



# LITHIUM

**MODEL: ATLG12-150-BT**

**CERTIFICATIONS**  
 UL1642 (Cell), CE (Pack), IEC62133 (Cell), UN38.3 (Cell / Pack), IEC62619 (Cell), ROHS (Cell)



**BLUETOOTH MONITORING FOR ANDROID AND IOS**



## Specifications

|                              |                               |   |                                |
|------------------------------|-------------------------------|---|--------------------------------|
| Electrical Specifications    | Nominal Voltage               | 12.8V   |                                |
|                              | Nominal Capacity              | 150 Ah  |                                |
|                              | Nominal Power                 | 1920 Wh   |                                |
|                              | Parallel Connection           | max 4 units   |                                |
|                              | Series Connection             | max 4 units   |                                |
|                              | Circuit Protection            | Overcharge, over discharge, over current, high temperature, short circuit, cell balancing |                                |
|                              | Cycle life                    | 3000 cycles @100% DOD<br>6000 cycles @80%DOD  |                                |
| Charge Specifications        | Charge Profile                | CC @ 0.2C to 14.4V, then CV @ 14.4V until current $\leq 0.01C$ (CC/CV)                    |                                |
|                              | Max Charge Voltage            | 14.4 $\pm$ 0.2V   |                                |
|                              | Charge Current                | $\leq 75A$ (0.2C @ 30A)   |                                |
|                              | Max Current                   | 75A   |                                |
| Discharge Specifications     | Recommended Discharge Current | $\leq 75A$ (0.2C @ 30A)   |                                |
|                              | Max Continuous Current        | 150A  |                                |
|                              | Cut-off Voltage               | 10V   |                                |
| Environmental Specifications | Charge Temperature            | 0°C to 55°C   | 60 $\pm$ 25% Relative Humidity |
|                              | Discharge Temperature         | -20°C to 60°C   |                                |
|                              | Storage Temperature           | -5°C to 45°C  |                                |
| Mechanical Specifications    | Dimensions, mm                | 330x173x216   |                                |
|                              | Approx Weight, kg             | 15.5  |                                |
|                              | Terminal type                 | M8  |                                |
|                              | Case Material                 | Plastic ABS   |                                |
|                              | IP Rating                     | IP65  |                                |
|                              | Cell Type                     | Cylindrical LiFePO <sub>4</sub>   |                                |

| Circuit Protection        | Characteristic                   | Parameters  |
|---------------------------|----------------------------------|---|
| Overcharge protection     | High voltage protection          | 15V   |
|                           | Reset/Recovery voltage           | 14.4V   |
|                           | Reset trigger                    | below reset value   |
|                           | Time delay                       | 10s   |
| Over discharge protection | Low voltage protection           | 10V   |
|                           | Reset/Recovery voltage           | 10.4V   |
|                           | Reset trigger                    | cut load, press reset button or charge/apply voltage >12V |
|                           | Time delay                       | 10s   |
| Overcurrent               | Max charge current protection    | 145A  |
|                           | Charge current protection reset  | 140A  |
|                           | Time delay                       | 10s   |
|                           | Max discharge current protection | 800A  |

| Circuit Protection | Characteristic                              | Parameters               |
|--------------------|---|--------------------------|
| High temperature   | Max charge temperature                      | 65°C                     |
|                    | Recovery point                              | 55°C                     |
|                    | Time delay                                  | 10s                      |
|                    | Max discharge temperature                   | 65°C                     |
|                    | Recovery point                              | 55°C                     |
|                    | Time delay                                  | 10s                      |
|                    | MOSFET over temperature protection          | 85°C                     |
| Cell balance       | Balance condition voltage (per cell)        | $\geq 3.3V$              |
|                    | Balance condition voltage difference (cell) | 30mv                     |
|                    | Balanced closed voltage difference (cell)   | 20mv                     |
|                    | Cell balance current                        | 30mA                     |
|                    | Short circuit protection                    | Short circuit protection |
| Time delay         |   | 100 $\mu$ s              |



