

Three-Phase Hybrid Inverter



X3-HYBRID-G4 PRO

4kW / 5kW / 6kW / 8kW
10kW / 12kW / 15kW



Flexible Expansion

- Dual independent battery ports and 2-in-1 function for effortless expansion
- Additional ports for simplified wiring and installation
- Functional and stylish wiring cover
- Microgrid and generator modes for versatile operations



Smart Energy

- V2X ready for smart home energy integration
- Intuitive management with Smart Schedule, Scene, and TOU
- VPP ready, supporting FCAS, 2030.5, and OpenADR.
- Wireless meter compatible for convenient setup



Safe and Reliable

- 10s 200% EPS output with ≤ 10 ms UPS level switch time
- Rapid shutdown function compatible
- SPD- II protection on both DC/AC sides, AFCI optional



Economically Efficient

- 20A DC input per MPPT with 3 trackers
- 200% PV oversizing and 110% AC overloading
- Ultra-wide MPPT range of 110-950V

| INPUT PV | | | | | | | |
|--|--|--------------------|-------|--------------------------|---------------------|-------|----------------------|
| Max. recommended PV array power [Wp] | 8000 | 10000 | 12000 | 16000 | 20000 | 24000 | 30000 |
| Max. input voltage [V]① | 1000 | | | | | | |
| Norminal DC operating voltage [V] | 650 | | | | | | |
| No. of MPP trackers / Strings per MPP tracker | 2 (1 / 1) | | | 3 (1 / 1 / 1) | | | |
| Max. input current (input 1 / input 2 / input 3) [A] | PV1:20 / PV2:20 | | | PV1:20 / PV2:20 / PV3:20 | | | |
| Max. short circuit current (input 1 / input 2 / input 3) [A] | PV1:25 / PV2:25 | | | PV1:25 / PV2:25 / PV3:25 | | | |
| MPPT operating voltage range [V]② | 110-950 | | | | | | |
| Start output voltage [V] | 140 | | | | | | |
| OUTPUT AC (On-Grid) | | | | | | | |
| Norminal AC power [VA] | 4000 | 5000(AS 4777 4999) | 6000 | 8000 | 10000(AS 4777 9999) | 12000 | 15000(AS 4777 14999) |
| Max. apparent AC power [VA] | 4400 | 5500(AS 4777 4999) | 6600 | 8800 | 11000(AS 4777 9999) | 13200 | 16500(AS 4777 14999) |
| Rated grid voltage(AC voltage range) [V] | 3P4W, 400 / 380 | | | | | | |
| Rated grid frequency [Hz] | 50 / 60 | | | | | | |
| Norminal AC current [A] (at 230V) | 5.8 | 7.2 | 8.7 | 11.6 | 14.5 | 17.5 | 21.8 |
| Max. AC current [A] | 6.7 | 8.4 | 10.0 | 13.4 | 16.7 | 20.0 | 25.0 |
| Displacement power factor | ~1 (Adjustable from 0.8 leading to 0.8 lagging) | | | | | | |
| Total harmonic distortion (THDi, rated power) [%] | <3 | | | | | | |
| INPUT AC | | | | | | | |
| Norminal AC power [VA] | 8000 | 10000 | 12000 | 16000 | 20000 | | |
| Norminal AC current [A] | 11.6 | 14.5 | 17.4 | 23.2 | 29.0 | | |
| Max. AC current [A] | 12.2 | 15.2 | 18.2 | 24.3 | 30.4 | | |
| Rated grid voltage (AC voltage range) [V] | 3P4W, 400 / 380 | | | | | | |
| Rated grid frequency [Hz] | 50 / 60 | | | | | | |
| Power factor | ~ 1 (Adjustable from 0.8 leading to 0.8 lagging) | | | | | | |
| BATTERY | | | | | | | |
| Battery voltage range [V] | 130 ~ 800 | | | | | | |
| Recommended battery voltage [V] | 400 | | | | | | |
| Max. charge / discharge current [A]③ | 50 (25 x 2) | | | | | | |
| Communication interfaces | CAN / RS485 | | | | | | |
| EPS OUTPUT (WITH BATTERY) | | | | | | | |
| EPS peak power [W] | <=1.1Pn continuous operation; 1.1Pn-2Pn 10s; >2Pn report error immediately | | | | | | |
| EPS rated power [VA] | 4000 | 5000 | 6000 | 8000 | 10000 | 12000 | 15000 |
| EPS rated voltage [V], Frequency [Hz] | 400 / 230, 50 / 60 | | | | | | |
| EPS rated current[A] | 5.8 | 7.2 | 8.7 | 11.6 | 14.5 | 17.5 | 21.8 |
| Switchover time [ms] | <10 | | | | | | |
| Total harmonic distortion (THDv, linear load) [%] | <3 | | | | | | |
| EFFICIENCY | | | | | | | |
| MPPT efficiency [%] | 99.9 | | | | | | |
| Euro-efficiency [%] | 97.7 | | | | | | |
| Max. efficiency [%] | 98 | | | | | | |
| Rated battery charge efficiency [%] | 98.5 | | | | | | |
| Rated battery discharge efficiency [%] | 97 | | | | | | |
| POWER CONSUMPTION | | | | | | | |
| Internal consumption (night) [W] | <5 | | | | | | |
| STANDARD | | | | | | | |
| Safety | IEC62109-1 / IEC62109-2 | | | | | | |
| EMC | EN 61000-6-1 / EN 61000-6-2 / EN 61000-6-3 | | | | | | |
| Certification | VDE 0126-1-1 A1:2012 / VDE-AR-N 4105 / G98/G99/ AS4777 / EN50549/ CEI 0-21 | | | | | | |
| GENERAL DATA | | | | | | | |
| Protection class | IP66 | | | | | | |
| Operating temperature range [°C] | -35 ~ 60 (derating at +45°C) | | | | | | |
| Relative humidity [%] | 0 ~ 100 (condensing) | | | | | | |
| Altitude [m] | ≤3000 | | | | | | |
| Storage temperature [°C] | -40 ~ + 65 | | | | | | |
| Noise emission (typical) [dBA] | <35 | | | | <45 | | |
| Over voltage category | III(electric supply side), II(PV side) | | | | | | |
| Cooling concept | Nature convection | | | | | Fan | |
| Weight [kg] | 38 | | | | | | |
| Topology | Non-isolated | | | | | | |
| Communication | COM1 (Parallel 1、 Parallel 2、 BMS 1、 BMS 2、 RS485、 Meter/CT); COM2 (DI/DO、 EVC、 DATAHUB、 DRM、 V2X、 Heatpump) | | | | | | |

①The maximum input voltage is the upper limit of the DC voltage. Any higher input DC voltage would probably damage inverter

②Input voltage exceeding the operating voltage range may triggers inverter protection

③If each of the two battery ports is connected to a separate battery, it's 25A per port. If one port is connected to a single battery, it's 30A. If both ports are connected to a single battery using a 2-in-1 splitter cable(sold separately), it's 50A

*V1.0. Information may be subject to modify without notice.