

Single-phase Residential On-grid Inverter



X1-BOOST G4

2.5kW / 3.0kW / 3.3kW / 3.6kW
4.0kW / 4.2kW / 5.0kW / 6.0kW



High Efficiency

- 200% PV oversizing and 16A input to support high-power panels
- 50V start up voltage



Assured Safety

- Type II SPD on AC & DC side
- Ready for rapid shutdown function
- AFCI support (optional)



Intelligent Design

- 10s data refresh on SolaXCloud
- Easy configuration via WiFi & App
- IV curve scan



Flexible Adaptability

- Supports parallel operation for up to 5 inverters, no external EMS required
- Smart loads management (e.g. heat pump, smart EV charger)
- Built-in export power control function

PV INPUT								
Max. recommended PV array power	6.0 kWp	6.0 kWp	6.6 kWp	7.2 kWp	8.0 kWp	8.0 kWp	10.0 kWp	12.0 kWp
Max. PV input voltage ^①	600 V							
Rated PV input voltage	360 V							
Operation voltage range	35 ~ 600 V							
MPPT voltage range ^②	40 ~ 560 V							
Start up voltage	50 V							
No. of MPP trackers / strings per MPP tracker	2 / (1 / 1)							
Max. input current per MPPT	16 A / 16 A							
Max. input short circuit current per MPPT	22 A / 22 A							
AC OUTPUT								
Rated output power	2500 W	3000 W	3300 W	3680 W	4000 W	4200 W	5000 W ^③	6000 W
Rated output current	10.9 A	13.1 A	14.4 A	16.0 A	17.4 A ^④	18.3 A	21.7 A	26.1 A
Max. output apparent power	2750 VA	3300 VA	3630 VA	4048 VA ^⑤	4000 VA	4620 VA	5000 VA ^⑥	6000 VA
Max. output continuous current	12.0 A	14.4 A	15.8 A	17.6 A ^⑦	17.4 A ^⑧	20.1 A	21.7 A ^⑨	27.3 A
Rated AC voltage	1 / N / PE, 220 / 230 / 240 V							
Rated AC frequency	50 Hz / 60 Hz							
AC frequency range ^⑩	50 ± 5 Hz / 60 ± 5 Hz							
Adjustable power factor range	~ 1 (0.8 lagging to 0.8 leading)							
THDi (rated power)	< 3%							
EFFICIENCY								
Max. efficiency	98.0%							
European efficiency	97.0%							
ENVIRONMENT LIMIT								
Ingress protection	IP66							
Operation temperature range	-25 ~ 60°C							
Max. operation altitude	4000 m							
Relative humidity	0 ~ 100% RH (condensing)							
Overvoltage category	Mains: III, PV: II							
GENERAL								
Dimensions (W × H × D)	404 × 274 × 146 mm							
Net weight	11.0 kg						11.5 kg	
Cooling concept	Natural cooling							
Communication interfaces	RS 485, DRM, optional: meter, CT							
Power consumption (night)	< 3 W							
Topology	Non-isolated							
Certifications	IEC/EN 62109-1/-2, IEC61727, EN50549, G98/G99, AS 4777.2, VDE4105, CEI 0-21, VFR, PPDS, TOR							
AC auxiliary power supply (APS)	Optional							
PROTECTION								
Protection	Over / under voltage protection, DC isolation protection, DC reverse-polarity protection, Grid monitoring, DC injection monitoring, Back feed current monitoring, DC reverse-polarity protection							
Active anti-islanding protection	Frequency shift							
Surge protection (DC / AC)	DC: Type II , AC: Type II							
Arc-fault circuit interrupter (AFCI)	Optional							

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

② Input voltage exceeding the MPPT voltage range may trigger inverter protection

③ 5000 W (4600 W for VDE4105, 4999 W for AS4777.2)

④ 17.4 A (16 A For G98) ⑤ 4048 VA (3680VA For G98/G99, TOR and PPDS)

⑥ 5000 VA (4600 VA for VDE4105, 4999 VA for AS4777.2)

⑦ 17.6 A (16 A For G98/G99, TOR and PPDS) ⑧ 17.4 A (16 A For G98) ⑨ 21.7 A (20 A for VDE4105)

⑩ The AC frequency range may vary from different country codes

Single-phase Residential Hybrid Inverter



X1-HYBRID G4

3.0kW / 3.7kW / 5.0kW / 6.0kW / 7.5kW



Smart Management

- VPP ready, ancillary service in power market
- Global MPP scan for optimal energy harvest
- Smart loads management (e.g. heat pump, smart EV charger)
- Intelligent ToU-driven energy management
- CT compatibility with fast load response in just 0.3 seconds



High Performance

- 200% PV oversizing and up to 110% AC output
- Up to 200% PV input
- Up to 97% efficiency in charging and discharging
- Low start-up voltage for longer operation



