

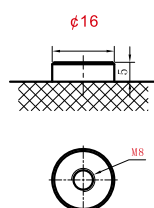
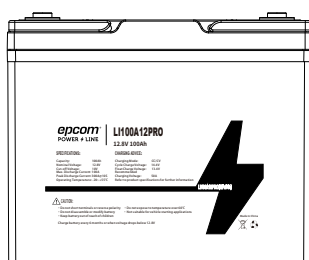
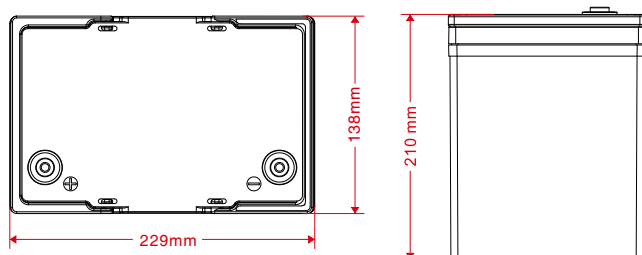
# LI100A12PRO

## 12.8V 100AH 1280WH

### LiFePO4 BATTERY



#### Dimension:



Unit: mm

#### SAFETY

- + Long life type prismatic LiFePO4 cells.
- + Cell certification: ROHS, IEC62619, UL1973, UL9540A
- + Battery certification:  
UN38.3, MSDS, IP65, ISTA 2A
- + The cycle life over 3500 times

#### DESIGN

- + ABS container, replace VRLA battery perfectly.
- + IP 65 Class,
- + Maintenance free.

#### BATTERY MANAGEMENT SYSTEM

- + Integrated Hardware BMS inside.
- + Independent protection for charge and discharge.
- + OVP, LVP, OCP, OTP, LTP, Short circuit protection.

# LI100A12PRO

## SPECIFICATION

| Model                            | R-LFP12.8V100AH                                                                                |
|----------------------------------|------------------------------------------------------------------------------------------------|
| Cell and Connection              | 3.2V100Ah, 1P4S                                                                                |
| Nominal Voltage [V]              | 12.8                                                                                           |
| Nominal Capacity [Ah]            | 100                                                                                            |
| Total Energy [Wh]                | 1280                                                                                           |
| Max. Charging Current [A]        | 100                                                                                            |
| Recommended Charging Current [A] | 50                                                                                             |
| Charging Voltage [V]             | 14.2~14.6                                                                                      |
| Max. Discharging Current [A]     | 100A (Continuous) / 300A@5s                                                                    |
| End of Discharge Voltage [V]     | 11.2                                                                                           |
| Operating Temperature Range      | Charge: 0 ~ +50°C<br>Discharge: -20 ~ +55°C                                                    |
| Protection                       | Over charge, Over discharge, Over temperature, Low Temperature,<br>Over Current, Short circuit |
| Cycle Life <sup>1</sup>          | >3500 cycles                                                                                   |
| Designed Calendar Life           | 10 Years                                                                                       |
| Communication Port               | /                                                                                              |
| LED Indicator and Button         | /                                                                                              |
| Dimension (W*D*H, mm)            | 229*138*210                                                                                    |
| Weight [Kg]                      | 9.9                                                                                            |
| Operation Humidity               | 0~95% RH (No condensing)                                                                       |
| IP Class                         | IP65                                                                                           |
| Parallel Support <sup>2</sup>    | Yes, Max, 4Sets                                                                                |
| Series Support                   | Yes, Max. 4 Sets                                                                               |
| Certification-Cell               | UN38.3; ROHS; IEC62619; UL1973                                                                 |
| Certification-Battery            | UN38.3; MSDS, IP65, ISTA 2A, Salt Spray test (ISO 9227:2022) ;                                 |

Note:

