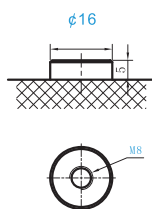
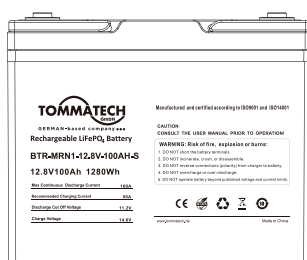
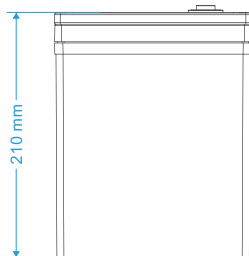
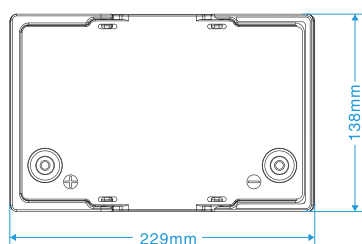


Rechargeable LiFePO4 Battery

BTR-MRN1-12.8V-100AH-S



Dimension:



Unit: mm

SAFETY

- + Long life type prismatic LiFePO4 cells.
- + Cell certification: ROHS, IEC62619, UL1973, UL9540A

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.

BTR-MRN1-12.8V-100AH-S

SPECIFICATION

Model	BTR-MRN1-12.8V-100AH-S
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 Discharge: -20 ~ +55°C
Protection	Over charge, Over discharge, Over temperature, Low Temperature, Over Current, Short circuit
Warranty period	5 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 ²	Yes, Max, 4Sets
Series Support	Yes, Max. 4 Sets
Certification-Cell	UN38.3; ROHS; IEC62619; UL1973

The datasheet is subject to change without prior notification

BTR-MRN1-12.8V-100AH-S

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

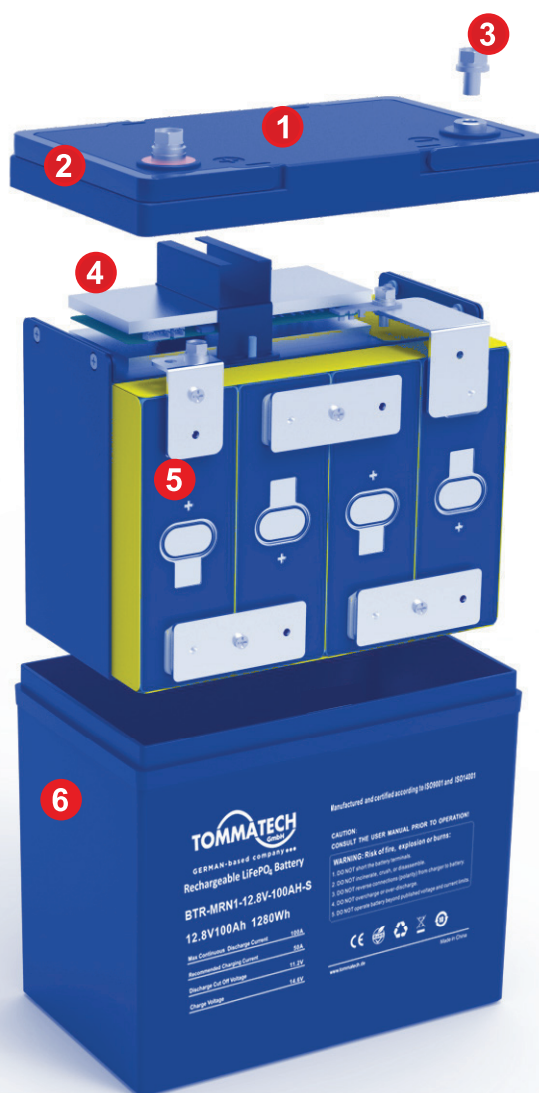
Charge Low Temperature Protection	0±2°C
Charge Low Temperature Protection Release	3±2°C
Charge High Temperature Protection	50±2°C
Charge High Temperature Protection Release	47±2°C
Discharge High Temperature Protection	67±2°C
Discharge High Temperature Protection Release	52±2°C
BMS High Temperature Protection	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

BTR-MRN1-12.8V-100AH-S

INTERNAL STRUCTURE DIAGRAM



- | | |
|-------------------------------|--------------------------|
| ① Cover-ABS | ④ BMS (RD-ZY4S100A-JP) |
| ② Handle | ⑤ Cells, 3.2V100Ah, 1P4S |
| ③ Hexagon socket screws M8*12 | ⑥ Case : ABS |