Assured Reliability

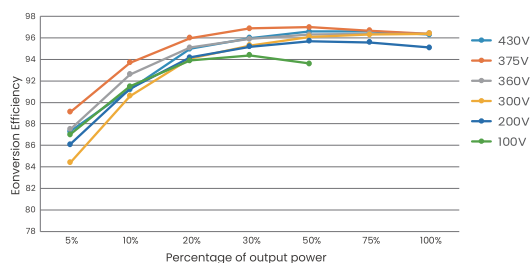
- Up to 150% EPS output for 10s
- UPS-level switchover time <10ms
- IP65 Ingress protection
- Type II SPD on AC&DC side



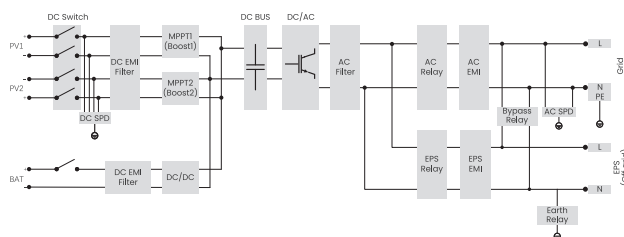
Flexible Adaptability

- Lithium & Lead-acid battery compatible
- Max. 16A DC input current for high power solar panel
- On-grid and off-grid parallel function, up to 15kW

Efficiency Curve



Circuit Diagram



X1-HYBRID-3.0-D
X1-HYBRID-3.7-D
X1-HYBRID-5.0-D
X1-HYBRID-6.0-D
X1-HYBRID-7.5-D

PV INPUT					
Max. recommended PV array power	6.0 kWp	7.4 kWp	10.0 kWp	12.0 kWp	15.0 kWp
Max. PV input voltage ^①	600 V				
Rated PV input voltage	360 V				
Operation voltage range	70 ~ 550 V				
MPPT voltage range ^②	70 ~ 550 V				
Start-up voltage	90 V				
No. of MPP trackers / Strings per MPP tracker	2 (1 / 1)				
Max. input current per MPPT	16 A / 16 A				
Max. input short circuit current per MPPT	20 A / 20 A				
AC INPUT & OUTPUT (ON-GRID)					
Rated output power	3000 W	3680 W	5000 W (Germany 4600 W, AU 4999 W)	6000 W	7500 W
Max. output apparent power	3300 VA	3680 VA	5500 VA (4600 VA for VDE4105, 4999 VA for AS4777)	6600 VA	7500 VA
Max. output continuous current	14.4 A	16.0 A	23.9 A (Germany 20 A, AU 21.7 A)	28.6 A	32.6 A
Rated AC voltage	1 / N / PE, 220 / 230 / 240 V				
Max. AC input apparent power	6300 VA	7360 VA	9200 VA	9200 VA	9200 VA
Max. AC input current	27.4 A	32.0 A	40.0 A	40.0 A	40.0 A
Nominal AC frequency	50 Hz / 60 Hz				
THDi (rated power)	< 2%				
BATTERY					
Battery type	Lithium / Lead - acid				
Battery voltage range	80 ~ 480 V				
Max. charge / discharge current	30 A				
EPS (OFF-GRID) OUTPUT (WITH BATTERY)					
Rated EPS output voltage, frequency	230 V, 50 Hz / 60 Hz				
Rated EPS output power	3000 VA	3680 VA	5000 VA	6000 VA	7500 VA
Peak EPS output power	6000 VA, 10 s	6000 VA, 10 s	7500 VA, 10 s	9000 VA, 10 s	11250 VA, 10 s
Switchover time	< 10 ms				
EFFICIENCY					
Max. efficiency	97.6%				
European efficiency	97.0%				
ENVIRONMENT LIMIT					
Ingress protection	IP65				
Operation temperature range	-35 ~ 60°C (> 45°C derating)				
Max. operation altitude	3000 m				
Relative humidity	4 ~ 100% RH (condensing)				
GENERAL					
Dimensions (W × H × D)	482 × 417 × 181 mm				
Net weight	24 kg				25 kg
Cooling concept	Natural cooling				Smart air cooling
Communication interfaces	CT / Meter (optional), External control RS485, Dongle interface, DRM, NTC (optional)				
Certification	VDE-AR-N 4105, G99, G98, AS/NZS4777, EN50549, CEI 0-21, C10/11 IEC61727, RD1699, NRS 097-2-1, PEA/MEA, VFR2019, PPDS				
PROTECTION					
Protections	Over / under voltage protection, DC isolation protection, DC reverse-polarity protection				
Active anti-islanding method	Frequency shift				
Surge protection	DC: Type II, AC: Type II				
Arc-fault circuit interrupter (AFCI)	Optional				

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

② Input voltage exceeding the MPPT voltage range may trigger inverter protection

Single-phase Residential On-grid Inverter



X1-MINI G4

0.6kW / 0.7kW / 0.8kW / 1.1kW / 1.5kW
2.0kW / 2.5kW / 3.0kW / 3.3kW



High Efficiency

- 200% PV oversizing and 16A input to support high-power panels
- Ultra-Wide MPPT voltage range
- Built-in global MPP scan