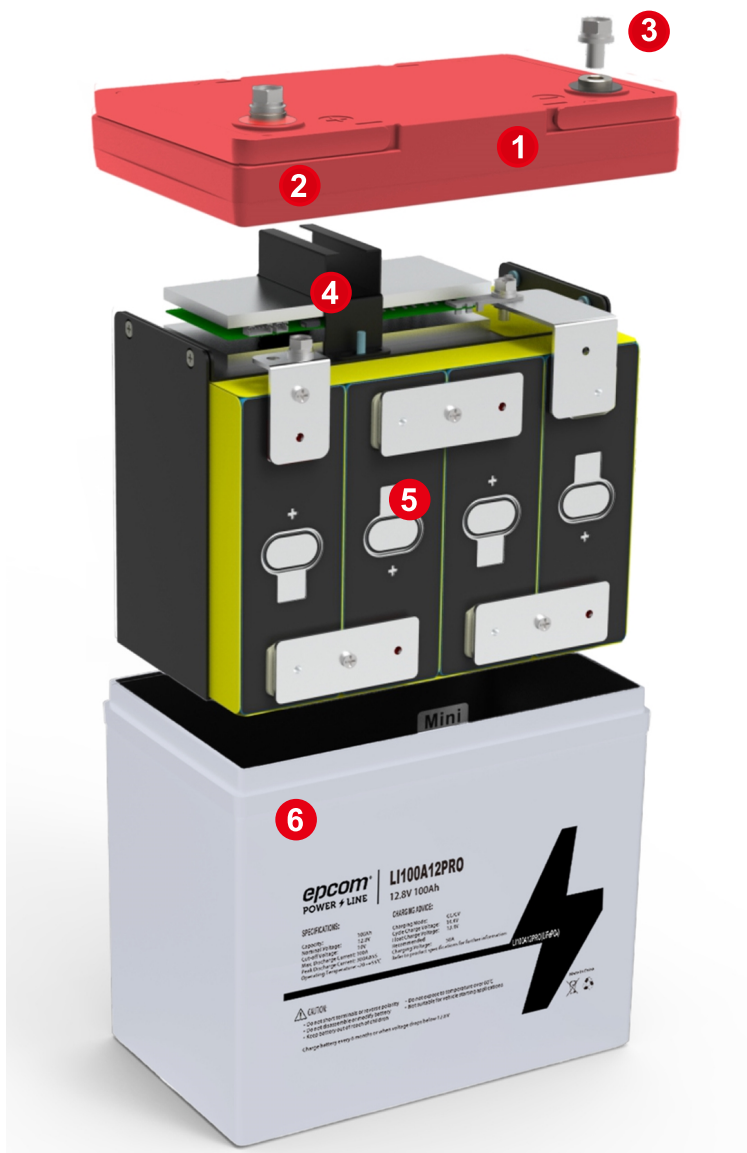
- 0.5C /0.5C ,25°C, 80%DOD to 80% of initial capacity.
- For parallel and series connection, refer to user manual.

# LI100A12PRO

| BMS Detail Information                        |  |                                 |
|-----------------------------------------------|--|---------------------------------|
| Over-Charge Protection                        |  |                                 |
| Over-Charge Protection                        |  | 3.75V± 25mV(For cell)           |
| Over-Charge Protection Delay                  |  | 500~1500 ms                     |
| Over-Charge Release                           |  | 3.55V± 50mV(For cell)           |
| Over-Discharge Protection                     |  |                                 |
| Over-Discharge Protection                     |  | 2.2V± 80mV(For cell)            |
| Over-Discharge Protection Delay               |  | 500~1500 ms                     |
| Over-Discharge Release                        |  | 2.7V± 100mV(For cell)           |
| Over Current Protection                       |  |                                 |
| Charge Over Current Protection                |  | 110A± 10A                       |
| Charge Over-Current Protection Delay          |  | 500~1500 ms                     |
| Charge Over Current Protection Release        |  | Disconnect charger or Discharge |
| Discharge Over Current Protection             |  | 550A± 50A                       |
| Discharge Over Current Protection Delay       |  | 500~1500 ms                     |
| Discharge Over Current Protection Release     |  | Disconnect load or Charge       |
| Over Temperature Protection                   |  |                                 |
| Charge Low Temperature Protection             |  | 0±2°C                           |
| Charge Low Temperature Protection Release     |  | 3±2°C                           |
| Charge High Temperature Protection            |  | 50±2°C                          |
| Charge High Temperature Protection Release    |  | 47±2°C                          |
| Discharge High Temperature Protection         |  | 67±2°C                          |
| Discharge High Temperature Protection Release |  | 52±2°C                          |
| BMS High Temperature Protection               |  | 90±5°C                          |
| BMS High Temperature Protection Release       |  | 65±15°C                         |
| Short Circuit Protection                      |  |                                 |
| Short Current Protection Delay Time           |  | 200~300 uS                      |
| Short Current Release Method                  |  | Disconnect load                 |

# LI100A12PRO

## INTERNAL STRUCTURE DIAGRAM



① Cover-ABS

② Handle

③ Hexagon socket screws M8\*12

④ BMS (RD-ZY4S100A-JP)

⑤ Cells, 3.2V100Ah, 1P4S

⑥ Case : ABS