



FLYBAT

LiFePO₄

LITHIUM IRON PHOSPHATE BATTERY



PRODUCT IMAGE



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	25.6 V	Resistance	≤60 mΩ @ 50% SOC
Nominal Capacity	50 Ah	Efficiency	99%
Capacity @ 25A	280 min	Self Discharge	<3% per Month
Energy	1280 Wh	Maximum Modules in Series/parallel	0/4

MECHANICAL SPECIFICATIONS

Dimensions	Length	329 mm
	Width	172 mm
	Height	223 mm
Weight		13,2 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

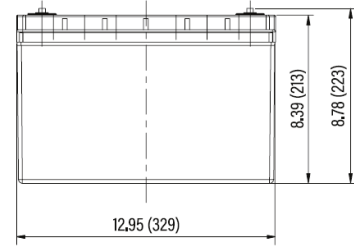
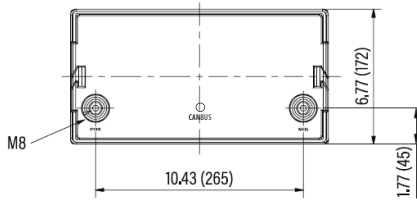
CHARGE SPECIFICATIONS

Recommended Charge Current	2.5 A - 25 A
Maximum Charge Current	50 A
Recommended Charge Voltage	28.4 V - 29.2 V
BMS Charge Voltage Cut-Off	31.2 V
Reconnect Voltage	30.4 V
Balancing Voltage	28.8 V

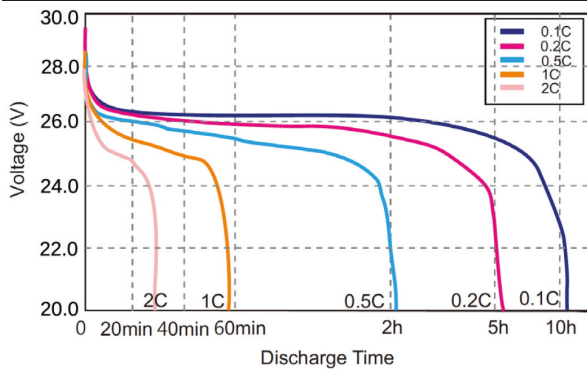
DISCHARGE SPECIFICATIONS

Maximum Continuous Discharge Current	50 A
Peak Discharge Current	100 A
BMS Discharge Current Cut-Off	150 A
Recommended Low Voltage Disconnect	22 V
BMS Discharge Voltage Cut-Off	16 V
Reconnect Voltage	20 V
Short Circuit Protection	Yes

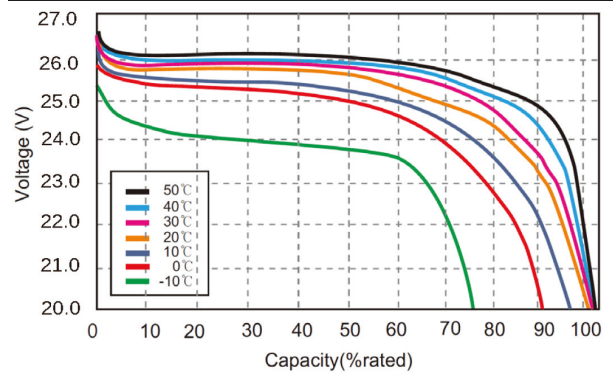
DIMENSIONAL SPECIFICATIONG



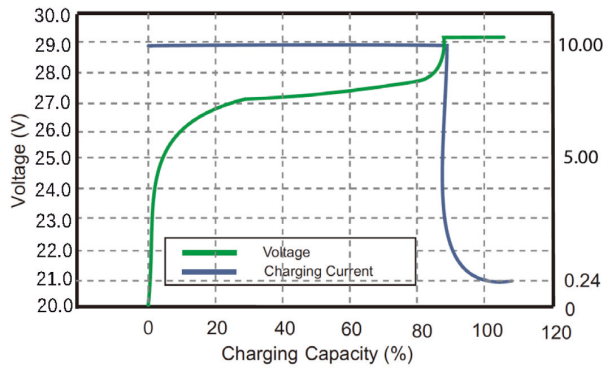
DIFFERENT RATE DISCHARGE CURVE @25°C



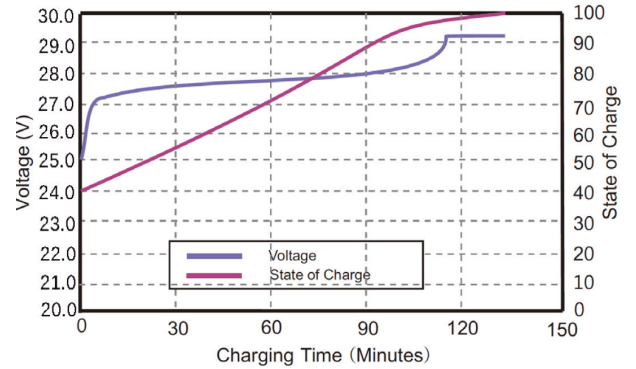
DIFFERENT TEMPERATUR DISCHARGE CURVE @0.5C



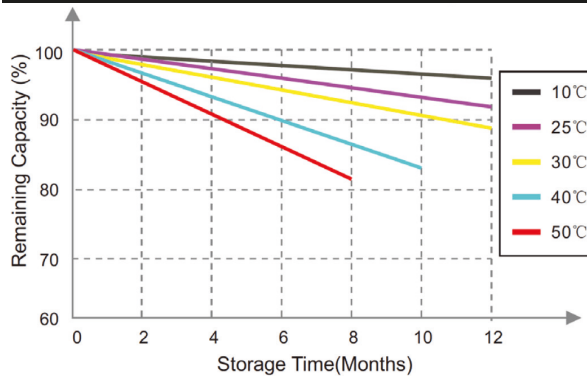
CHARGING CHARACTERISTICS @0.5C 25°C



STATE OF CHARGE CURVE @0.5C 25°C



DIFFERENT TEMPERATURE SELF DISCHARGE CURVE



DIFFERENT DOD DISCHARGE CYCLE LIFE @1C