Assured Safety

- Type II SPD on AC & DC side
- Ready for rapid shutdown function
- AFCI support (optional)
- IP66 ingress protection



Intelligent Design

- 10s data refresh on SolaXCloud
- IV curve scan



Flexible Adaptability

- Built-in export power control function
- Supports parallel operation for up to 5 inverters, no external EMS required
- Smart loads management (e.g. heat pump, smart EV charger)

PV INPUT									
Max. recommended PV array power	1.2 kWp	1.4 kWp	1.6 kWp	2.2 kWp	3 kWp	4 kWp	5 kWp	6 kWp	6.6 kWp
Max. PV input voltage ^①	450 V						550 V		
Rated PV input voltage	360 V								
Operation voltage range	35 ~ 450 V						35 ~ 550 V		
MPPT voltage range ^②	40 ~ 450 V						40 ~ 550 V		
Start up voltage	50 V								
No. of MPP trackers / strings per MPP tracker	1 / 1								
Max. input current per MPPT	16 A								
Max. input short circuit current per MPPT	22 A								
AC OUTPUT									
Rated output power	600 W	700 W	800 W	1100 W	1500 W	2000 W	2500 W	3000 W	3300 W
Rated output current ^③	2.6 A	3.1 A	3.5 A	4.8 A	6.5 A	8.7 A	10.9 A	13.1 A	14.4 A
Max. output apparent power	600 VA	770 VA	800 VA	1210 VA	1650 VA	2200 VA	2750 VA	3300 VA	3300 VA
Max. output continuous current ^③	3.0 A	3.5 A	3.7 A	5.5 A	7.5 A	10.0 A	12.5 A	15.0 A	15.0 A
Rated AC voltage	1 / N / PE, 220 / 230 / 240 V								
Rated AC frequency	50 Hz / 60 Hz								
AC frequency range ^④	50 ± 5 Hz / 60 ± 5 Hz								
Adjustable power factor range	~ 1 (0.8 lagging to 0.8 leading)								
THDi (rated power)	< 3%								
EFFICIENCY									
Max. efficiency	98.0%								
European efficiency	96.0%				97.0%				
ENVIRONMENT LIMIT									
Ingress protection	IP66								
Operation temperature range	-25 ~ 60°C (> 45°C derating)								
Max. operation altitude	4000 m								
Relative humidity	0 ~ 100% RH (condensing)								
Overvoltage category	Mains: III, PV: II								
GENERAL									
Dimensions (W × H × D)	290 × 206 × 120 mm								
Net weight	5.2 kg						5.5 kg		
Cooling concept	Natural cooling								
Communication interfaces	RS 485, DRM, meter / CT (optional)								
Power consumption (night)	< 1 W								
Topology	Non-isolated								
Certifications	EN / IEC62109-1/ 2, IEC61727, EN50549, G98 G99, AS 4777.2, VDE4105, CEI 0-21, VFR								
AC auxiliary power supply (APS)	Optional								
PROTECTION									
Protection	Over / under voltage protection, DC isolation protection, Grid monitoring, DC injection monitoring, DC reverse-polarity protection, Back feed current monitoring, Residual current detection, Over temperature protection, Monitoring ground fault protection, String fault detection, AC overcurrent protection, AC short-circuit protection								
Active anti-islanding protection	Frequency shift								
Surge protection (DC / AC)	DC: Type II, AC: Type II								
Arc-fault circuit interrupter (AFCI)	Optional								

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

② Input voltage exceeding the MPPT voltage range may trigger inverter protection

③ The two data refer to different grid voltage 220V/230V

④ The AC frequency range may vary from different country codes

Single-phase Residential On-grid Inverter



X1-SMART-G2

5kW / 6kW / 7kW / 8kW

9kW / 10kW



High Efficiency

- 3 MPP trackers for multi-orientation
- Max. 20A PV input current
- 200% PV oversizing & 110% AC overloading
- Built-in global MPP scan



Assured Safety

- Type II SPD on AC&DC side
- Ready for Rapid Shutdown function
- AFCI support (optional)



Intelligent Design

- Plug-and-Play communication terminal
- 10s data refresh interval & 24h consumption monitoring
- I-V Curve diagnosis



Flexible Adaptability

- Supports parallel operation for up to 5 inverters, no external EMS required
- Smart loads management (e.g., heat pump, smart EV charger)

