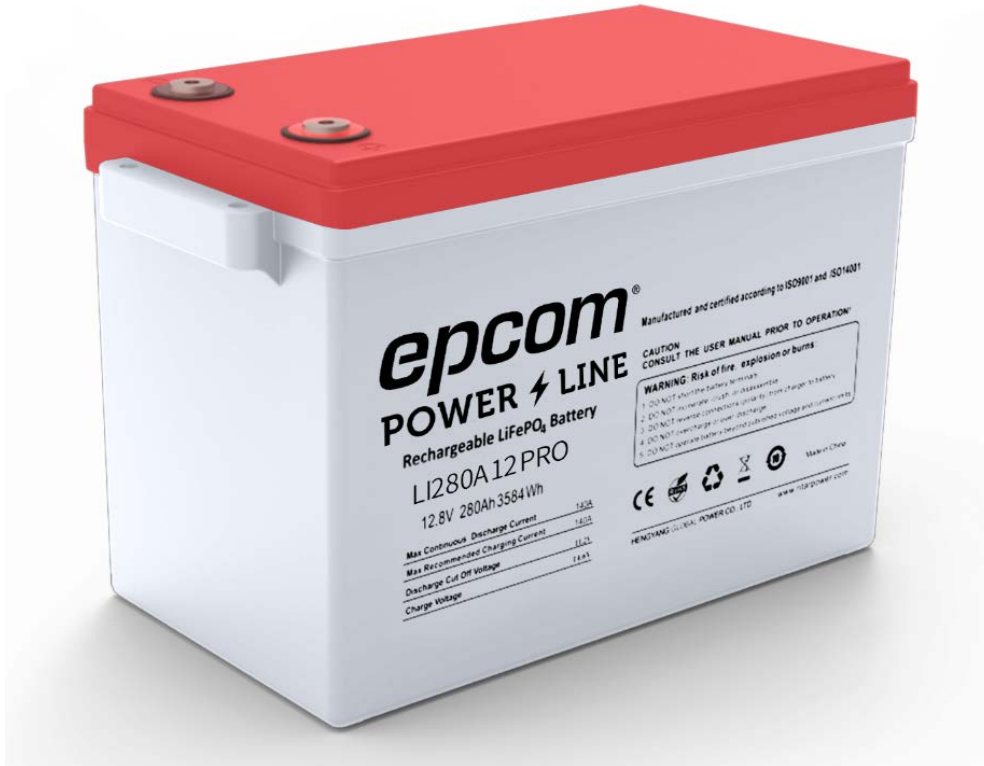
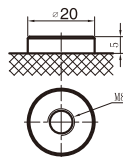
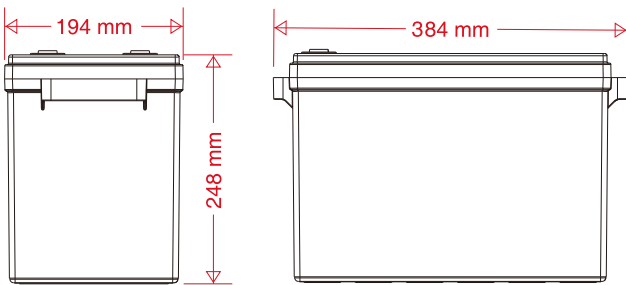


LI280A12PRO

12.8V 280AH 3584WH LiFePO4 BATTERY



Dimension:



Unit: mm

SAFETY

- + Long life type prismatic LiFePO₄ cells. 3.2V280Ah, 1P4S.
- + Cell certification: IEC62619, UL1973, UL9540A.
- + Battery certification: UN38.3, MSDS, CE.
- + The cycle life over 6000 times.

DESIGN

- + Case material ABS, replace VRLA design.
- + IP65 Class, water-proof design.
- + Maintenance free.

BATTERY MANAGEMENT SYSTEM

- + Integrated BMS inside.
- + Independent protection for charge and discharge.
- + OVP, LVP, OCP, OTP, LTP, OTP, Short circuit protection.
- + Optional parts: Heater parts(200W), Blue-tooth module.

LI280A12PRO

SPECIFICATION

Model	LI280A12PRO
Nominal Voltage [V]	12.8
Nominal Capacity [Ah]	280
Total Energy [Wh]	3584
Max. Charging Current [A]	140
Recommended Charging Current [A]	100
Charging Voltage [V]	13.8~14.6
Max. Discharging Current [A]	140 (Peak: 380A@10S, 400A @200ms)
End of Discharge Voltage [V]	11.2
Operating Temperature Range ¹	Standard Product: Charge: 0 ~ +50°C, Discharge: -20 ~ +55°C With optional heater: Charge/Discharge: -20 ~ +50°C
Protection	Over charge, Over discharge, Over temperature, Low Temperature, Over Current, Short circuit
Cycle Life ²	>6000 cycles
Designed Calendar Life	10 Years
Dimension (W*D*H, mm)	384*194*248
Weight [Kg]	29.0
Operation Humidity	0~95% RH (No condensing)
IP Class	IP65
Parallel Support	Yes, Max, 4Sets
Series Support	Yes, Max, 4Sets
Certification-Cell ³	IEC62619, UL1642, UL1973, UL9540A, REACH, ROHS
Certification-Battery	UN38.3, MSDS, CE

Note:

(1) Normally the Li-ion battery operation temperature range is : discharge -20~+55°C, charge 0~+55°C, If the optional heater is stalled, it will automatic start to work once the cell temperature is below 5°C and the heater can help to increase cell temperature 4~8°C/hour. With Optional Heater: Charge / Discharge: -20 ~ +55°C , the charger power should be above than heater parts power consumption.

