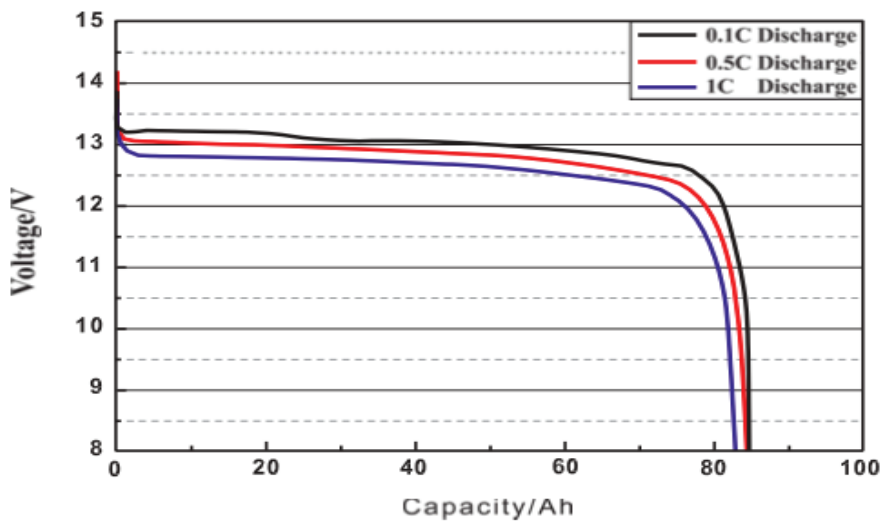
8.7 in.  
221 mm

## CYCLE LIFE

### CAPACITY AT DIFFERENT CYCLES (%)

100 cycles	99.7
500 cycles	96.3
1000 cycles	90.8
1500 cycles	85.4
2000 cycles	80.1

## 12V 80AH LITHIUM ION BATTERY



Amp Hours: 80AH

Voltage: 12.8V Nominal

Peak Amps: 800

Life Expectancy: 3000-5000 Cycles

LiFePo<sub>4</sub> - Safe Battery

Weight: 25lbs. / 11.34kg

Efficiency: 99%

Minutes at 20A: 240

Memory: None

Max Continuous Charge: 1C = 80A

Max Continuous Discharge: 100A

Operating Temperature: -4 + 158 F / -20 + 70 C

Auto Low Voltage Cutoff: 8V - 10V

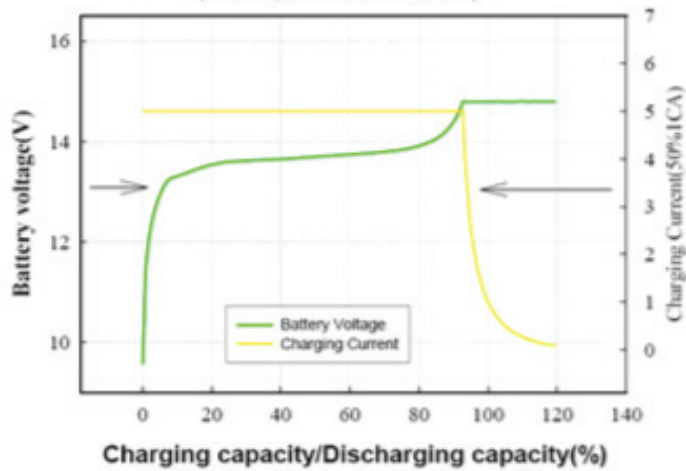
Auto Over Voltage Cutoff: 15.8V

Charge Voltage: CC/CV 14.6V / Float 13.8V

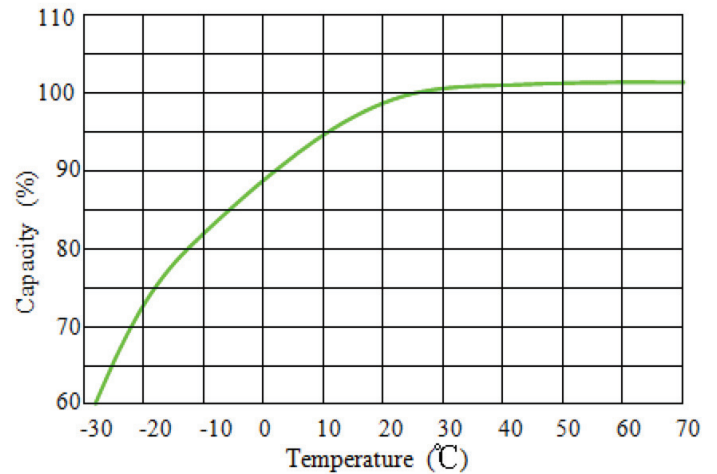
Capacity at different cycles at 100% DOD



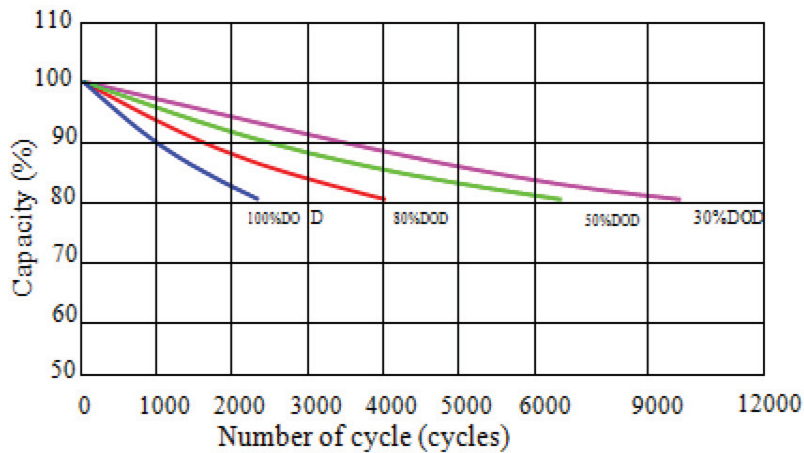
constant voltage charging characteristic  
(0.5CA, 25Celsius scale)



