

# LITHIUM-ION BATTERIES

## LITHIUM IRON PHOSPHATE BATTERY

### ELECTRICAL SPECIFICATIONS

Nominal Voltage	12.8 V
Nominal Capacity	25 Ah
Capacity @ 0.2C	>290 min
Energy	320 Wh
Resistance	<50 mΩ
Efficiency	99%
Self Discharge	<3% per Month
Maximum Modules in Series	4

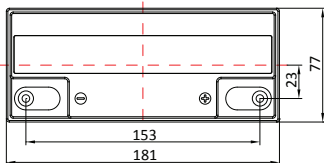
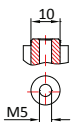
### DISCHARGE SPECIFICATIONS

Maximum Continuous Discharge Current	25 A
Peak Discharge Current	50 A
PCM Discharge Current Cut-Off	70 A
Recommended Low Voltage Disconnect	11 V
PCM Discharge Voltage Cut-Off	10 V
Reconnect Voltage	12 V
Short Circuit Protection	Yes

### TEMPERATURE SPECIFICATIONS

Discharge Temperature	-4 to 140 °F (-20 to 60 °C)
Charge Temperature	32 to 131 °F (0 to 55 °C)
Storage Temperature	-4 to 140 °F (-20 to 60 °C)
PCM High Temperature Cut-Off	176 °F (80 °C)

### DIMENSIONAL SPECIFICATIONS

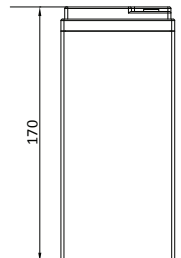
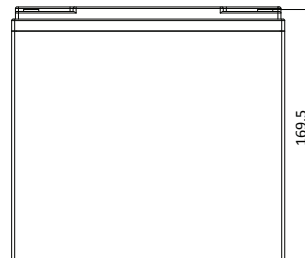


### MECHANICAL SPECIFICATIONS

Dimensions (L x W x H)	181 x 77 x 170 mm
Weight	2.65 kg
Terminal Type	M5
Terminal Torque	35 - 44 in-lbs (4 - 5 N-m)
Case Material	ABS
Enclosure Protection	IP65
Cell Type - Chemistry	LiFePO <sub>4</sub>

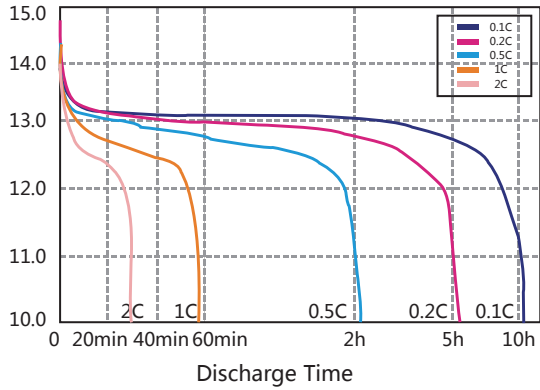
### CHARGE SPECIFICATIONS

Recommended Charge Current	< 10 A
Maximum Charge Current	20 A
PCM Charge Current Cut-Off	70 A
Recommended Charge Voltage	14.2 V - 14.6 V
PCM Charge Voltage Cut-Off	15.2 V
Reconnect Voltage	14.4 V
Balancing Voltage	14.4 V

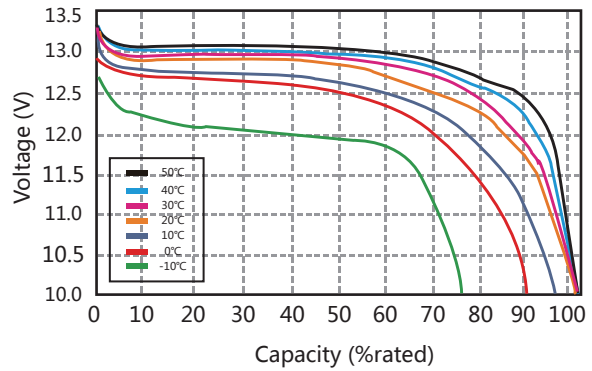


## PERFORMANCE CHARACTERISTICS

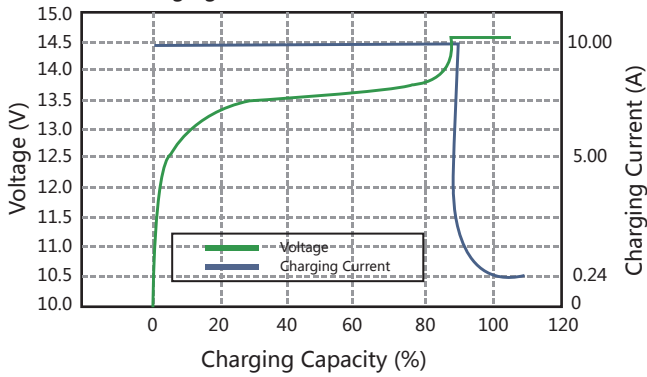
Different Rate Discharge Curve @25°C



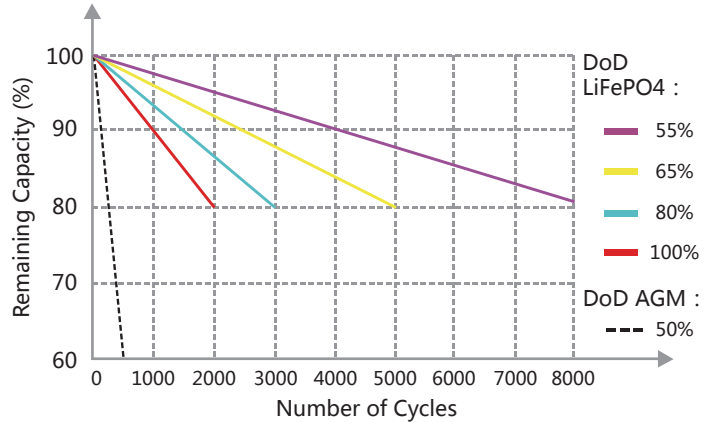
Different Temperature Discharge Curve @0.5C



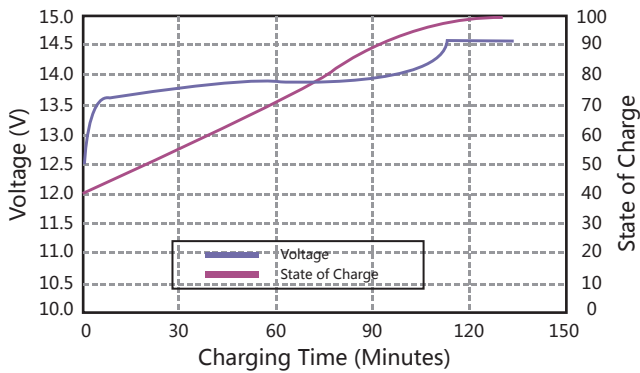
Charging Characteristics @0.5C 25°C



Different DoD Discharge Cycle Life @1C



State of Charge Curve @0.5C 25°C



Different Temperature Self Discharge Curve

