

# Micro-inverter



## A1-Micro 1 in 1

300W / 400W / 450W / 500W / 600W

Introducing the SolaX A1-Micro series – the apex of microinverter technology. With an exceptional capacity of up to 600 VA, these leading 1-in-1 microinverters provide unrivaled power efficiency and dependability.

Engineered for high-power modules, the A1-Micro series boasts advanced MPPT technology, managing substantial input currents and exceptional output power. Integrated PLC communication ensures seamless monitoring and control.

Ideal for both residential and commercial solar applications, the A1-Micro series offers cost-effective solutions and integrates effortlessly with the SolaX Hybrid system and AC coupled systems.



### High Efficiency

- Max. 600VA output power
- Max. 20A DC input current
- Single MPPT for optimal energy harvest



### Assured Safety

- Built-in Rapid Shutdown compliant
- Safety protection relay integrated
- IP67 protection degree



### Intelligent Design

- Reactive power control
- Faster installation with plug and play cables and connectors
- Complies with advanced grid support and voltage/frequency ride-through requirements for enhanced stability
- Industrial-grade PLC module for stable data transmission and easier wiring

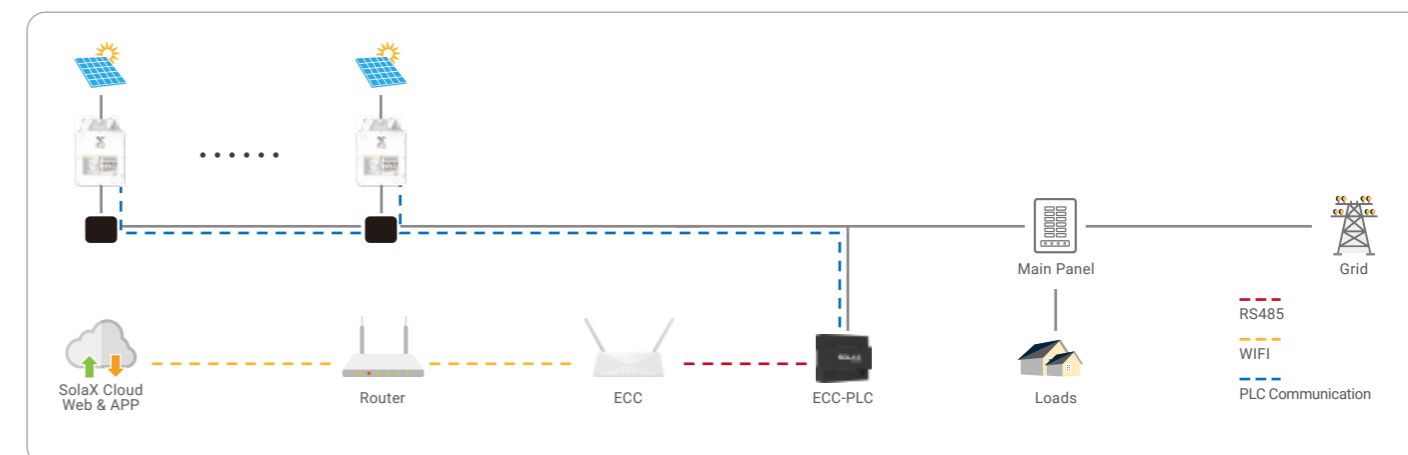


### Flexible Adaptability

- Support Zero Export Control
- Easy and flexible expansion of system capacity
- Support 1-phase microinverter integration into 3-phase power grids\*

	A1-Micro 300P	A1-Micro 400P	A1-Micro 450P	A1-Micro 500P	A1-Micro 600P
<b>DC INPUT</b>					
Commonly used module power per input	240 ~ 410+ W	320 ~ 550+ W	360 ~ 600+ W	400 ~ 670+ W	400 ~ 670+ W
Max. PV input voltage	60 V				
MPPT voltage range	22 ~ 60 V				
Start-up voltage	20 V				
Max. PV input current	12 A	15 A	16 A	18 A	20 A
Max. input short circuit current I <sub>sc</sub>	20 A	20 A	25 A	25 A	25 A
No. of MPP trackers	1				
Strings per MPP tracker	1				
<b>AC OUTPUT</b>					
Rated AC output power	300 VA	400 VA	450 VA	500 VA	600 VA
Maximum continuous output power	300 VA	400 VA	450 VA	500 VA	600 VA
Maximum continuous output current	1.25 A	1.67 A	1.88 A	2.09 A	2.50 A
Rated grid voltage / range	240 / 211 ~ 264 V				
Nominal AC frequency / range [Hz]	60 / 60 ± 5 Hz				
Maximum units per 10AWG branch* 40A / 30°C	22	19	17	15	13
Maximum units per 12AWG branch* 30A / 30°C	17	14	13	11	9
Power Factor range	~ 1 (0.8 lagging to 0.8 leading)				
THDi (rated power)	< 3%				
<b>EFFICIENCY</b>					
Peak efficiency	96.50%				
CEC efficiency	96.00%				
Nominal MPPT efficiency	99.50%				
Night power consumption	< 40 mW				
<b>STANDARD</b>					
Safety	UL 1741, UL 1699B, CSA C22.2 No.107.1-16, CSA - C22.2 No. 292-18				
EMC	FCC Part 15 Class B				
Grid connection standard	UL 1741 SB, IEEE 1547, Rule 21, Rule 14H				
PV Rapid Shutdown	Conforms with NEC-2017 and NEC-2020 Article 690.12				
<b>ENVIRONMENT LIMIT</b>					
Ingress protection rating	Type 6				
Operating ambient temperature range	-40 ~ 70°C				
Humidity	0 ~ 100% RH (condensing)				
Storage temperature	-40 ~ 70°C				
<b>GENERAL</b>					
Dimensions (W x H x D)	206 x 178 x 34 mm				
Weight	2.5 kg				
Cooling concept	Natural convection				
Communication	PLC				
Monitoring	SolaX Cloud				