X1-SMT-5K-G2
X1-SMT-6K-G2
X1-SMT-7K-G2
X1-SMT-8K-G2
X1-SMT-9K-G2
X1-SMT-10K-G2

PV INPUT						
Max. recommended PV array power	10 kWp	12 kWp	14 kWp	16 kWp	18 kWp	20 kWp
Max. PV input voltage ^①	600 V					
Nominal PV input voltage	360 V					
Operating voltage range	35 ~ 600 V					
MPPT voltage range ^②	40 ~ 560 V					
Start-up voltage	50 V					
No. of MPP trackers / Strings per MPP tracker	3 / (1 / 1 / 1)					
Max. input current per MPPT	20 A / 20 A / 20 A					
Max. input short circuit current per MPPT	25 A / 25 A / 25 A					
AC OUTPUT						
Rated output power	4999 W	6000 W	7000 W	8000 W	9000 W	9999 W
Rated output current	21.8 A	26.1 A	30.5 A	34.8 A	39.2 A	43.5 A
Max. output apparent power	4999 VA	6600 VA	7700 VA	8800 VA	9900 VA	9999 VA
Max. output continuous current	22.8 A	30.0 A	35.0 A	40.0 A	45.0 A	45.5 A
Nominal AC voltage	1 / N / PE, 220 / 230 / 240 V					
Nominal AC frequency	50 Hz / 60 Hz					
AC frequency range ^③	50 ± 5 Hz / 60 ± 5 Hz					
Adjustable Power Factor range	~ 1 (0.8 lagging to 0.8 leading)					
THDi (Rated power)	< 3%					
EFFICIENCY						
Max. efficiency	98.2%					
European efficiency	97.5%					
ENVIRONMENT LIMIT						
Ingress protection	IP66					
Operating ambient temperature range	-25 ~ 60°C					
Max. operating altitude	4000 m					
Relative humidity	0 ~ 100%RH (condensing)					
Overvoltage Category	Mains: III, PV: II					
GENERAL						
Dimensions (W × H × D)	515 × 370 × 170 mm					
Net weight	19.5 kg					
Cooling concept	Nature cooling					
Communication interfaces	RS485, DRM, CT, Meter, WiFi, LAN, 4G, WiFi+LAN, WiFi+4G					
Power consumption (night)	< 3 W					
Topology	Non-isolated					
Certificates and approvals	IEC/EN 62109-1/-2, AS 4777.2:2020, G99, INMETRO, IEC61727					
PROTECTION						
Protection	Over / under voltage protection, DC isolation protection, DC reverse-polarity protection, Grid monitoring, DC injection monitoring, Back feed current monitoring, Residual current detection, Anti-islanding protection, Over temperature protection, DC reverse-polarity protection					
Active anti-islanding method	Frequency Shift					
Surge protection (DC / AC)	DC: Type II, AC: Type II					
Arc-fault circuit interrupter (AFCI)	Optional					

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

② Input voltage exceeding the MPPT voltage range may trigger inverter protection

③ The AC frequency range may vary from different country codes

Single-phase Residential Hybrid Inverter



X1-VAST

5kW / 6kW / 8kW / 10kW



Smart Management

- V2G/V2H ready for smart home energy integration*
- Smart Schedule, Smart Scene, and 7×24h TOU
- VPP ready with a variety of compatibility(OpenADR, IEEE2030.5, FCAS, API)*
- Wireless meter compatibility
- Support whole-home load without extra devices



High Performance

- 20A DC input per MPPT with 4 trackers
- 200% PV oversizing and high power capacity
- Low PV start-up voltage of 50V



Assured Reliability

- Up to 200% EPS output for 10s
- UPS-level switchover time <10ms
- Type II SPD on AC&DC side
- Optional AFCI protection*

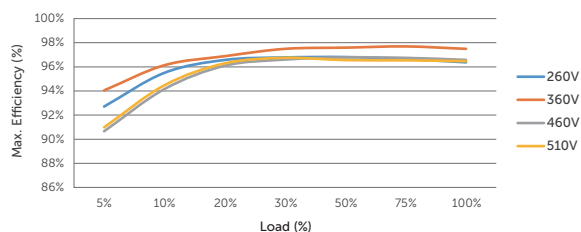


Flexible Adaptability

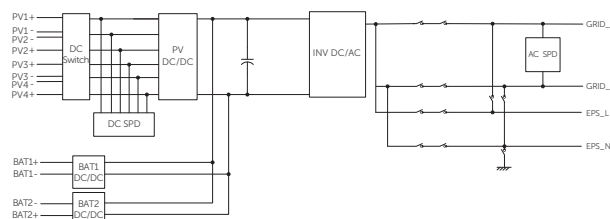
- Dual battery ports & 2-in-1 function for expansion
- Dedicated multi-device connections for streamlined cabling
- Functional and stylish wiring cover
- Microgrid and generator compatible for resilient off-grid solutions

