

THREE PHASE HYBRID INVERTER

PD030/40/500G-TPS-EU-A

PRODUCT FEATURE

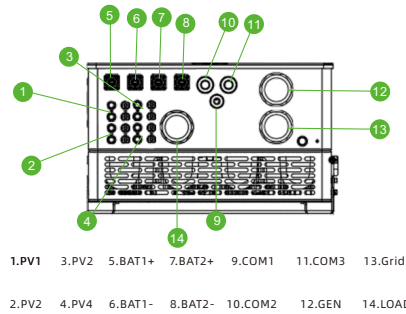
- 100% three-phase unbalanced output, with each phase cap
- AC couple to retrofit existing solar system
- Max. 10 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- Max. charging/discharging current of 100A
- High voltage battery, higher efficiency
- 6 time periods for battery charging/discharging
- Support storing energy from diesel generator



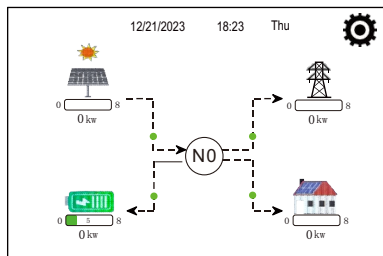
CERTIFICATIONS



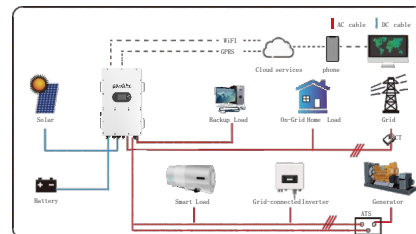
PRODUCT CHARACTERISTICS



LCD DISPLAY ICONS



BASIC SYSTEM ARCHITECTURE



Data sheet

| Model | PD0300G-TPS-EU-A | PD0400G-TPS-EU-A | PD0500G-TPS-EU-A |
|--|--|-------------------|-------------------|
| PV String Input | | | |
| Max. DC Input Power (W) | 39000 | 52000 | 65000 |
| Max. DC Input Voltage (V) | 1000 | | |
| Start-up Voltage (V) | 180 | | |
| MPPT Range (V) | 150-850 | | |
| Full Load MPPT Voltage Range (V) | 360-850 | 360-850 | 450-850 |
| Rated DC Input Voltage (V) | 600 | | |
| PV Input Current (A) | 36+36+36 | 36+36+36+36 | |
| Max. PV Isc (A) | 55+55+55 | 55+55+55+55 | |
| No. of MPP Trackers | 3 | 4 | |
| No. of Strings per MPP Tracker | 2+2+2 | 2+2+2+2 | |
| AC Output | | | |
| Rated AC Output Power (W) | 30000 | 40000 | 50000 |
| Max. AC Output Power (W) | 33000 | 44000 | 55000 |
| AC Output Rated Current (A) | 45.6 | 60.8 | 76.0 |
| Max. AC Output Current (A) | 50.2 | 66.9 | 83.6 |
| Max. Three-phase Unbalanced Output Current (A) | 60 | 70 | 83.3 |
| Max. Continuous AC Passthrough (A) | 200 | | |
| Peak Power (Off Grid) | 1.5 times of rated power, 10 S | | |
| Generator Input/Smart Load/AC Couple Current (A) | 45.5 / 200 / 45.5 | 60.7 / 200 / 60.7 | 75.8 / 200 / 75.8 |
| Power Factor | 0.8 leading - 0.8 lagging | | |
| Output Frequency and Voltage | 50/60Hz; 3L/N/PE 220/380Vac 230/400Vac | | |
| Grid Type | Three Phase | | |
| Total Harmonics Current Distortion (THDI) | <3% (of nominal power) | | |
| DC Current Injection | <0.5% In | | |
| Battery | | | |
| Battery Type | Lithium-Ion | | |
| Battery Voltage Range (V) | 160-800 | | |
| Max. Charging Current (A) | 50+50 | | |
| Max. Discharging Current (A) | 50+50 | | |
| Number of Battery Input | 2 | | |
| Charging Strategy for Li-Ion Battery | Self-adaption to BMS | | |
| Efficiency | | | |
| Max. efficiency | 97.6% | | |
| Euro efficiency | 97.0% | | |
| MPPT efficiency | 99.9% | | |
| Protection | | | |
| Anti-islanding Protection | Yes | | |
| PV String Input Reverse Polarity Protection | Yes | | |
| Insulation Resistor Detection | Yes | | |
| Residual Current Monitoring Unit | Yes | | |
| Output Over Current Protection | Yes | | |
| Output Shorted Protection | Yes | | |
| Surge Protection | Yes | | |
| Arc Fault Circuit Interruption (AFCI optional) | Yes | | |
| Over Voltage Category | DC Type II/AC Type III | | |
| Certifications and Standards | | | |
| Grid Regulation | IEC61727/62116, EN50549-1 | | |
| Safety EMC / Standard | IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2 | | |
| General Data | | | |
| Operating Temperature Range () | -40~60°C, >45°C Derating | | |
| Cooling | Smart Cooling | | |
| Noise (dB) | ≤65 dB | | |
| Communication with BMS | CAN | | |
| Monitoring mode | WIFI, APP | | |
| Weight (kg) | 80 | | |
| Size (WxHxD mm) | 527x894x294 (Excluding Connectors and Brackets) | | |
| Ingress Protection | IP65 | | |
| Installation Style | Wall-mounted | | |
| Warranty | 5 Years (10 Years Optional) | | |