







PSiH12KW3#1000VPVI

Features:



-  Equipped with GEN port, compatible with diesel generators, smart loads, and AC coupling.
-  Color touch screen (4.3/7" optional).
-  Supports battery charge/discharge currents up to 400A.
-  IP66 rated enclosure, designed for both indoor and outdoor deployment in harsh environments.
-  Supports 100% 3-phase unbalanced output on both ports (BACKUP & GRID).
-  110% continuous overload rating at sustained operation.



Technical Specifications

| Technical Data | PSiH12KW3#1000VPVI |
|---|------------------------|
| Input DC (PV side) | |
| Max. PV access power | 24kW |
| Max. PV input power | 20kW |
| Max. PV input voltage | 1000V |
| Nominal input voltage | 600V |
| MPPT working voltage range | 180V-850V |
| Number of independent MPPT/strings per MPPT | 2/1 |
| MPPT max. current | 2*20A |
| Start-up voltage | 200V |
| Output/Input AC (Grid side) | |
| Nominal apparent power | 12kW |
| Max. apparent power | 13.2kVA |
| Nominal voltage | 380V/400V |
| Nominal frequency | 50Hz/60Hz |
| Rated current | 17.4A |
| Max. current | 20A |
| Power factor | -0.8~+0.8 (adjustable) |
| THDi | <3%(Nominal Output) |
| Grid system pattern | 3L+N+PE |
| Max. AC current from utility grid | 60A |
| Output AC (Back-up) | |
| Nominal output power | 12kW |
| Max. output apparent power | 13.2kVA |
| Nominal output voltage | 380V/400V |
| Nominal output frequency | 50Hz/60Hz |
| Output THDV | <3% |
| Automatic switch time | <10ms |
| Battery | |
| Battery type | Li-ion/Lead-acid |
| Battery voltage range | 40V~60V |
| Max.charging/discharging current | 240A |
| Charging strategy for Li-ion battery | Self-adaption to BMS |
| Charging strategy for Lead-acid battery | Three-stage |
| Efficiency | |
| Max. MPPT efficiency | 99.9% |
| Europe efficiency | 97.5% |
| Max. battery to load efficiency | 94.5% |
| Protection | |
| Anti islanding protection | Yes |
| Insulation impedance protection | Yes |
| RCD detection | Yes |
| PV reverse polarity protection | Yes |
| Output over voltage protection | Yes |
| Output over current protection | Yes |
| General Data | |
| Dimensions(L/W/H)in mm | 425/290/710 |
| Weight | 38kg |
| Operation temperature range | -25°C 60°C |
| Heat dissipation mode | Smart cooling |
| IP Class | IP 66 |
| Maximum altitude | 4000m |
| Self-Consumption night | <3W |
| Topology | Transformerless |
| Features | |
| LCD display | Yes |
| Communication interface | WiFi/4G/USB/CAN/RS485 |