* Feature to be upgraded in the future

Efficiency Curve



Circuit Diagram



X1-VAST-5K
X1-VAST-6K
X1-VAST-8K
X1-VAST-10K

PV INPUT				
Max. recommended PV array power	10 kWp	12 kWp	16 kWp	20 kWp
Max. PV input voltage ^①	600 V			
Nominal PV input voltage	360 V			
Operating voltage range	40 ~ 560 V			
MPPT voltage range ^②	40 ~ 560 V			
Start-up voltage	50 V			
No. of MPP trackers / Strings per MPP tracker	3 / (1 / 1 / 1)		4 / (1 / 1 / 1 / 1)	
Max. input current per MPPT(MPPT1/2/3)	20 A / 20 A / 20 A		20 A / 20 A / 20 A / 20 A	
Max. input short circuit current per MPPT(MPPT1/2/3)	25 A / 25 A / 25 A		25 A / 25 A / 25 A / 25 A	
AC INPUT & OUTPUT(ON-GRID)				
Rated output power	4999 W	6000 W	8000 W	9999 W
Rated output current	21.8 A	26.1 A	34.8 A	43.5 A
Max. output apparent power	4999 VA	6000 VA	8000 VA	9999 VA
Max. output continuous current	21.8 A	26.1 A	34.8 A	43.5 A
Max. AC input apparent power	14500 VA			
Max. AC input current	63 A			
Adjustable Power Factor range	~ 1 (0.8 lagging to 0.8 leading)			
THDi (rated power)	< 2%			
BATTERY				
Battery type	Lithium			
Battery voltage range	80 ~ 480 V			
Max. charge / discharge current ^③	50 A (25 A × 2)			
EPS (OFF-GRID) OUTPUT (WITH BATTERY)				
Rated EPS output voltage, frequency	230 V, 50 Hz / 60 Hz			
Rated EPS output power	5000 VA (4999 VA for Australia)	6000 VA	8000 VA	10000 VA (9999 VA for Australia)
Peak EPS output power	2 times of rated power, 10 s			
Switchover time	< 10 ms			
EFFICIENCY				
Max. efficiency	97.6%			
ENVIRONMENT LIMIT				
Ingress protection	IP66			
Operating ambient temperature range ^④	-35 ~ 60℃			
Max. operating altitude	3000 m			
Relative humidity	4 ~ 100% RH (condensing)			
GENERAL				
Dimensions (W × H × D)	590 × 400 × 180 mm			
Net weight	28 ± 2 kg			
Cooling concept	Nature cooling			
Communication interfaces	CT/Meter (optional), External control RS485, Dongle interfce , DRM			
Topology	Transformerless			
Certificates and approvals	EN / IEC62109 -1 / -2, AS / NZS 4777, G99, EN 50549-10, BR140, IEC61727, IEC 61683, RD1699, NRS 097-2 -1, PEA / MEA, VFR2019			
PROTECTION				
Protections	DC isolation protection, DC reverse-polarity protection, Residual current detection, Over temperature protection			
Active anti-islanding method	Frequency shift			
Surge protection (DC / AC)	DC: Type II, AC: Type II			
Arc-fault circuit interrupter (AFCI)	Optional			

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

② Input voltage exceeding the MPPT voltage range may trigger inverter protection

③ If 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.

④ Derating above +45°C

Three-phase Residential Hybrid Inverter



X3-HYBRID G4

5.0kW / 6.0kW / 8.0kW / 10.0kW /
12.0kW / 15.0kW



Smart Management

- VPP ready, ancillary service in power market
- Global MPP scan for optimal energy harvest
- Smart loads management(e.g. heat pump, smart EV charger)
- Intelligent ToU-driven energy management



Assured Reliability

- Up to 200% EPS overload output for 10 seconds*
- UPS-level switchover time <10ms
- IP65 Ingress protection
- Type II SPD on AC&DC side



High Performance

- 200% PV oversizing and up to 110% AC output
- Up to 97.5% efficiency in charging and discharging
- Up to 200% PV input
- Three-phase unbalanced output: Max. 5kW per phase

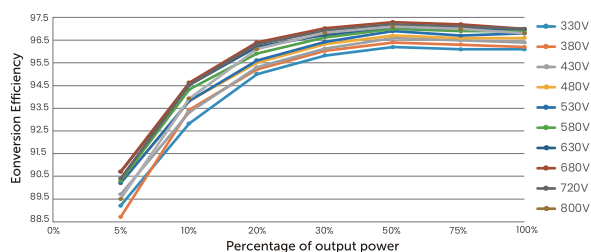


Flexible Adaptability

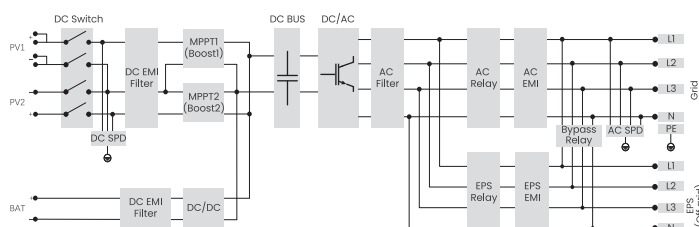
- Lithium & Lead-acid battery compatible
- On-grid and off-grid parallel function, up to 150kW
- Max. 28A input per MPPT, optimized for high-power solar panels.
- Quick configuration via U-disk