Temperature effects on capacity at 0.2C



Cycle life with DOD at 25°C, 0.2C





6.77 in.  
172 mm

8.5 in.  
216 mm

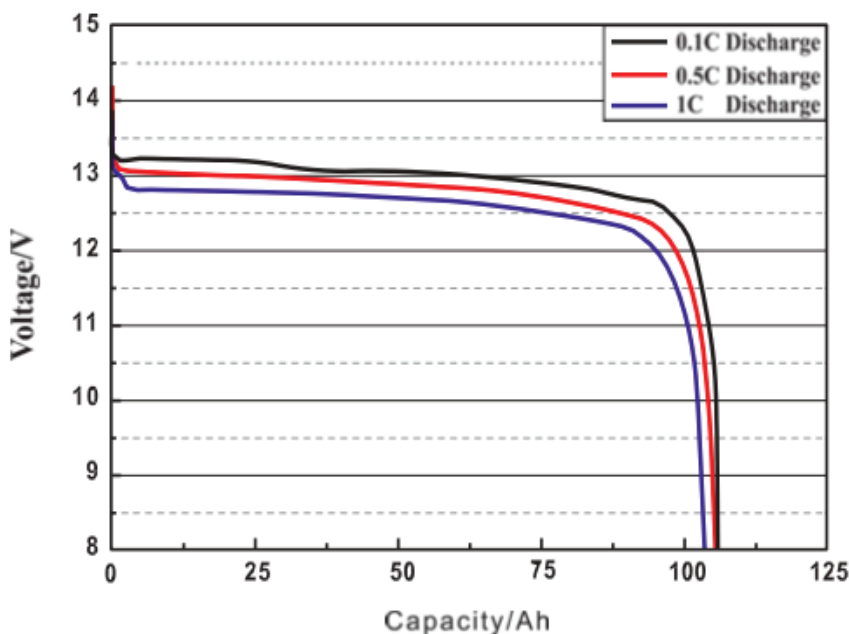
12.95 in.  
329 mm

## CYCLE LIFE

CAPACITY AT DIFFERENT CYCLES AT 100% DOD

100 cycles	99.7
500 cycles	96.3
1000 cycles	90.8
1500 cycles	85.4
2000 cycles	80.1

## 12V 100AH LITHIUM ION BATTERY



Amp Hours: 100AH

Voltage: 12.8V Nominal

Peak Amps: 1000

Life Expectancy: 3000-5000 Cycles

Weight (Battery Only): 32lbs. / 14.51kg

Efficiency: 99%

Minutes at 20A: 240

Max Continuous Charge: 1C = 100A

Max Continuous Discharge: 1C = 100A

Operating Temperature: -4 + 158 F / -20 + 70 C

Auto Low Voltage Cutoff: 8V - 10V

Auto Over Voltage Cutoff: 15.8V

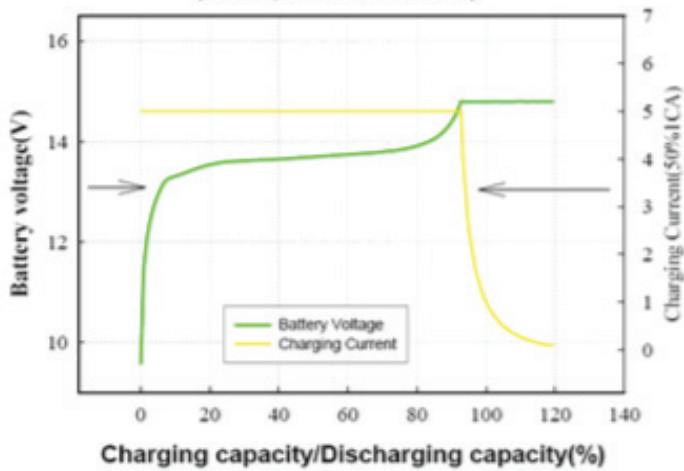
Charge Voltage: CC/CV 14.6V / Float 13.8V

