



BTR-P-51.2V-102AH



BTR-P-51.2V-102AH-R



**LFP LITHIUM BATTERY
 MODULAR - 51.2V**

**LFP LITHIUM BATTERY
 RACK - 51.2V**

TommaTech new generation low voltage lithium batteries offer unique solutions for energy storage. With a long life of up to 8000 cycles, high energy density, high quality and performance, TommaTech lithium batteries stand out with their functional and eco-friendly structure.



High Performance

Great performance based on the latest generation of LiFePO₄ technology



Active Smart Management System

Effective usage structure with active balancing BMS technology



Long Lifespan

Long lifespan up to 8000 cycles



Innovative Design and Heat Resistant Case

Aesthetic, compact and durable metal cabinet design



Expandable Capacity

Parallel Connection up to 16 Batteries



Communication

CAN / RS485 / Bluetooth



IP20- IP65 Protection Class

IP20 - IP65 compatible metal cabinet and connector components



Sustainable Energy

An eco-friendly and sustainable energy source thanks to its ability to charge from solar panels

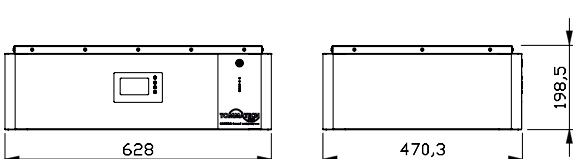
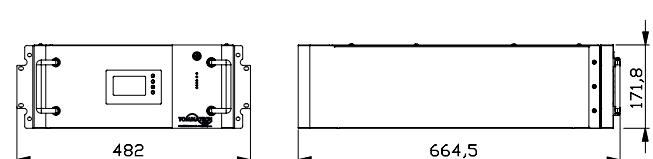
TommaTech Lithium Batteries are designed with heat-resistant and high performance LiFePO₄ battery technology. At the same time, lithium batteries equipped with temperature sensors are presented to users with a durable metal case. BMS (Battery Management System) with balancing function is used in TommaTech Lithium Batteries designed with the concept of safety and quality. Batteries with Al-Cu alloy conductive busbars allow up to 16 parallel connections without loss of performance. In this way, energy storage capacity of up to 80kWh can be achieved in a single system.



TECHNICAL SPECIFICATIONS

ELECTRICAL SPECIFICATIONS	BTR-P-51.2V-102Ah	BTR-P-51.2V-102Ah-R
Nominal Voltage [V]	51.2	
Nominal Capacity [Ah]	102	
Nominal Energy [Wh]	5222.4 ¹	
Recommended Charging Current [A]	50 ^{2,3}	
Maximum Charge Current [A]	75 ^{2,3}	
Recommended Charging Voltage [V]	56.8	
Maximum Charge Voltage [V]	58.4	
Recommended Discharge Current [A]	50 ^{2,3}	
Maximum Discharge Current [A]	75 ^{2,3}	
Discharge Cut-off Voltage [V]	44.8±0.2	
BATTERY/CELL		
Cycle Life	8000 ^{2,3,4,5,6}	
Mass Energy Density [Wh/Kg]	165	
Volumetric Energy Density [Wh/L]	350	
Internal Resistance [mΩ]	0.27-0.40 ⁷	
SAFETY AND STANDARDS		
Overcharge Protection	Yes	
Overdischarge Protection	Yes	
Overcurrent Protection	Yes	
Short Circuit Protection	Yes	
Overtemperature Protection	Yes	
Temperature Sensor	Yes	
Adjustable Charge / Discharge Current	Yes	
Cell Type	LFP Prismatic	
Safety Standards	IEC 61960 / 62133-2 / RoHS	
ENVIRONMENTAL CONDITIONS		
Charging Temperature [°C]	0 ~ +60	
Discharge Temperature [°C]	-20 ~ +60	
Storage Temperature [°C]	0 ~ +35	
Humidity (Non-Condensing) [%]	Max. 85%	
Protection Class	IP20-IP65	
Design Life [Year]	>15	
Warranty [Year]	5	
ADDITIONAL INFORMATION		
Dimensions (WxDxH) [mm]	628x468.5x198.5	482x664.5x174.2
Weight [kg]	47.70±0.2	53.35±0.2
Battery Connector	IP67 Protected Positive (+) and Negative (-) Pole Connector	
Serial Connection	No	
Parallel Connection	Yes (Max. 16 pcs)	
Communication	CAN / RS485 / Bluetooth	
Display	LCD	
Casing Material	Metal Case	

PHYSICAL CHARACTERISTICS

BTR-P-51.2V-102Ah	BTR-P-51.2V-102Ah-R
	
birim:mm	

1) Usable Energy

2) 0.5C

3) 25°C ± 2°

4) 50% SOC (State Of Charge)

5) 75% D.O.D (Depth Of Discharge)

6) 80% EOL (End Of Life)

7) 17% ± 3% SOC (State Of Charge)

* TommaTech GmbH reserves the right to change the specification of product without prior notice.

**For modular lithium battery, the base accessory is available separately upon request.