LiFePO4

Voltage: 51.2V | Capacity: 100 Ah | Energy: 5120Wh

Lithium Iron Phosphate Battery

ELECTRICAL CHARACTERISTICS

Nominal Voltage	51.2V
Nominal Capacity	100 Ah
Power Before Delivery (50-60%)	50-60Ah
Internal Resistance (AC)	≤70mΩ
Cycle Life @ 80% DOD	>6000 cycles
Efficiency of Charge @ 0.5C	100%
Efficiency of disharge @ 0.5C	96~ 99%
Self Discharge	<3% per Month

MECHANICAL SPECIFICATIONS

Dimensions (L x W x H /TH)	[[PP
Approx. Weight	45.0kgs
Display	LCD display @ four keystrokes
Positive / Negative Termial	2+/2- with M6 Screws
Case Material	Iron Metal Plate
Power Switch	DG125A Air Switch
Communication protocol	CAN/RS232+RS485

CHARGE CHARACTERISTICS

Recommended Charge Current (0.5C)	50 A
Maximum Charge Current (1C)	100 A
Charge Current (14 to 32 ºF or -10 to 0 ºC)	≤0.1 C
Charge Current (-4 to 14 ºF or -20 to -10 ºC)	≤0.05 C
Recommended Charge Voltage	52.5 V - 54.60 V
BMS Charge Voltage Cut-Off	40.0 V
Charge Mode @ 0.2C to 54.6V	Charge current to 0.2C
Reconnect Voltage	57.0 V (3.8 ±0.05 vpc)
Balancing Voltage	54.0 V (3.6 vpc)

DISCHARGE CHARACTERISTICS

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Maximum Continuous Discharge Current	100 A
Peak Discharge Current	87.5 A (7.5 s ±2.5 s)
BMS Discharge Current Cut-Off	150A±15 A (9 ms)
Recommended Low Voltage Disconnect	44 V
BMS Discharge Voltage Cut-Off	30 V (2.0 ±0.08 vpc)
Reconnect Voltage	30 V (2.0 ±0.08 vpc)
Short Circuit Protection	200-600 µs

DIMENSIONS
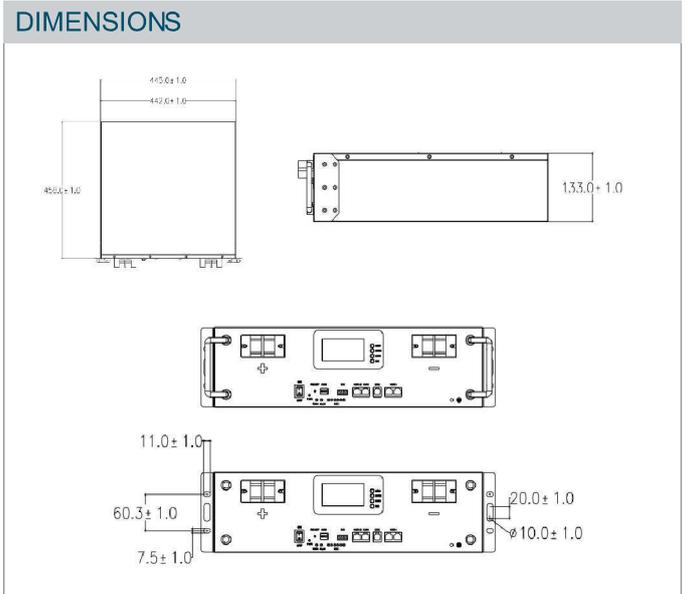
TEMPERATURE

Discharge Temperature	- 20 to 65°C
Charge Temperature*	0 to 65°C
Storage Temperature	- 40 to 55°C
BMS High Temperature Cut-Off	75°C
Reconnect Temperature	65°C

*Refer to charge currents below 32° F (0° C)
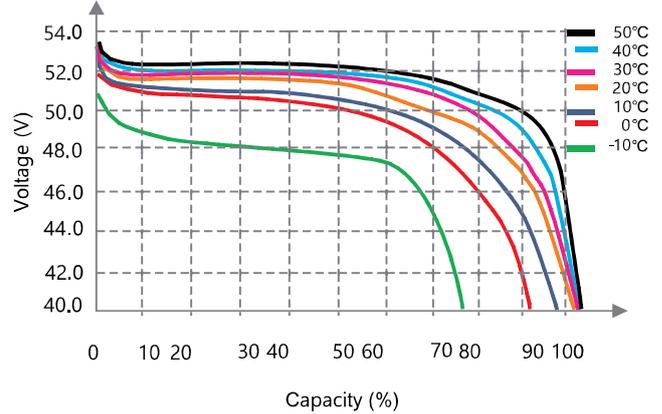
COMPLIANCE