Max Series Connection: 4

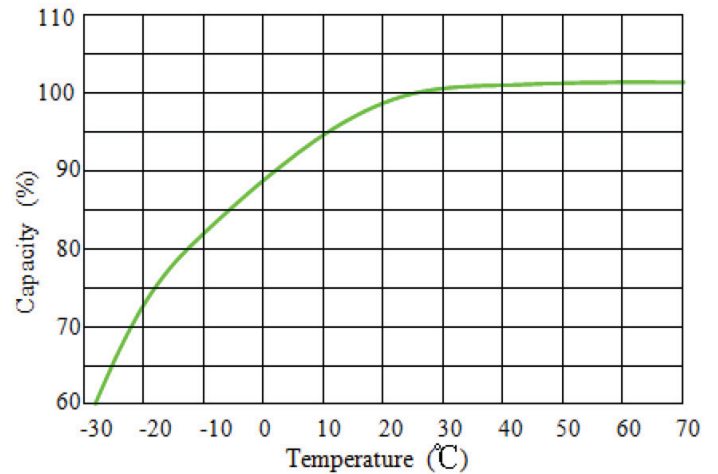
Max Parallel Connection: 4

Cell Type: Cylindrical LiFePO4

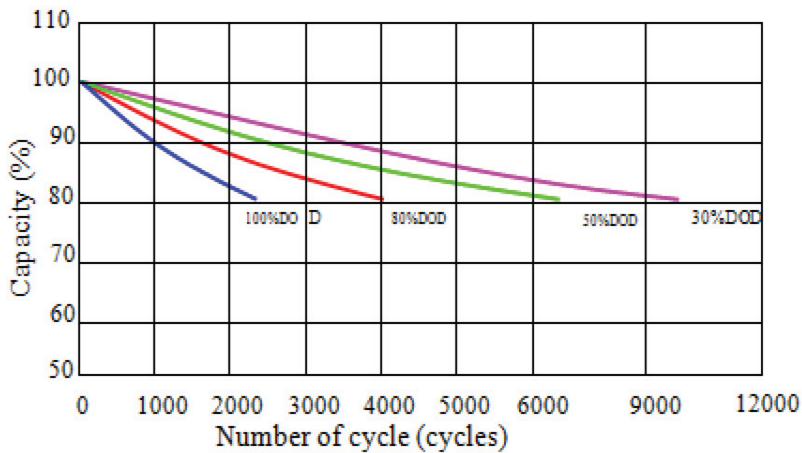
constant voltage charging characteristic  
(0.5CA, 25Celsius scale)



Temperature effects on capacity at 0.2C



Cycle life with DOD at 25°C, 0.2C





6.5 in.  
165.1 mm

12.52 in.  
318.0 mm

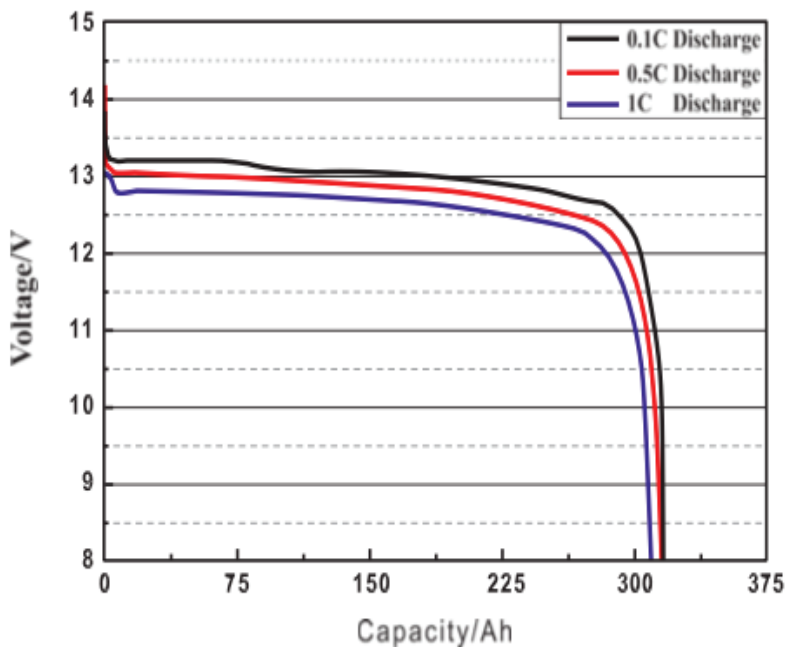
8.47 in.  
215.14 mm

## CYCLE LIFE

CAPACITY AT DIFFERENT CYCLES AT 100% DOD

100 cycles	99.7
500 cycles	96.3
1000 cycles	90.8
1500 cycles	85.4
2000 cycles	80.1

## 12V 100AH SC LITHIUM ION BATTERY



Amp Hours: 100AH

Voltage: 12.8V Nominal

Peak Amps: 1000

Life Expectancy: 3000-5000 Cycles

Weight: 28lbs. / 12.7kg

Efficiency: 99%

Minutes at 25A: 240

Max Continuous Charge: .6C = 60A

Max Continuous Discharge: 1C = 100A (20 Min)

Operating Temperature: -4 + 158 F / -20 + 70 C

Auto Low Voltage Cutoff: 8V - 10V

Auto Over Voltage Cutoff: 15.8V

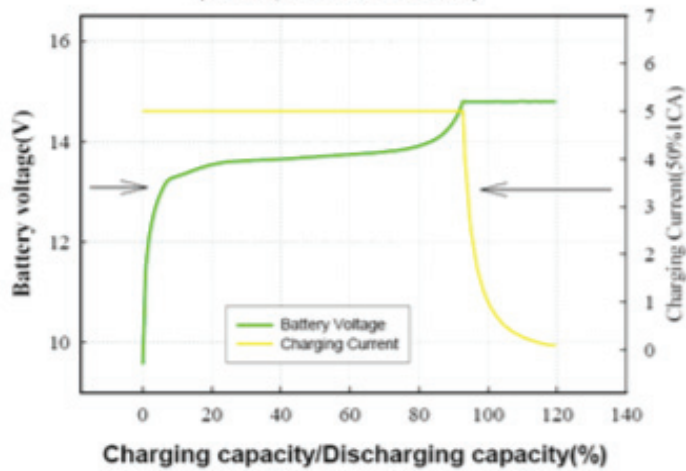
Charge Voltage: CC/CV 14.6V / Float 13.8V