**Overload capabilities vary by model. Please refer to the specification page for detailed information*

Efficiency Curve



Circuit Diagram



PV INPUT						
Max. recommended PV array power	10 kWp	12 kWp	16 kWp	20 kWp	24 kWp	30 kWp
Max. PV input voltage ^①	1000 V					
Rated PV input voltage	640 V					
MPPT voltage range ^②	180 ~ 950 V					
Start-up voltage	200 V					
No. of MPP trackers / strings per MPP tracker	2 (1 / 1)		2 (2 / 1)			
Max. input current per MPPT ^③	16 A / 16 A		28 A / 16 A			
Max. input short circuit current per MPPT	20 A / 20 A		35 A / 20 A			
AC INPUT & OUTPUT (ON-GRID)						
Rated output power	5 kW	6 kW	8 kW	10 kW	12 kW	15 kW
Rated output current	7.2 A	8.7 A	11.6 A	14.5 A	17.5 A	21.8 A
Max. output apparent power	5.5 kVA	6.6 kVA	8.8 kVA	11.0 kVA	13.2 kVA	15.0 kVA
Max. output continuous current	8.1 A	9.7 A	12.9 A	16.1 A	19.3 A	24.1 A
Rated AC voltage	3 / N / PE, 220 / 380 V 3 / N / PE, 230 / 400 V					
Max. AC input apparent power	10 kVA	12 kVA	16 kVA	20 kVA	20 kVA	20 kVA
Max. AC input current	16.1 A	19.3 A	25.8 A	32.0 A	32.0 A	32.0 A
Rated AC frequency	50 Hz / 60 Hz					
Adjustable power factor range	~ 1 (0.8 lagging to 0.8 leading)					
THDi (rated power)	< 3%					
BATTERY						
Battery type	Lithium / Lead-acid					
Battery voltage range ^④	120 ~ 800 V					
Max. charge / discharge current	30 A					
EPS (OFF-GRID) OUTPUT (WITH BATTERY)						
Rated EPS output voltage, frequency	230 V / 400 V, 50 Hz / 60 Hz					
Rated EPS output power	5 kVA	6 kVA	8 kVA	10 kVA	12 kVA	15 kVA
Peak EPS output power	12.0 kVA, 10 s	12.0 kVA, 10 s	18.0 kVA, 10 s	18.0 kVA, 10 s	22.5 kVA, 10 s	22.5 kVA, 10 s
Switchover time	< 10 ms					
EFFICIENCY						
Max. efficiency	98.0%					
European efficiency	97.7%					
ENVIRONMENT LIMIT						
Ingress protection	IP65					
Operation temperature range	-35 ~ 60°C (> 45°C derating)					
Max. operation altitude	3000 m					
Relative humidity	4 ~ 100% RH (condensing)					
Overvoltage category	Mains: III, Battery: II, PV: II					
GENERAL						
Dimensions (W × H × D)	503 × 503 × 199 mm					
Net weight	30 ± 1 kg					
Cooling concept	Natural cooling				Smart air cooling	
Communication interfaces	CT / Meter (optional), External control RS485, Pocket WiFi (Optional: Pocket LAN/4G), DRM, NTC (optional)					
Power consumption (night)	< 40 W for standby, < 5 W for idle					
Topology	Non-isolated					
Certifications	EN/IEC62109-1/-2, VDE4105, G99, G98, AS4777, EN50549, CEI 0-21, IEC61727, PEA/MEA, NRS-097-2-1, RD1699, TOR					
PROTECTION						
Protections	DC reverse-polarity protection, DC isolation protection, Residual current detection, AC overcurrent protection, AC short-circuit protection, Over / under voltage protection, Grid monitoring, DC injection monitoring, Back feed current monitoring, Over temperature protection					
Active anti-islanding method	Frequency shift					
Surge protection	DC: Type II, AC: Type II					
Arc-fault circuit interrupter (AFCI)	Optional					

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

② Input voltage exceeding the MPPT voltage range may trigger inverter protection

③ When PV1 is connected to 2 strings, the maximum input current is 28A; when PV1 is connected to 1 string, the maximum input current is 20A

④ Compatible with a minimum of 3 units of HS25/HS36 batteries, but if the total voltage of the 3 batteries is less than 127V and there is no PV input, the system will not be able to startup

Three-phase Residential On-grid Inverter



X3-MIC G2

3.0kW / 4.0kW / 5.0kW / 6.0kW
8.0kW / 10.0kW / 12.0kW / 15.0kW



High Efficiency

- Up to 98.5% efficiency
- 32A per MPP tracker
- 200% DC oversizing & 110% AC overloading output
- Built-in global MPP scan



Assured Safety

- Type II SPD on AC & DC side (optional)
- AFCI support (optional)
- IP66 ingress protection



Intelligent Design

- 24h monitoring (WiFi / LAN / 4G)
- Smart loads management (e.g. heat pump, smart EV charger)