(2) 25°C ,0.5C/0.5C, 100%DOD and 80% EOL

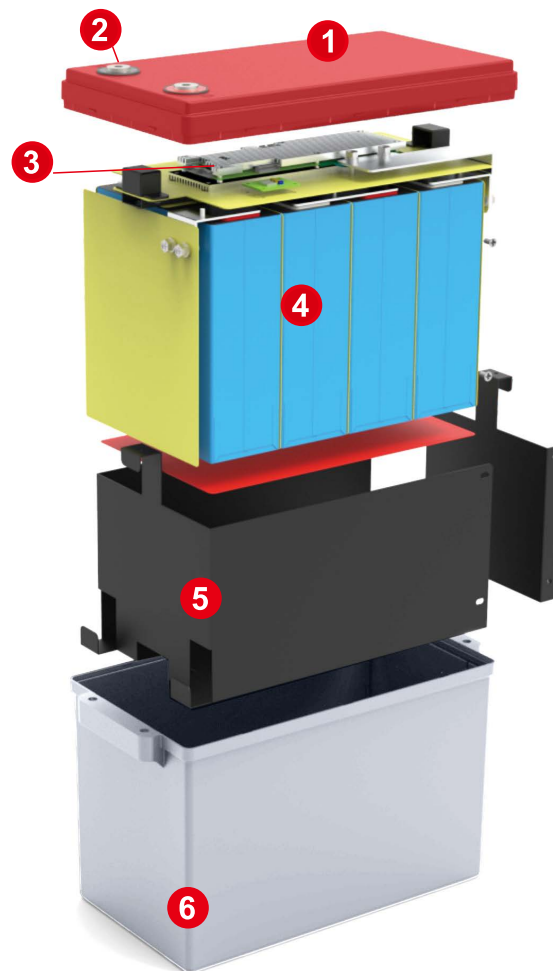
(3) For parallel and series power cable connection, refer to user manual.

Li-ion Battery

BMS Detail Information	
Over-Charge Alarm & Protection	
Over-Charge Alarm	3.55V (For cell) 14.2V (For pack)
Over-Charge Protection	3.7V (For cell) 14.8V (For pack)
Over-Charge Protection Delay	1000 ms
Over-Charge Release	3.45V (For cell) 14.2V (For pack)
Over-Discharge Alarm & Protection	
Over-Discharge Alarm	2.8V (For cell) 11.2V (For pack)
Over-Discharge Protection	2.5V (For cell) 10V (For pack)
Over-Discharge Protection Delay	1000 ms
Over-Discharge Release	2.8V (For cell) 11.2V (For pack)
Over Current Alarm & Protection	
Charge Over Current Alarm	155A
Charge Over Current Protection	160A
Charge Over-Current Protection Delay	15S
Charge Over Current Protection Release	Automatic release after 1min and up to 3 times or Discharge
Discharge Over Current Alarm	155A
Discharge Over Current Protection-1	160A
Discharge Over Current Protection-1 Delay	15S
Discharge Over Current Protection-2	400A
Discharge Over Current Protection-2 Delay	200ms
Discharge Over Current Protection Release	Automatic release after 1min and up to 3 times or Charge
Over Temperature Alarm & Protection	
Charge Low Temperature Alarm	7°C
Charge Low Temperature Protection	0°C
Charge Low Temperature Protection Release	5°C
Charge High Temperature Alarm	50°C
Charge High Temperature Protection	55°C
Charge High Temperature Protection Release	45°C
Discharge Low Temperature Alarm	-10°C
Discharge Low Temperature Protection	-20°C
Discharge Low Temperature Protection Release	-17°C
Discharge High Temperature Alarm	55°C
Discharge High Temperature Protection	60°C
Discharge High Temperature Protection Release	50°C
Short Circuit Protection	
Short Current Protection Delay Time	1500 uS
Short Current Release Method	Release load
Heater Control (for optional heater parts)	
Heater ON	Cell temperature ≤ 0°C and charger is connected
Heater OFF	Cell temperature >10°C

LI280A12PRO

INTERNAL STRUCTURE DIAGRAM



① Top cover-ABS

② Power Terminal M8

③ BMU

④ Cells: 3.2V280Ah, 1P4S

⑤ Material part for pack- SPCC with black painting

⑥ Case : ABS