Max Series Connection: 4

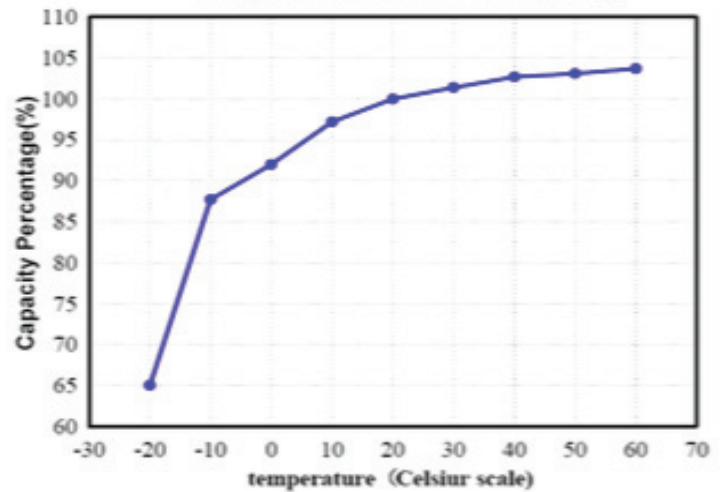
Max Parallel Connection: 10

Cell Type: Prismatic LiFePO4

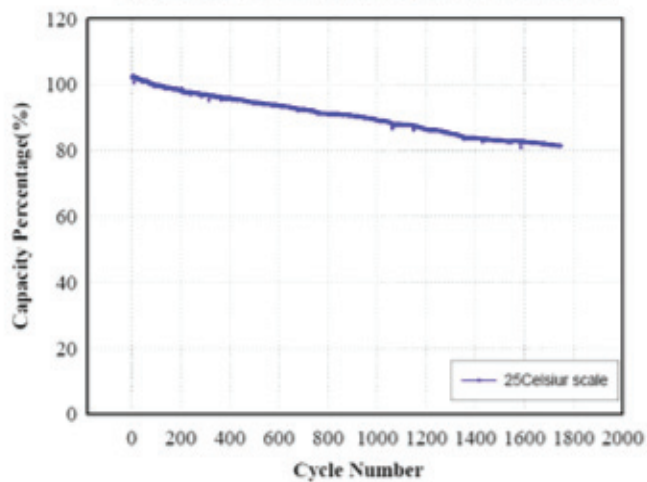
constant voltage charging characteristic  
(0.5CA, 25Celsius scale)



Temperature effects on capacity



Charging capacity/Discharging capacity (%)  
Cycle service life (100% Depth of discharge)





10.5 in.  
266.7 mm

19.3 in.  
490.22 mm

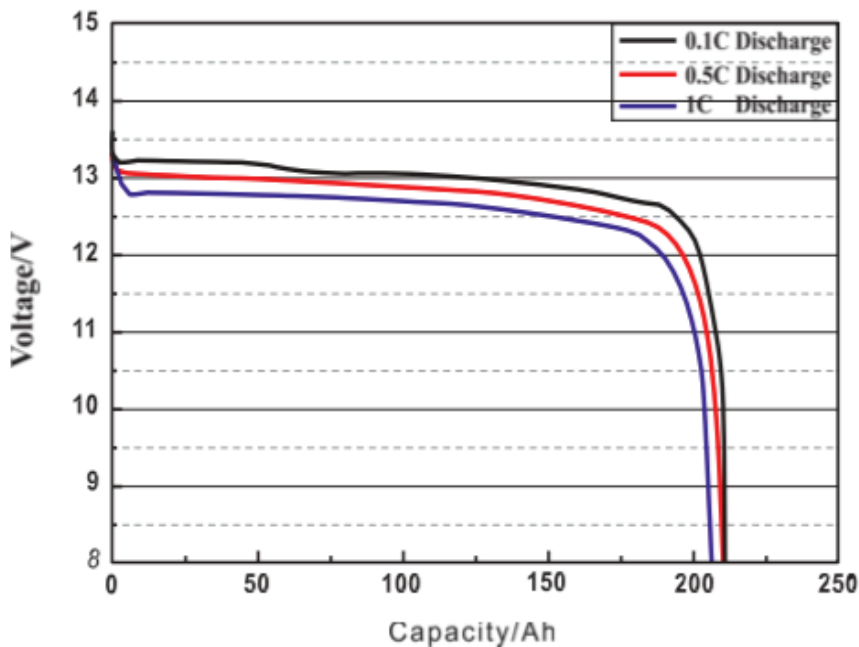
9.0 in.  
228.6 mm

## CYCLE LIFE

### CAPACITY AT DIFFERENT CYCLES AT 100% DOD

100 cycles	99.7
500 cycles	96.3
1000 cycles	90.8
1500 cycles	85.4
2000 cycles	80.1

