



LiFePO₄

LITHIUM IRON PHOSPHATE BATTERY



Advantages of the FLYBAT lithium iron phosphate (LiFePO₄) batteries:

- 5 year manufacturer's warranty
- The safest technology, without the risk of fire or explosion
- Integrated BMS
- Long service life
- Steadily improving storage capacity
- 99 % efficient
- High stability even under extreme loads
- No memory effect - no need for full charge and discharge cycles
- High performance even under extreme conditions
- Deep and steady discharge and charging efficiency
- Small size and light weight

ELECTRICAL SPECIFICATIONS

Nominal Voltage	51.2 V	Resistance	≤70 mΩ @ 50% SOC
Nominal Capacity	30 Ah	Efficiency	99%
Capacity @ 25A	280 min	Self Discharge	<3% per Month
Energy	1536 Wh	Maximum Modules in Series/parallel	0/4

MECHANICAL SPECIFICATIONS

Dimensions	Length	260 mm
	Width	180 mm
	Height	247 mm
Weight		12,8 kg
Terminal Type		M8
Terminal Torque		9 - 11 N-m
Case Material		ABS
Enclosure Protection		IP56
Chemistry		LiFePO ₄

TEMPERATURE SPECIFICATIONS

Discharge Temperature	-20 to 60 °C
Charge Temperature	0 to 55 °C
Storage Temperature	-20 to 60 °C
BMS High Temperature Cut-Off	80 °C

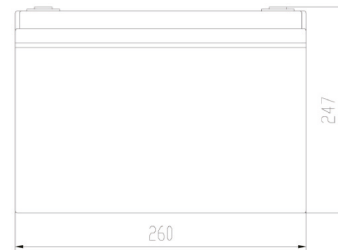
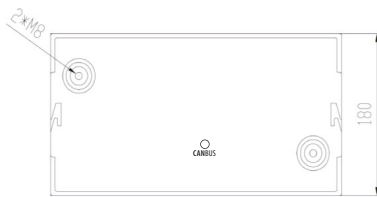
CHARGE SPECIFICATIONS

Recommended Charge Current	1.5 A - 15 A
Maximum Charge Current	30 A
Recommended Charge Voltage	56.0 V - 58.4 V
BMS Charge Voltage Cut-Off	60.8 V
Reconnect Voltage	57.6 V
Balancing Voltage	57.6 V

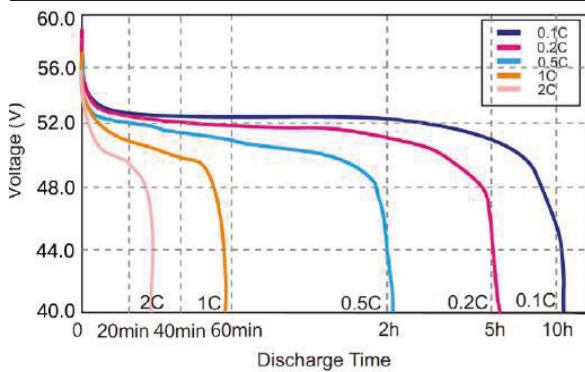
DISCHARGE SPECIFICATIONS

Maximum Continuous Discharge Current	30 A
Peak Discharge Current	60 A (15 ±1 s)
BMS Discharge Current Cut-Off	1 00 A ±20 A (6 ±3 ms)
Recommended Low Voltage Disconnect	44 V
BMS Discharge Voltage Cut-Off	40 V (2.5 ±0.1 vpc) (100 ±50 ms)
Reconnect Voltage	32 V (2.0 ±0.1 vpc)
Short Circuit Protection	Yes

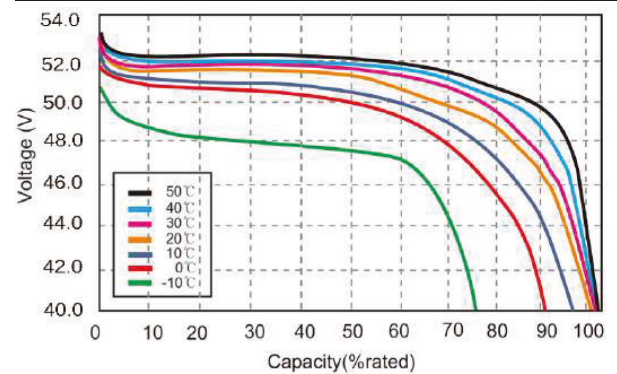
DIMENSIONAL SPECIFICATIONG



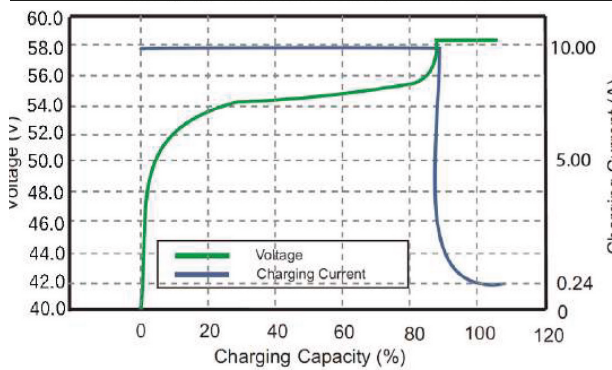
DIFFERENT RATE DISCHARGE CURVE @25°C



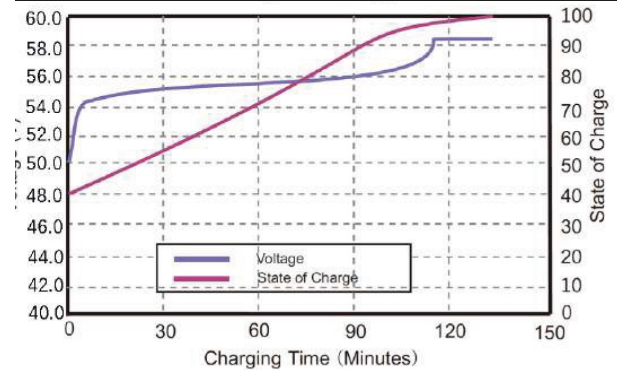
DIFFERENT TEMPERATURE DISCHARGE CURVE @0.5C



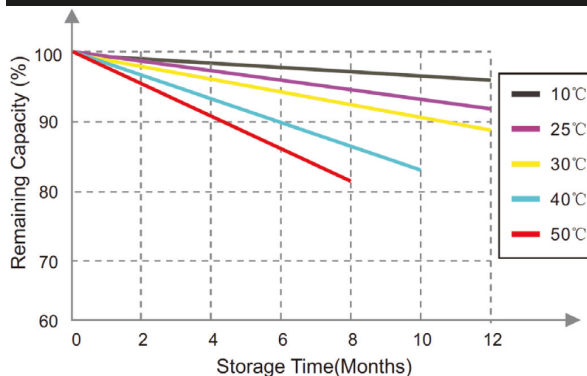
CHARGING CHARACTERISTICS @0.5C 25°C



STATE OF CHARGE CURVE @0.5C 25°C



DIFFERENT TEMPERATURE SELF DISCHARGE CURVE



DIFFERENT DOD DISCHARGE CYCLE LIFE @1C