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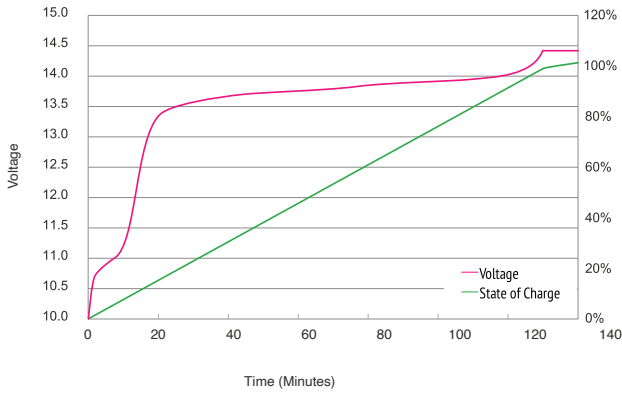


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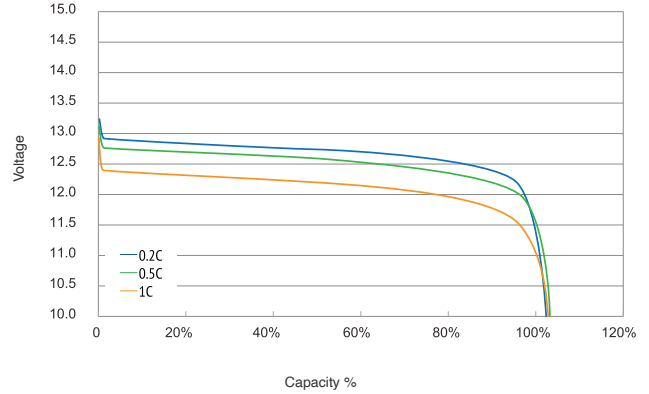


## Characteristics Curve

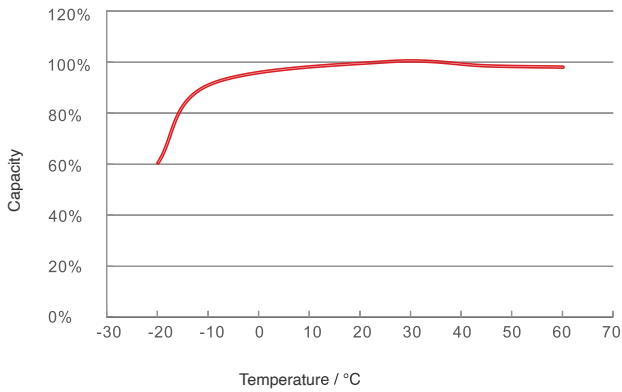
**Charging Characteristics (0.5C @25°C)**



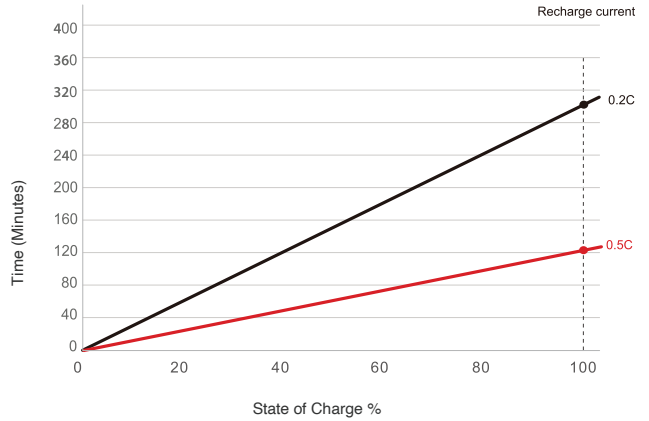
**Discharging Characteristics (0.2C, 0.5C, 1C @25°C)**



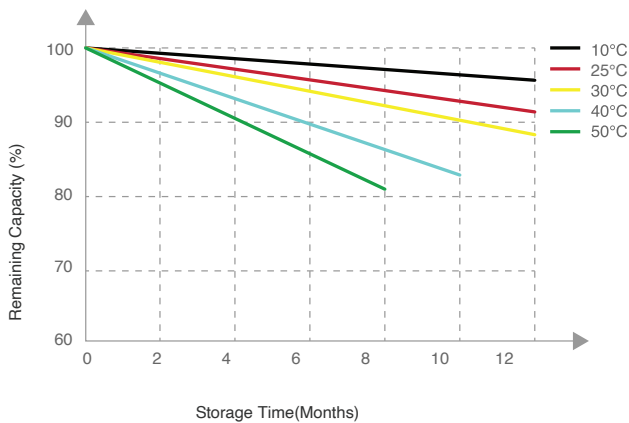
**Different Temperature Capacity Curve**



**Typical Charge Time Curve**



**Different Temperature Self Discharge Curve**



**Different DOD Discharge Cycle Life Curve**