## 12V 150AH LITHIUM ION BATTERY



Amp Hours: 150AH

Voltage: 12.8V Nominal

Peak Amps: 1500

Life Expectancy: 3000-5000 Cycles

Weight (Battery Only): 65lbs. / 29.48kg

Efficiency: 99%

Minutes at 20A: 450

Max Continuous Charge: 1C = 100A

Max Continuous Discharge: .66C = 100A

Operating Temperature: -4 + 158 F / -20 + 70 C

Auto Low Voltage Cutoff: 8V

Auto Over Voltage Cutoff: 16V

Charge Voltage: CC/CV 14.6V / Float 13.8V

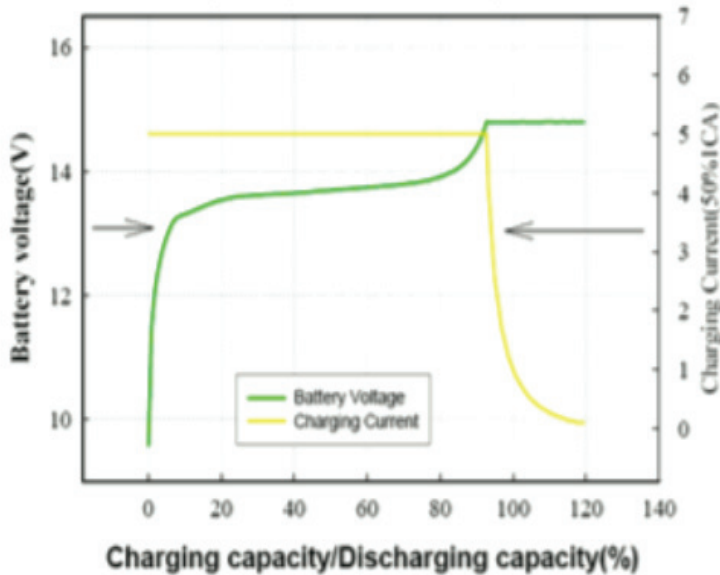
Max Series Connection: 4

Max Parallel Connection: 4

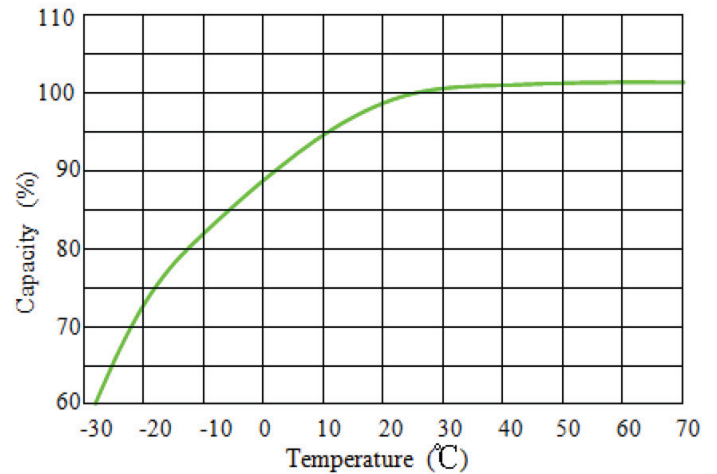
Cell Type: Cylindrical LiFePO4



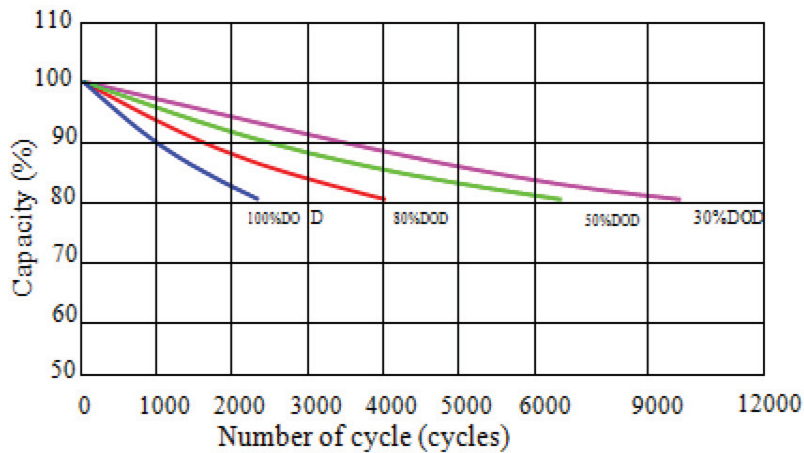
constant voltage charging characteristic  
(0.5CA, 25Celsius scale)



Temperature effects on capacity at 0.2C



Cycle life with DOD at 25°C, 0.2C







10.5 in.  
266.7 mm

9.0 in.  
228.6 mm

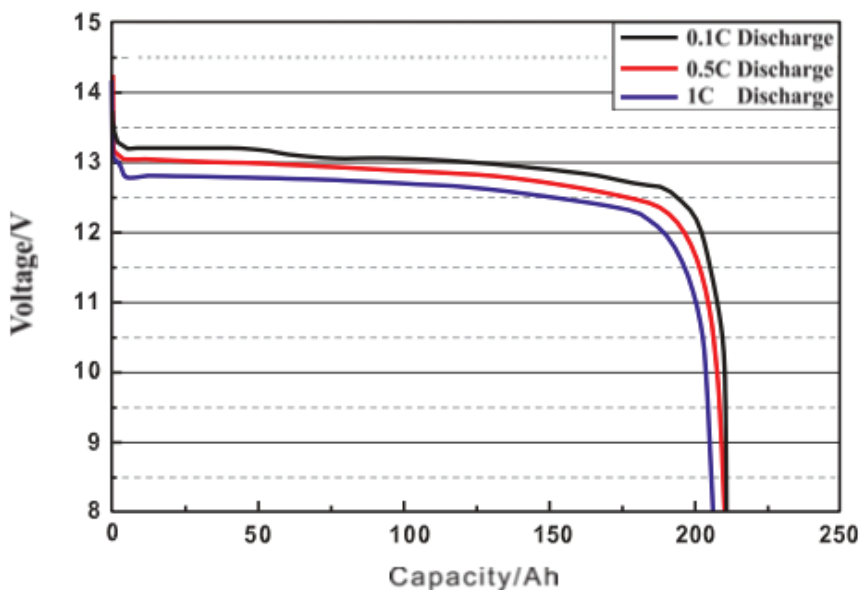
19.3 in.  
490.22 mm

## CYCLE LIFE

### CAPACITY AT DIFFERENT CYCLES AT 100% DOD

100 cycles	99.7
500 cycles	96.3
1000 cycles	90.8
1500 cycles	85.4
2000 cycles	80.1