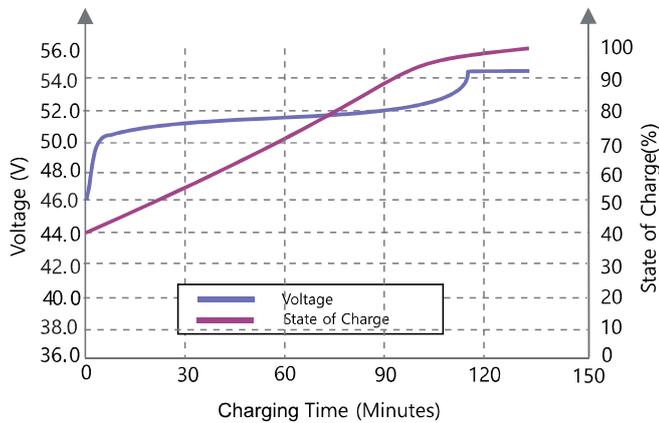|	
Certifications	UN38.3 (battery) CE (battery) UL1642 & IEC62133 (cells)
Shipping Classification	UN 3480, CLASS 9

Lithium Iron Phosphate Battery

Different Rate Discharge Curve (25℃)
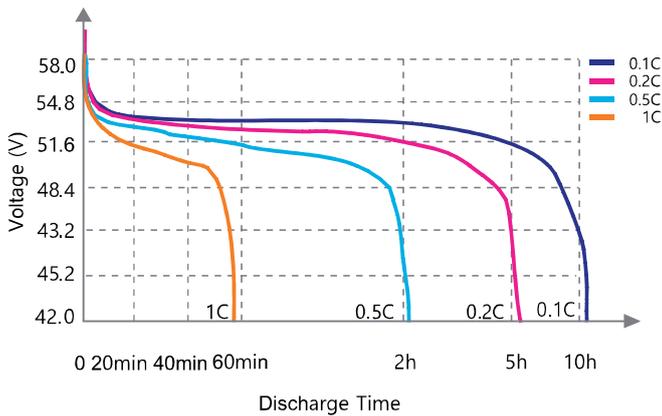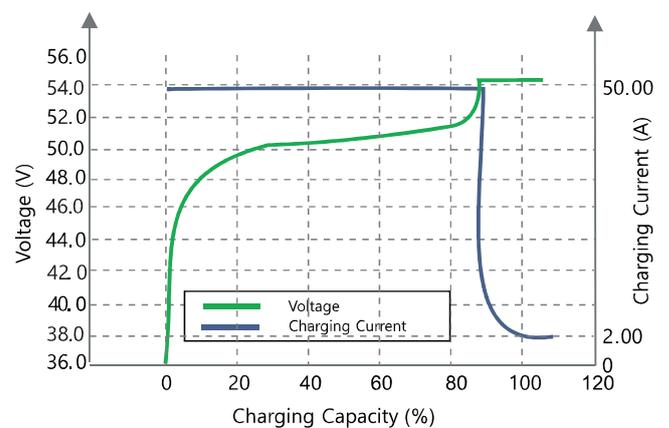

Different Temperature Discharge Curve (40A, 25℃)
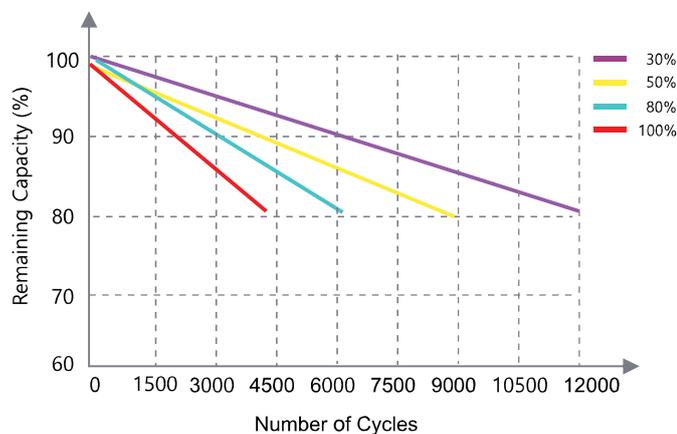

State of Charge Curve (40A, 25℃)

Charging Characteristics (40A, 25℃)

Different DOD Discharge Cycle Life Curve(1C)

Different Temperature Self Discharge Curve