Flexible Adaptability

- Low start up voltage & ultra-wide MPPT range
- Built-in export power control
- Ultra-high power density

	X3-MIC-3K-G2	X3-MIC-4K-G2	X3-MIC-5K-G2	X3-MIC-6K-G2	X3-MIC-8K-G2	X3-MIC-10K-G2	X3-MIC-12K-G2	X3-MIC-15K-G2
PV INPUT								
Max. recommended PV array power	6 kWp	8 kWp	10 kWp	12 kWp	16 kWp	20 kWp	24 kWp	30 kWp
Max. PV input voltage ^①	1000 V							
Rated PV input voltage	640 V							
Operation voltage range	100 ~ 985 V							
MPPT voltage range ^②	120 ~ 980 V							
Start up voltage	150 V							
No. of MPP trackers / strings per MPP tracker	2 / (1 / 1)					2 / (1 / 1) ^③	2 / (2 / 1)	
Max. input current per MPPT	16 A / 16 A					16 A / 16 A ^③	32 A / 16 A	
Max. input short circuit current per MPPT	20 A / 20 A					20 A / 20 A ^③	40 A / 20 A	
AC OUTPUT								
Rated output power	3000 W	4000 W	5000 W	6000 W	8000 W	10000 W	12000 W	15000 W
Rated output current ^⑤	4.6 A	6.1 A	7.6 A	9.1 A	12.2 A	15.2 A	18.2 A	22.7 A
Max. output apparent power	3300 VA	4400 VA	5500 VA	6600 VA	8800 VA	11000 VA	13200 VA	15 000 VA
Max. output continuous current	4.8 A	6.4 A	8.0 A	9.6 A	12.8 A	16.0 A	19.1 A	22.7 A
Rated AC voltage	3 / N / PE, 220 / 380 V 3 / N / PE, 230 / 400 V							
Rated AC frequency	50 Hz / 60 Hz							
AC frequency range ^④	50 ± 5 Hz / 60 ± 5 Hz							
Adjustable power factor range	~ 1 (0.8 lagging to 0.8 leading)							
THDi (rated power)	< 3%							
EFFICIENCY								
Max. efficiency	98.3%							
European efficiency	97.8%							
ENVIRONMENT LIMIT								
Ingress protection	IP66							
Max. operation altitude	4000 m							
Relative humidity	0 ~ 100% RH (condensing)							
Overvoltage category	Mains: III / PV: II							
GENERAL								
Dimensions (W × H × D)	342 × 434 × 144.5 mm				342 × 434 × 156 mm			
Net weight	15.5 kg				17.0 kg	18.0 kg		
Cooling concept	Natural cooling				Smart air cooling			
Communication interfaces	RS485 / DRM, optional: meter							
Power consumption (night)	< 3 W							
Topology	Non-isolated							
Certifications	VDE4105, EN 50549, AS 4777.2, VDE4105, G98/G99, IEC 61727, IEC 62116, IEC 61683, IEC 60068, EN 50530, NB/T 32004 IEC/EN 62109-1, IEC/EN 62109-2							
PROTECTION								
Protections	Over / under voltage protection, DC isolation protection, DC reverse-polarity protection, Grid monitoring, DC injection monitoring, Back feed current monitoring, Residual current detection, Over temperature protection, AC overcurrent protection, AC short-circuit protection							
Active anti-islanding method	Frequency shift							
Surge protection (DC / AC)	Type II / Type II (optional)							
Arc-fault circuit interrupter (AFCI)	Optional							
AC auxiliary power supply (APS)	Optional							

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

② Input voltage exceeding the MPPT voltage range may trigger inverter protection

③ Input 1 is optional with two strings (Max. input current: 32A, Max. short circuit current: 40A)

④ The AC frequency range may vary from different country codes

Three-phase Residential On-grid Inverter



X3-PRO G2

8kW/10kW/12kW/15kW
17kW/20kW/25kW/30kW



High Efficiency

- Up to 98.5% efficiency
- 32A per MPP tracker
- 150% DC oversizing & 110% AC overloading output
- Built-in global MPP scan
- Low start up voltage & ultra-wide MPPT range



Intelligent Design

- IP66 ingress protection
- 24h monitoring (WiFi / LAN / 4G)
- Smart loads management (e.g. heat pump, smart EV charger)