## 12V 200AH LITHIUM ION BATTERY



Amp Hours: 200AH

Voltage: 12.8V Nominal

Peak Amps: 2000

Life Expectancy: 3000-5000 Cycles

Weight (Battery Only): 72lbs. / 32.66kg

Efficiency: 99%

Minutes at 50A: 240

Max Continuous Charge: .5C = 100A

Max Continuous Discharge: 1C = 100A

Operating Temperature: -4 + 158 F / -20 + 70 C

Auto Low Voltage Cutoff: 8V

Auto Over Voltage Cutoff: 16V

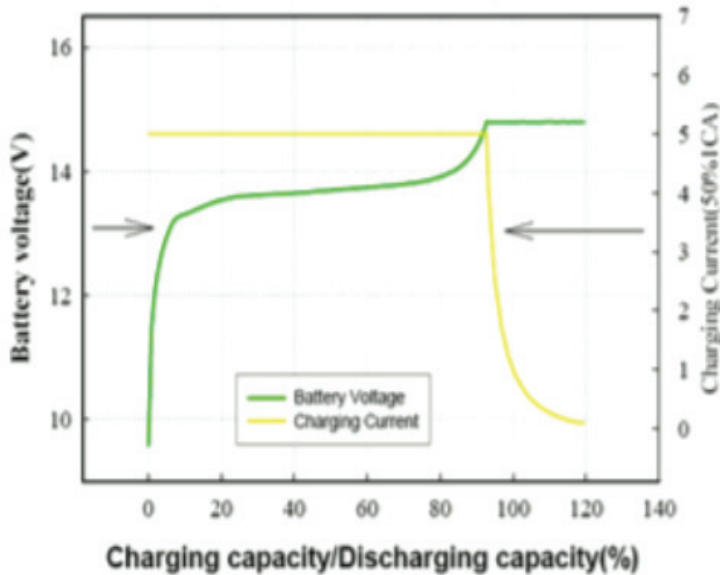
Charge Voltage: CC/CV 14.6V / Float 13.8V

Max Series Connection: 4

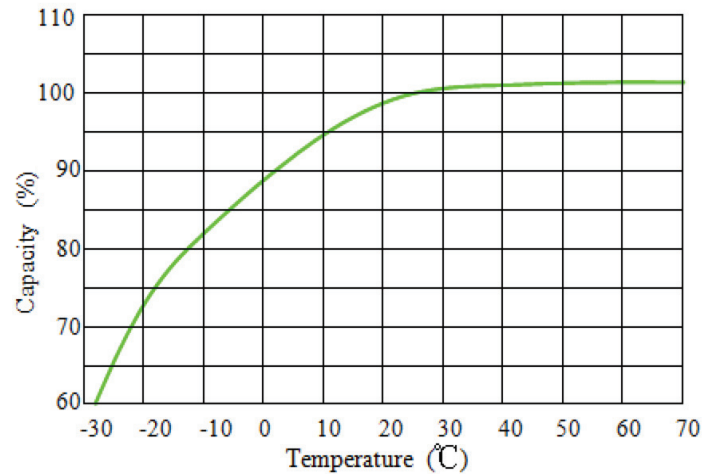
Max Parallel Connection: 4

Cell Type: Cylindrical LiFePO4

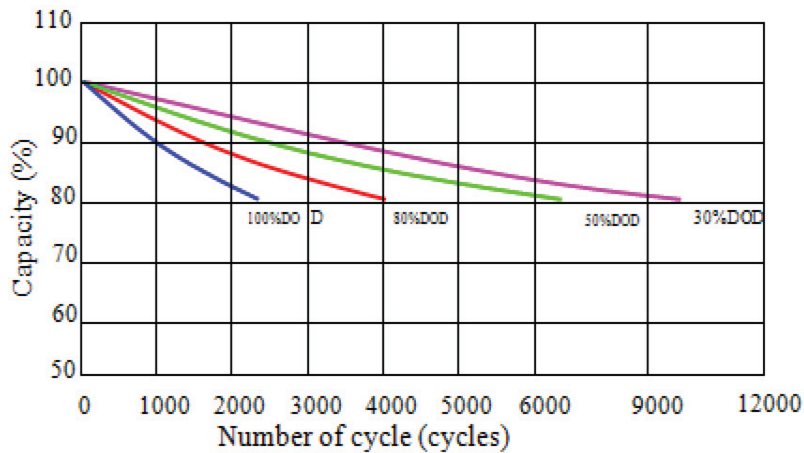
constant voltage charging characteristic  
(0.5CA, 25Celsius scale)

