GRANDTECH

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GTHB51150US2P-02
GTHB51160US2P-02
GTHB51180US2P-02

Hybrid Solar Storage Inverter

Efficiency

- Advanced MPPT with up to 99.9% efficiency
- Up to 42A*3 PV input current

Reliable

- Output high-quality pure sine wave AC power
- With IP65 protection degree

Safety

- With software and hardware security protection
- Multiple safety approvals

User-Friendly

- Industrial design with a modern aesthetic look
- Easy to install and simple to use

All-in-One

- Up to 380A charging current
- Supports Li-ion battery BMS communication

Intelligent

- Exclusive Li-ion battery BMS dual activation
- Time-slot function to save cost with peak-valley

MODEL	GTHB51150US2P-02	GTHB51160US2P-02	GTHB51180US2P-02
Rated AC Input/Output Active Power	15000W	16000W	18000W
Max. Peak Power	2 times rated power, 10s		
Max. Apparent Power	16500VA	17600VA	19800VA
Rated Output Voltage	120/240Vac (Split-phase) 120/208Vac (Three-phase)		
Rated Output Current	62.5A	66.7A	75A
Rated Frequency	50/60Hz ±0.3Hz		
Waveform	Pure sine wave		
BATTERY			
Battery Type	Lead-acid battery / Lithium-ion battery / User-defined		
Rated Battery Voltage	48Vdc		
Battery Voltage Range	40Vdc~60Vdc		
Max. Grid/Generator Charging Current	320Adc	340Adc	380Adc
Max. Charging/Discharging Current	320Adc	340Adc	380Adc
PV INPUT			
No. of MPPT Trackers	3		
No. of Strings MPPT Tracker	2+2+2		
Max. PV Access Power	30000W	32000W	36000W
Max. PV Input Power	24000W	25600W	28800W
Max. PV Input Current	42Adc + 42Adc +42Adc		
Max. short-circuit current	63Adc + 63Adc + 63Adc		
PV Start-up Voltage	120Vdc		
Max. PV Open Circuit Voltage	600Vdc / 600Vdc / 600Vdc		
MPPT Operating Voltage Range	120Vdc~500Vdc / 120Vdc~500Vdc/ 120Vdc~500Vdc		
GRID/GENERATOR INPUT			
Rated Input Voltage	120/240Vac (Split-phase) 120/208Vac (Three phase)		
Input Voltage Range	85Vac~140Vac / 170Vac~280Vac		
Input Frequency Range	50/60Hz		
Bypass Overload Current	200Aac		
EFFICIENCY			
MPPT Tracking Efficiency	>99%		
Max. Efficiency	97.6%		
CEC Efficiency	97%		
GENERAL DATA			
Parallel Capacity	1 ~ 9 Units		
Dimension	33.86×18.90×12.32 in	Humidity	0 ~ 100%
Weight	141.67 lbs (64.7 kg)	Cooling Method	Heat sink + intelligent air cooling
Protection Degree	IP65	Warranty	5 years
Temperature	-40~140 °F, >113°F derated	Communication	RS485/CAN/USB/Dry Contact
Noise	<55dB	External Module	Wi-Fi / GPRS（Optional）
Certificate	UL1741&IEEE1547.1-2020, CEC, FCC part 15		
PROTECTION			
PV Reverse Protection	Yes	Anti-Islanding Protection	Yes
Residual-Current Monitoring	Yes	Insulation Resistance Monitoring	Yes
Output Short-Circuit Protection	Yes	Output Over-Current Protection	Yes
Over-Voltage Protection	AC type III/DC type II	Surge Protection	AC type II/DC type II