Assured Safety

- Type II SPD on AC & DC side
- AFCI support (optional)*



Flexible Adaptability

- Built-in export power control function
- Ultra-high power density

** Feature to be upgraded in the future*

PV INPUT								
Max. recommended PV array power	12.0 kWp	15.0 kWp	18.0 kWp	22.5 kWp	25.5 kWp	30.0 kWp	37.5 kWp	45.0 kWp
Max. PV input voltage ^①	1100 V							
Rated PV input voltage	650 V							
Operation voltage range	135 ~ 985 V							
MPPT voltage range ^②	160 ~ 980 V							
Start up voltage	200 V							
No. of MPP trackers / strings per MPP tracker	2 / (2 / 2)						3 / (2 / 2 / 2)	
Max. input current per MPPT	32 A							
Max. input short circuit current per MPPT	40 A							
AC OUTPUT								
Rated output power	8 kW	10 kW ^④	12 kW	15 kW ^⑤	17 kW	20 kW	25 kW	30 kW ^⑥
Rated output current	12.2 A	15.2 A	18.2 A	22.8 A	25.8 A	30.3 A	37.9 A	45.5 A
Max. output apparent power	8.8 kVA	11.0 kVA ^④	13.2 kVA	16.5 kVA ^⑤	18.7 kVA	22.0 kVA	27.5 kVA	30.0 kVA ^⑥
Max. output continuous current	13.2 A	16.0 A	19.3 A	24.2 A	27.5 A	33.6 A	41.8 A	45.5 A
Rated AC voltage	3 / N / PE, 220 / 380 V 3 / N / PE, 230 / 400 V							
Rated AC frequency	50 Hz / 60 Hz							
AC frequency range ^③	50 ± 5 Hz / 60 ± 5 Hz							
Adjustable power factor range	~ 1 (0.8 lagging to 0.8 leading)							
THDi (rated power)	< 3%							
EFFICIENCY								
Max. efficiency	98.2%			98.3%			98.5%	
European efficiency	97.7%			97.8%			98.0%	
ENVIRONMENT LIMIT								
Ingress protection	IP66							
Operation temperature range	-30 ~ 60°C							
Max. operation altitude	4000 m							
Relative humidity	0 ~ 100 % RH (condensing)							
Overvoltage category	Mains: III / PV: II							
GENERAL								
Dimensions (W × H × D)	482 × 417 × 186 mm							
Net weight	24.5 kg			26.0 kg			28.0 kg	
Cooling concept	Natural cooling			Smart air cooling				
Communication interfaces	RS 485 / DRM, optional: meter							
Power consumption (night)	< 3 W							
Topology	Non-isolated							
Certifications	VDE4105, EN 50549, AS 4777.2, IEC 61727, IEC 62116, IEC 61683, IEC 60068, EN 50530, NB/T 32004, IEC/EN 62109-1, IEC/EN 62109-2							
AC auxiliary power supply (APS)	Optional							
PROTECTION								
Protections	Over / under voltage protection, DC isolation protection, DC reverse-polarity protection, Grid monitoring, DC injection monitoring, Back feed current monitoring, Residual current detection, Over temperature protection, AC overcurrent protection, AC short-circuit protection							
Active anti-islanding method	Frequency shift							
Surge protection (DC / AC)	DC: Type II, AC: Type II							
Arc-fault circuit interrupter (AFCI)	Optional							

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

② Input voltage exceeding the MPPT voltage range may trigger inverter protection

③ The AC frequency range may vary from different country codes

④ 9999 W / VA for AS4777.2

⑤ 14999 W / VA for AS4777.2

⑥ 29999 W / VA for AS4777.2

TRIPLE POWER

- Safest LiFePO₄ battery
- 90% DOD
- Cycle life > 6000 times
- IP55 protection level
- Floor or wall mounting
- Less self consumption
- Quick installation
- No toxic heavy metals or caustic materials



TRIPLE
POWER

Global: +86 571-56260011

Email: info@triple-power.com

T-BAT SYS-HV Configuration List

T-BAT H 5.8

Nominal Voltage [V]	115.2
Operating Voltage [V]	100-131
Battery Type	Li-on (LFP)
Nominal Capacity [kWh]	5.8
Faradic Charge Efficiency [%]	99
Battery Roundtrip Efficiency [%]	95
Standard Power [kW]	2.9
Max Power [kW]	4.0
Recommend Charge/Discharge Current [A]	25
Max Charge/Discharge Current [A]	35
Cycle Life [90% DOD]	>6000 Cycles
Warranty [Year]	10
Available Operating Temperature Range [°C]	0 to 55
Full-load Operating Temperature Range [°C]	5 to 48
Humidity [%]	4 to 100 (condensing)
Altitude [m]	Below 2000
Protection	IP55
System to Inverter	CAN2.0
Battery to Battery/BMS	RS485
Data Collection Port /FW UPDATE	CAN2.0
Master Control Working Mode Indicator	1 LED
Master Control Capacity Indicator	4LED (25%, 50%, 75%, 100%)
Battery Module LED	2 LED
Reset	Button
Switch ON/OFF	Button*1 + breaker*1
Safety	CE, RCM, TUV(IEC62619) UL1973,ROHS,REACH
UN Number	UN3840
Hazardous Materials Classification	Class 9
Transport Testing Requirement	UN38.3
Dimensions(LxWxH) [mm]	474*193*708 (T-BAT H 5.8) / 474*193*647 (HV11550)
Weight [kg]	72.2 (T-BAT H 5.8) / 68.5 (HV11550)

**The Triple Power battery could be scalable up to 4 modules, for a total of 23.2kWh.*