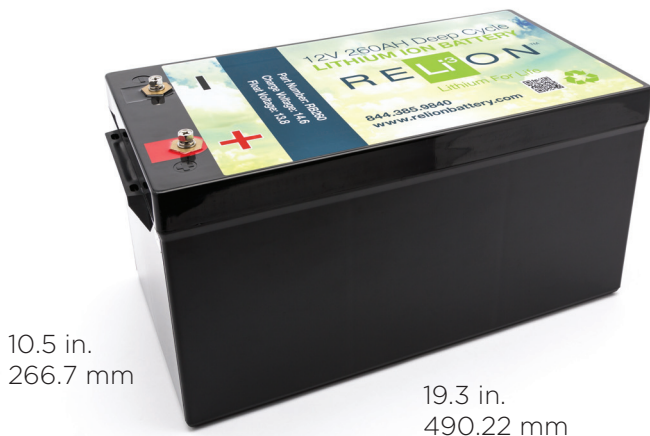


Temperature effects on capacity at 0.2C



Cycle life with DOD at 25°C, 0.2C





9.0 in.  
228.6 mm

19.3 in.  
490.22 mm

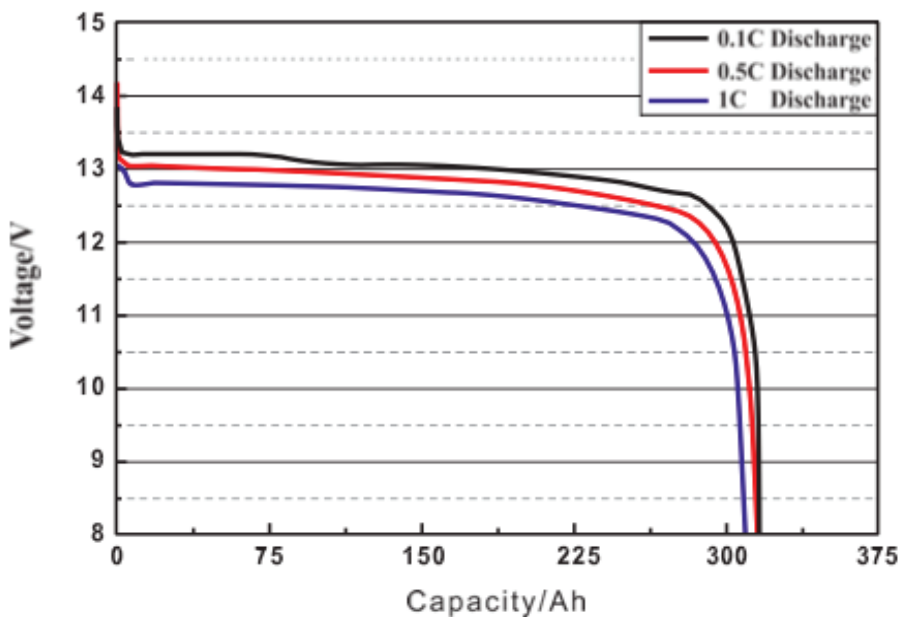
10.5 in.  
266.7 mm

## CYCLE LIFE

### CAPACITY AT DIFFERENT CYCLES AT 100% DOD

100 cycles	99.7
500 cycles	96.3
1000 cycles	90.8
1500 cycles	85.4
2000 cycles	80.1

## 12V 260AH LITHIUM ION BATTERY



Amp Hours: 260AH

Voltage: 12.8V Nominal

Peak Amps: 2600

Life Expectancy: 3000-5000 Cycles

Weight (Battery Only): 87lbs. / 37.7kg

Efficiency: 99%

Minutes at 65A: 240

Max Continuous Charge: 100A

Max Continuous Discharge: 100A

Operating Temperature: -4 + 158 F / -20 + 70 C

Auto Low Voltage Cutoff: 8V

Auto Over Voltage Cutoff: 16V

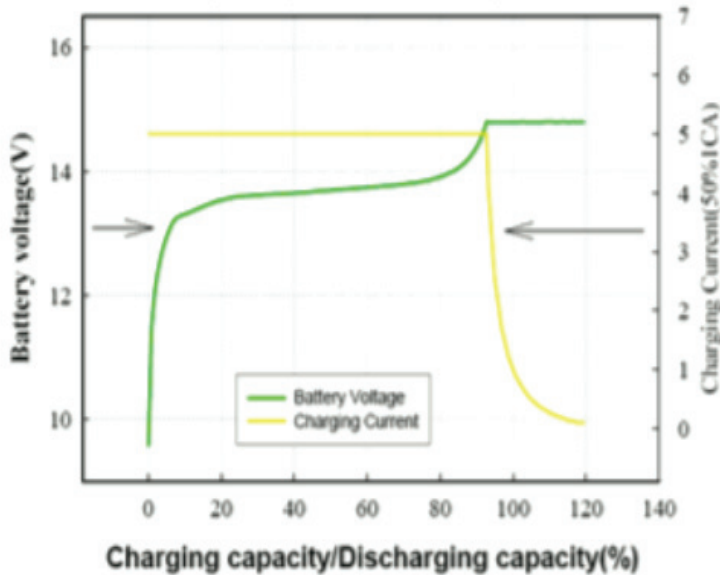
Charge Voltage: CC/CV 14.6V / Float 13.8V

Max Series Connection: 4

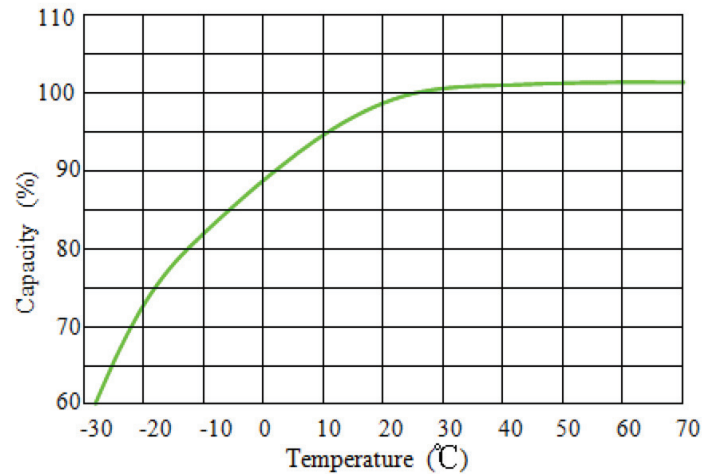
Max Parallel Connection: 4

Cell Type: Cylindrical LiFePO4

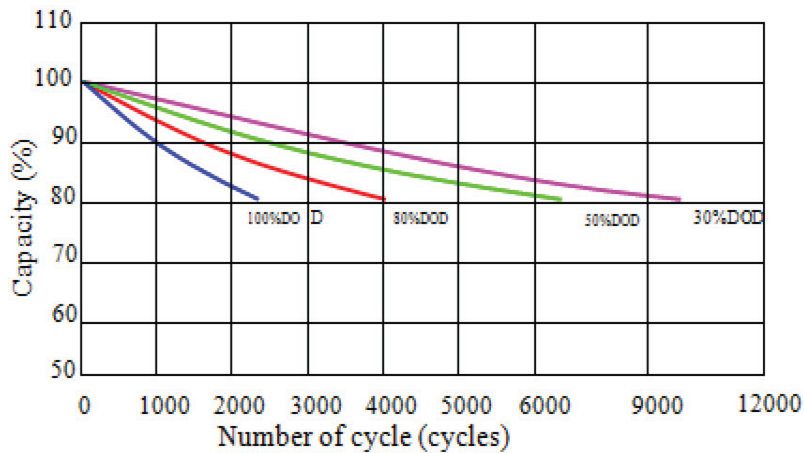
constant voltage charging characteristic  
(0.5CA, 25Celsius scale)

