

Three-Phase Hybrid Inverter



X3-HYB-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.