



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 | 12.8 V | Resistance | <30 mΩ |
| Nominal Capacity | 165 Ah | Efficiency | 99% |
| Capacity @ 0.2C | >290 min | Self Discharge | <3% per Month |
| Energy | 2112 Wh | Maximum Modules in Series/parallel | 4 |

MECHANICAL SPECIFICATIONS

| | | |
|----------------------|-----------------------------|--------|
| Dimensions | Length | 355 mm |
| | Width | 175 mm |
| | Height | 188 mm |
| Weight | 16,2 kg | |
| Terminal Type | AP | |
| Terminal Torque | 80 - 100 in-lbs (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 |
| PCM High Temperature Cut-Off | 80 °C |

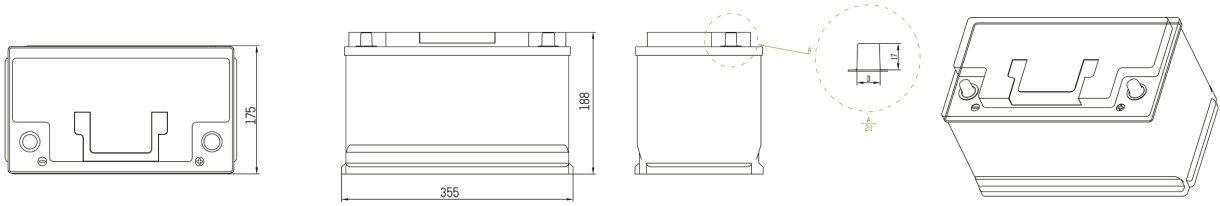
CHARGE SPECIFICATIONS

| | |
|----------------------------|-----------------|
| Recommended Charge Current | <50 A |
| Maximum Charge Current | 100 A |
| Recommended Charge Voltage | 14.2 V - 14.6 V |
| PCM Charge Voltage Cut-Off | 15.6 V |
| Reconnect Voltage | 15.2 V |
| Balancing Voltage | 14.4 V |

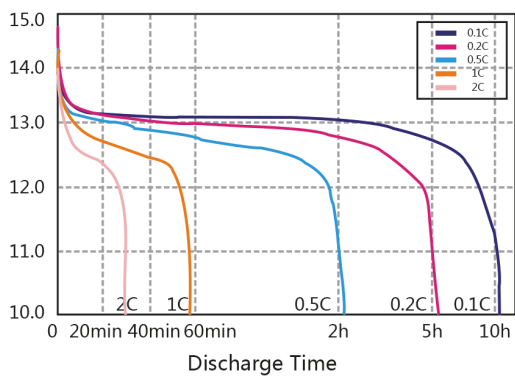
DISCHARGE SPECIFICATIONS

| | |
|--------------------------------------|-------|
| Maximum Continuous Discharge Current | 150 A |
| Peak Discharge Current | 200 A |
| PCM Discharge Current Cut-Off | - |
| Recommended Low Voltage Disconnect | 11 V |
| PCM Discharge Voltage Cut-Off | 10 V |
| Reconnect Voltage | 12 V |
| Short Circuit Protection | Yes |

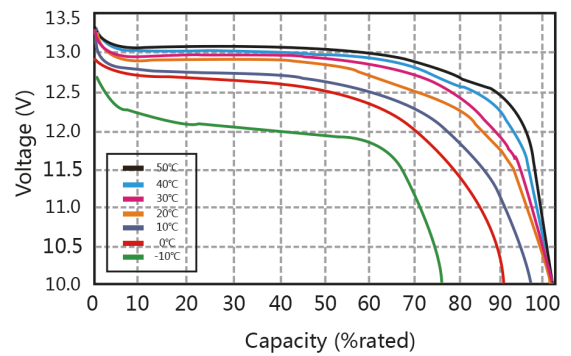
DIMENSIONAL SPECIFICATIONG



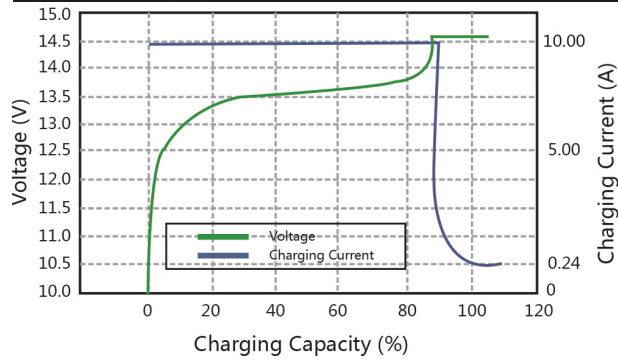
DIFFERENT RATE DISCHARGE CURVE @25°C



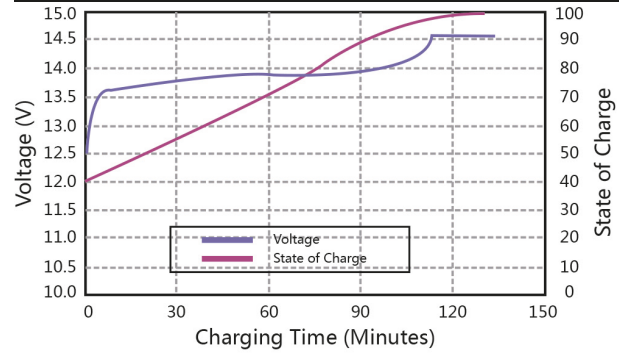
DIFFERENT TEMPERATURE DISCHARGE CURVE @0.5C



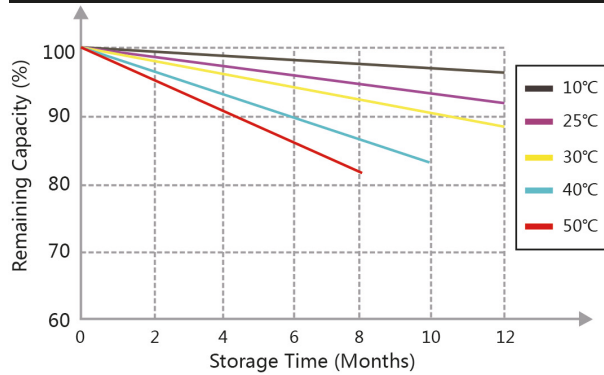
CHARGING CHARACTERISTICS @0.5C 25°C



STATE OF CHARGE CURVE @0.5C 25°C



DIFFERENT TEMPERATURE SELF DISCHARGE CURVE



DIFFERENT DOD DISCHARGE CYCLE LIFE @1C