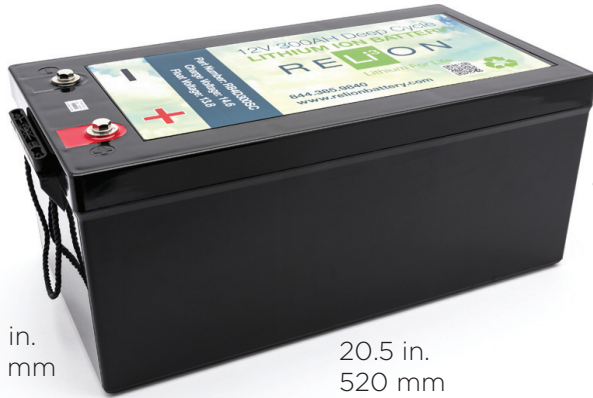


Temperature effects on capacity at 0.2C



Cycle life with DOD at 25°C, 0.2C





10.6 in.  
269 mm

20.5 in.  
520 mm

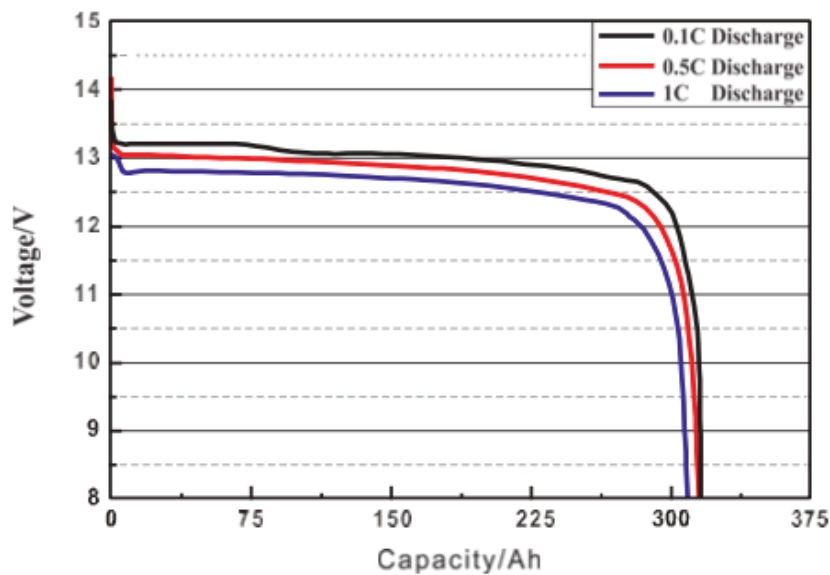
8.7 in.  
221 mm

## CYCLE LIFE

### CAPACITY AT DIFFERENT CYCLES AT 100% DOD

100 cycles	99.7
500 cycles	96.3
1000 cycles	90.8
1500 cycles	85.4
2000 cycles	80.1

## 12V 300AH LITHIUM ION BATTERY



Amp Hours: 300AH

Voltage: 12.8V Nominal

Peak Discharge: 350A (3 sec)

Life Expectancy: 3000-5000 Cycles

Weight (Battery Only): 84lbs. / 37.7kg

Efficiency: 99%

Minutes at 50A: 360

Max Continuous Charge: 80A Max

Max Continuous Discharge: 80A

Operating Temperature: -4 + 158 F / -20 + 70 C

Auto Low Voltage Cutoff: 8V - 10V

Auto Over Voltage Cutoff: 15.8V

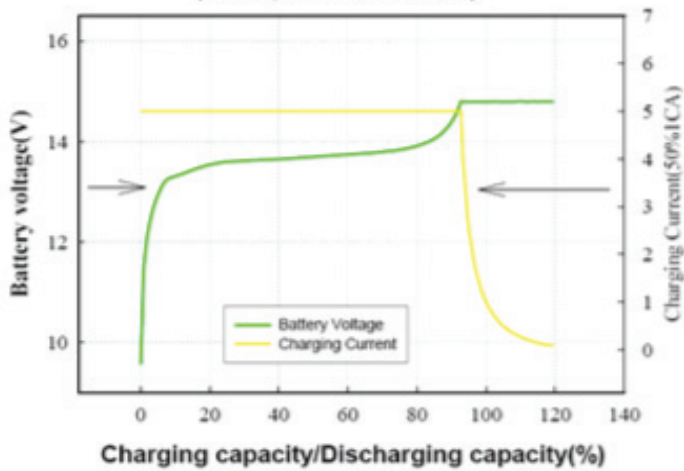
Charge Voltage: CC/CV 14.6V / Float 13.8V

Max Series Connection: 4

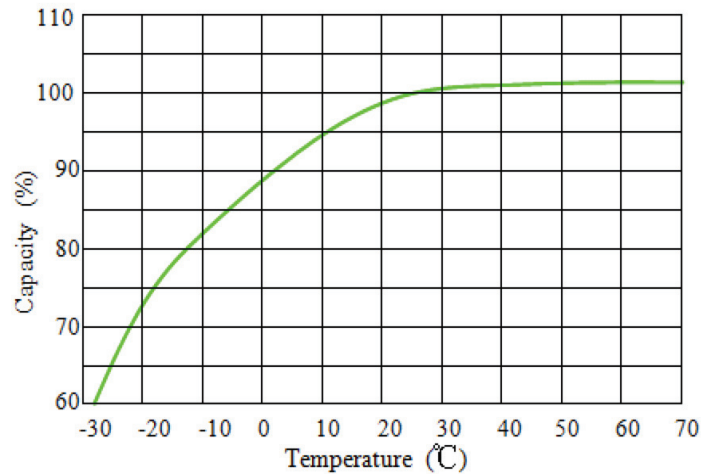
Max Parallel Connection: 10

Cell Type: Prismatic LiFePO4

constant voltage charging characteristic  
(0.5CA, 25Celsius scale)



Temperature effects on capacity at 0.2C



Cycle life with DOD at 25°C, 0.2C

