

Single-phase Low-voltage Residential Hybrid Inverter



X1-GENKI

8kW / 10kW / 12kW



Smart Management

- Smart loads management
- Single unit UPS-level switchover time < 8ms
- Global MPP scan for optimal energy harvest*



Assured Reliability

- Battery terminal temperature detection
- IP65 protection degree
- Type II SPD on AC&DC side
- Optional AFCI protection*



High Performance

- 200% PV oversizing and up to 110% AC output
- 200% peak EPS power for 10s*
- Max. 250A charging / discharging current
- Low start-up voltage for longer operation



Flexible Adaptability

- Max. 10pcs parallel for off-grid*
- Generator function for versatile operations
- Max. 32A input per string, optimized for high-power solar panels.

* Feature to be upgraded in the future

X1-GENKI-8K-LV
X1-GENKI-10.0-LV
X1-GENKI-12.0-LV

| DC INPUT | | | |
|--|---|---------------|--------------------|
| Max. PV array power | 16000 Wp | 20000 Wp | 24000 Wp |
| Max. PV input power | 16000 W | 20000 W | 24000 W |
| Max. PV input voltage | 600 V | | |
| Start output voltage | 110 V | | |
| Nominal input voltage | 360 V | | |
| Operating voltage range | 50 ~ 550 V | | |
| MPPT voltage range | 50 ~ 550 V | | |
| No. of MPPT / strings per MPPT | 2 (2 / 2) | 2 (2 / 2) | 3 (2 / 2 / 2) |
| Max. input current | 32 A / 32 A | 32 A / 32 A | 32 A / 32 A / 32 A |
| Max. short circuit current | 40 A / 40 A | 40 A / 40 A | 40 A / 40 A / 40 A |
| BATTERY DATA | | | |
| Battery type | Lithium / Lead-Acid | | |
| Battery voltage range | 40 ~ 60 V | | |
| Nominal battery voltage | 48 V | | |
| Max. charging / discharging current | 190 A | 220 A | 250 A |
| EPS OUTPUT (WITH BATTERY) | | | |
| Nominal output apparent power | 8000 VA | 10000 VA | 12000 VA |
| Peak apparent power | 16000 VA, 10 s | 20000VA, 10 s | 24000VA, 10 s |
| Nominal output current | 34.8 A | 43.5 A | 52.2 A |
| Nominal voltage, frequency | 230 V , 50 / 60 Hz | | |
| Switch time | < 4 ms | | |
| THDv (linear load) | < 2% | | |
| LRA | 125 A | | |
| EFFICIENCY | | | |
| MPPT efficiency | > 99.9% | | |
| Max. efficiency | 97.6% | | |
| Euro. efficiency | 97% | | |
| ENVIRONMENT LIMIT | | | |
| Degree of protection | IP65 | | |
| Operating temperature range | -25 ~ +60°C (derating above +45°C) | | |
| Relative humidity | 4 ~ 100% | | |
| Max. operation altitude | < 3000 m | | |
| Storage temperature | -25 ~ +70°C | | |
| Noise emission (typical) | < 45 dB | | |
| GENERAL | | | |
| Dimensions (WxHxD) | 651 x 462 x 280 mm | | |
| Net weight | 38.5 kg | | |
| Cooling concept | Smart cooling | | |
| Topology | Transformerless for PV side / HF for battery side | | |
| HMI interface / communication interfaces | LED + LCD / CAN, RS485, CT, Meter, USB, NTC, WiFi+Lan | | |
| Warranty [years] | 5 | | |
| STANDARD | | | |
| Safety | EN IEC 62109-1/-2, EN IEC 61683 | | |