

PVT8-12K-TR Series

Hybrid Solar Charge Inverter

Full digital voltage and current double closed loop control, advanced SPWM technology, output of pure sine wave, support split-phase and single-phase pure sine wave output.

Main features

Efficient

Dual MPPT with up to 99.9% efficiency.
Up to 22A PV input current perfect for high power modules.

Reliable

Outputs high quality pure sine wave AC power
8-12kW load power to meet the needs of most households

User-friendly

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

Safety

360 degrees of security from hardware to software
EU and North American safety approvals

All-in-one

Solar Charger Controller up to 200A charging current
Support for LiFePO4 battery BMS communication

Intelligent

Exclusive Li-ion battery BMS dual activation
Time-slot function to save cost with peak-valley tariff
It has the function of sectional charge and discharge
(can set the time period for battery charging or discharging).



PROTECTION

Has PV input current limiting protection、PV input over-voltage、PV night reverse current protection、AC input overvoltage protection、AC input under-voltage protection、Battery over-voltage protection、Battery under-voltage Protection、Battery over-current protection、AC output short-circuit protection、Heat sink over-temperature protection、Inverter over-load protection.

Datasheet

| MODEL | PVT8K-48-TR | PVT10K-48-TR | PVT12K-48-TR |
|---------------------------------|---|-----------------|--------------|
| INVERTER OUTPUT | | | |
| Parallel capacity | YES,6 units | | |
| Rated Output Power | 8,000W | 1,0000W | 1,2000W |
| Max. Peak Power | 1,6000W | 2,0000W | 2,4000W |
| Rated Output Voltage | 380/400Vac(three-phase) | | |
| Load Capacity of Motors | 5HP | 6HP | 7HP |
| Rated AC Frequency | 50/60Hz | | |
| Conversion time | 10ms (typical) | | |
| Waveform | Pure Sine Wave | | |
| Output Mode | Off-Grid (default) / Hybrid | | |
| BATTERY | | | |
| Battery Type | LiFePO4 / Lead-Acid / User Defined | | |
| Rated Battery Voltage | 48VDC | | |
| Voltage Range | 40～60Vdc | | |
| Max.PV Charging Current | 180A | 220A | 260A |
| Max.AC Charging Current | 100A | 120A | 120A |
| Max.AC+PV Charging Current | 180A | 220A | 260A |
| PV INPUT | | | |
| Number of MPP Trackers | Dual MPPT | | |
| Max.PV array power | 6000Wx2 | 7500Wx2 | 9000Wx2 |
| Max.input current | 44A (22Ax2) | | |
| Max.Voltage of Open Circuit | 800Vdc | | |
| MPPT Voltage Range | 200～650Vdc | | |
| AC INPUT | | | |
| Input Voltage Range | Phase voltage 170~280V, Line voltage 305~485V | | |
| Frequency Range | 50Hz(47Hz～55Hz); 60Hz(57Hz～65Hz); | | |
| Bypass Overload Current | 63A | 63A | 80A |
| EFFICIENCY | | | |
| MPPT Tracking Efficiency | 99.9% | | |
| Max.Battery Inverter Efficiency | 92% | | |
| COMMUNICATION | | | |
| Embedded Interfaces | RS485 / CAN / USB / Dry contact | | |
| External Modules (Optional) | Wi-Fi / GPRS | | |
| GENERAL | | | |
| Protection Degree | IP20, Indoor Only | | |
| Operating Temperature Range | -15~55℃,>45℃ derating. (5~131°F , >113°F derating.) | | |
| Noise | <60dB | | |
| Cooling Method | Internal Fan | | |
| Dimensions | 652*470.5*142mm (2.14*1.54*0.47ft) | | |
| Net Weight | 26.8kg (59.1lb) | 26.8kg (59.1lb) | — |
| STANDARD | CE | | |