

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 on-grid and off-grid*
- Microgrid and 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 IEC62040		