



**BTR-P-51.2V-280AH**

**Product  
Warranty**

**5  
YEAR**



## V SERIES LFP MODULAR LITHIUM BATTERY - 51.2V 280Ah

TommaTech offers unique solutions in energy storage with its new generation low voltage lithium batteries. With a long lifespan of up to 8000 cycles, TommaTech Lithium Batteries stand out with their high energy density, superior quality, and performance, as well as their functional and environmentally friendly design.



### High Performance

with Next Generation LiFePO4 Battery Technology for Superior Performance



### Active Smart Management System

with effective usage structure through BMS technology with active balancing features.



### Long Lifespan

up to 8000 cycles.



### Innovative Design and Heat Resistant Structure

Aesthetic, compact, and durable metal case design



### Expandable Capacity

up to 16 parallel battery connections.



### Communication

CAN / RS485 / Bluetooth



### IP20-IP65 Protection Class

IP20-IP65 compatible metal enclosure and terminal components



### Sustainable Energy

is an eco-friendly and sustainable energy source thanks to the ability to be charged by solar panels.

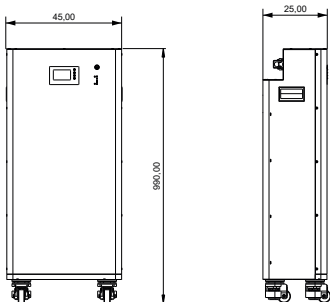
TommaTech Lithium Batteries are uniquely designed with a heat-resistant and high-performance LiFePO4 battery architecture. Additionally, these lithium batteries are equipped with temperature sensors and presented to users in a durable metal casing. Designed with a focus on safety and quality, TommaTech Lithium Batteries utilize a BMS (Battery Management System) with balancing features. The batteries, which feature Al-Cu alloy conductor busbars, allow for up to 16 parallel connections without performance loss. This enables a single system to achieve an energy storage capacity of up to 80 kWh.



## TECHNICAL SPECIFICATIONS

STRESS - CAPACITY		BTR-P-51.2V-280Ah
Nominal Voltage [V]		51.2
Nominal Capacity [Ah]		280
Nominal Energy [Wh]		14336 <sup>1</sup>
Recommended Charging Current [A]		100 <sup>2,3</sup>
Maximum Charge Current [A]		140 <sup>2,3</sup>
Recommended Charging Voltage [V]		56.8
Maximum Charging Voltage [V]		58.4
Recommended Discharge Current [A]		100 <sup>2,3</sup>
Maximum Discharge Current [A]		140 <sup>2,3</sup>
Discharge Cut-off Voltage [V]		44.8±0.2
BATTERY / CELL		
Number of Cycles		8000 <sup>2,3,4,5,6</sup>
Mass Energy Density [Wh / Kg]		165
Volumetric Energy Density [Wh / L]		350
Internal Resistance [mΩ]		<15 <sup>7</sup>
STANDARD		
Overcharge Protection		Yes
Overdischarge Protection		Yes
Overcurrent Protection		Yes
Short Circuit Protection		Yes
Excessive Temperature Protection		Yes
Temperature Sensor		Yes
Adjustable Charge / Discharge Current		Yes
Battery Chemistry		LFP Prismatic
Security		IEC 61960 / 62133-2 / RoHS
Working Conditions		
Charge Temperature [°C]		0 ~ +60
Discharge Temperature [°C]		-20 ~ +60
Storage Temperature [°C]		0 ~ +35
Humidity (Without Condensation)		Maximum %85
Protection Class		IP20-IP65
Planned Product Lifespan [Year]		>15
Warranty Period [Year]		5
OTHER		
Dimensions (WxDxH) [mm]		450x250x990
Weight (Kg)		119±0.5
Battery Connection		IP67 Protected Plus (+) and Minus (-) Connector Cap
Serial Connection		No
Parallel Connection		Yes (Maximum 16 pieces)
Communication		CAN / RS485 / Bluetooth
Screen		LCD
External Cabin		Metal Case

## PHYSICAL PROPERTIES

BTR-P-51.2V-280Ah	
	

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

\*TommaTech GmbH reserves the right to change product specifications without prior notice.

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