

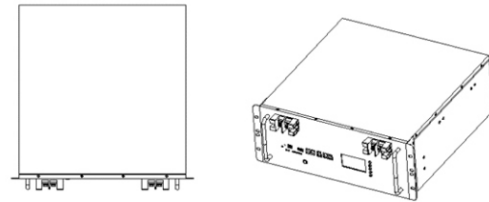
TR51100LFP Lithium LiFePO₄ Battery Pack

XGW TP series lithium ion battery is a powerful LiFePO₄ battery product, has the highest capacity in a standard casing available on the market. The highly sophisticated and integrated BMS with very low self consumption, brings safety, functionality and ease of use together in a lightweight and robust casing. The batteries has been especially designed to provide energy for Residential Energy Storage System, LCD screen, DIP switch could be optional.



Benefits of Lithium

- High capacity, low weight, Increased energy in given space
- Fast charging
- High operational reliability
- Safest lithium LFP technology
- Excellent long life times
- Built-in intelligent BMS to protect the battery pack at any time and prolong its service life
- Maintenance free



Certifications and standards

a. Products

- UL1642(cells)
- FCC
- UN38.3
- IEC62619

b. MS certifications

- ISO9001
- ISO14001
- ISO45001



Specifications

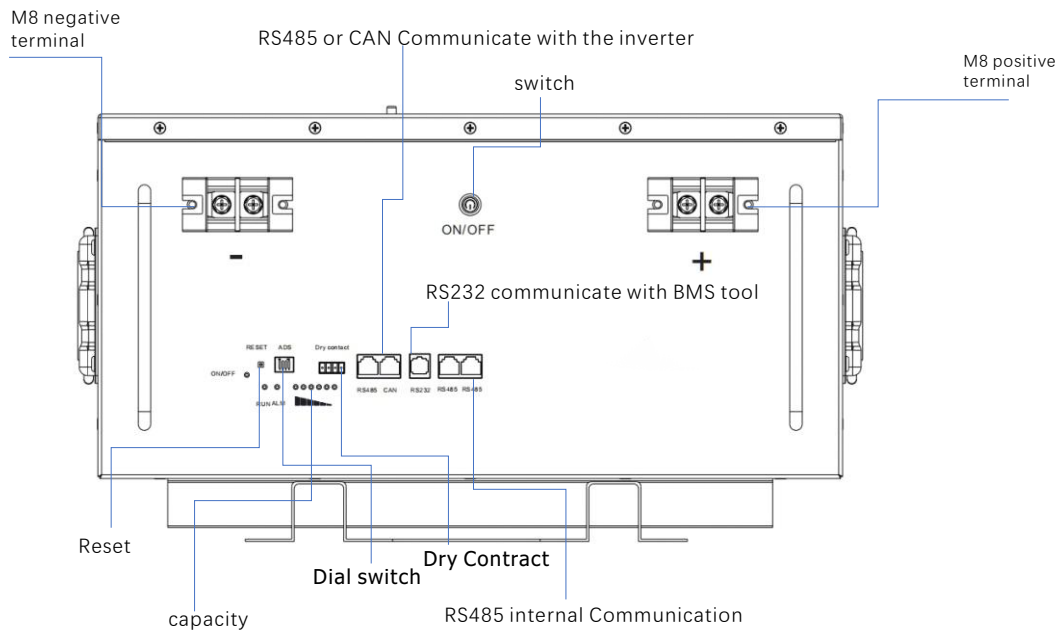
Nominal Characteristic		
Battery model		TP51100LFP
Nominal voltage		51.2V
Typical capacity		100Ah(25℃,0.2C)
Typical energy		5120Wh
Cells type/chemistry		Prismatic-LiFePO ₄
Gravimetic Energy density		106Wh/Kg
Dimensions	Length	450mm
	Width	177mm
	Depth	442mm
Reference Weight		45Kg
Case Material		Steel case with baking finish
Cycle life		>6000 cycles(80% DoD)
Electric Characristics		
Charge method		CC/CV
Charge voltage Range		54.75V
Max.continuous Discharge Current		100A
Max.continuous Charge Current		100A
Charging limit Current		20A
End of Discharge Voltage		43.2V
Operation Environment		
Charge Temperature		0℃~55℃
Discharge Temperature		-20℃~60℃
Storage Temperature		-10℃~50℃
Protection Class		IP54

BMS specifications

ITEM	CONTENT	CRITERION
Voltage	Charging voltage	3.65V/cell
	Balance voltage	3.45V/cell
Current	Max continues charge current	100A
	Max continues discharge current	100A
Over charge Protection	Over charge detection voltage	3.70±0.05V/cell
	Over charge detection delay time	1S
	Over charge release voltage	3.6±0.05V/cell
Over discharge Protection	Over discharge detection voltage	2.7±0.05V/cell
	Over discharge detection delay time	1~3S
	Over discharge release voltage	2.95±0.10V/cell
Over current protection	Over discharge current protection	125A
	Detection delay time1	1000mS
	Over charge current detection current	125A
	Detection delay time	1000mS
Short Circuit Protection	Short Circuit Protection Current	350A, External short circuit
	Detection delay time	300uS
	Release condition	Cut load or charging
Battery temperature	Over-temperature protection	65±5℃
	Release temperature	50±5℃

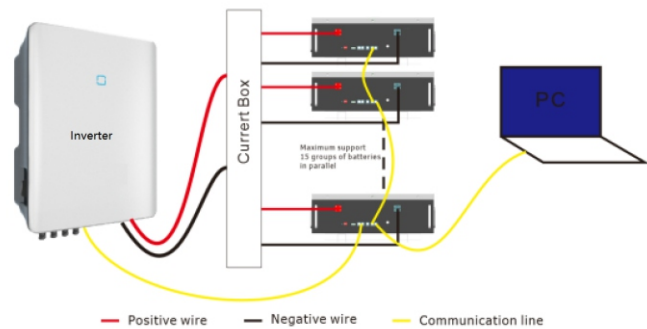


Panel instructions



Parallel Communication

While in parallel communication, dial-up addresses of battery module are 1,2,3,4.....14,15; By this method, we can be allowed to read each data depending on battery module. Any battery other than address 0 can be connected to the host computer; FF polling mode used as consulting mode.



Address Switch function (Only in Parallel)

Note: RS485 communication address can not be 0, the address set by the host computer is required to be the same as the battery communication address, do not have duplicate addresses, otherwise communication may be affected.