### Communication Diagram



# Micro-inverter



## X1-Micro 2 in 1

750W / 800W / 900W / 1000W / 1200W



### High Efficiency

- Max. 1200VA output power
- Max. 20A DC input current
- Two MPPT channels, small size, light weight



### Assured Safety

- Built-in Rapid Shutdown compliant
- Safety protection relay integrated
- IP67 protection degree



### Intelligent Design

- Reactive power control
- Built-in industrial grade Wi-Fi module
- Easy to install and maintain



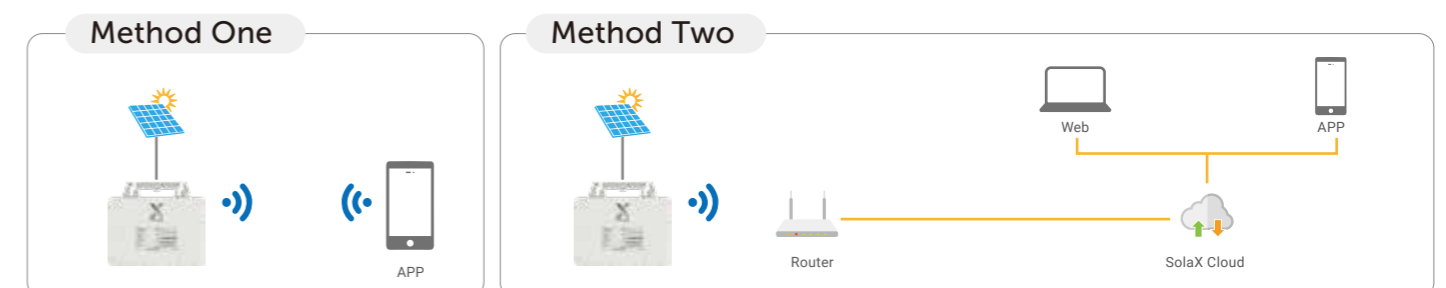
### Flexible Adaptability

- Easy and flexible expansion of system capacity
- Support AC coupling solution
- Support 1-phase microinverter integration into 3-phase power grids\*

	X1-Micro 750	X1-Micro 800	X1-Micro 900	X1-Micro 1000	X1-Micro 1200
<b>DC INPUT</b>					
Commonly used module power per input	240 ~ 470+ W	320 ~ 540+ W	360 ~ 600+ W	360 ~ 600+ W	400 ~ 670+ W
Max. PV input voltage	60 V				
MPPT voltage range	22 ~ 60 V				
Start-up voltage	22 V				
Max. PV input current	2 × 15 A		2 × 16 A		2 × 20 A
Max. input short circuit current I <sub>sc</sub>	2 × 20 A		2 × 25 A		2 × 25 A
No. of MPPT trackers	2				
Strings per MPPT tracker	1				
<b>AC OUTPUT</b>					
Rated AC output power	750 VA	800 VA	900 VA	1000 VA	1200 VA
Maximum continuous output power	750 VA	800 VA	900 VA	1000 VA	1200 VA
Maximum continuous output current	3.41 A @220 V 3.26 A @230 V 3.13 A @240 V	3.64 A @220 V 3.48 A @230 V 3.34 A @240 V	4.10 A @220 V 3.92 A @230 V 3.75 A @240 V	4.55 A @220 V 4.35 A @230 V 4.17 A @240 V	5.46 A @220 V 5.22 A @230 V 5.00 A @240 V
Rated grid voltage/range	1 / N / PE, 220 / 230 / 240 V				
Nominal AC voltage range	180 ~ 264 V				
Nominal AC frequency	50 Hz / 60 Hz				
AC frequency / range	50 ± 5 Hz / 60 ± 5 Hz				
Maximum units per 10AWG branch*	8 @220 V 8 @230 V 8 @240 V	7 @220 V 8 @230 V 8 @240 V	6 @220 V 7 @230 V 7 @240 V	6 @220 V 6 @230 V 6 @240 V	5 @220 V 5 @230 V 5 @240 V
Maximum units per 12AWG branch*	6 @220 V 6 @230 V 6 @240 V	5 @220 V 5 @230 V 6 @240 V	5 @220 V 5 @230 V 5 @240 V	4 @220 V 5 @230 V 5 @240 V	3 @220 V 4 @230 V 4 @240 V
Power Factor range	~ 1 (0.8 lagging to 0.8 leading)				
THDi (Rated power)	< 3%				
<b>EFFICIENCY</b>					
Max. efficiency	96.50%				
Nominal MPPT efficiency	99.90%				
Night power consumption	< 40 mW				
<b>STANDARD</b>					
Safety	IEC62109-1/-2, IEC63027				
EMC	IEC62920:2017, IEC61000-6-1-2-3-4, IEC61000-3-2, IEC61000-3-3, EN 301489, EN 55011				
Grid connection standard	IEC 61727, IEC 62116, EN 50549-1:2019, ORDINANCE No. 140, ORDINANCE NO. 515, G98, VDE4105, C10/11				
Radio	2014/53/EU (RED), EN 300 328, EN IEC 62311				
<b>ENVIRONMENT LIMIT</b>					
Ingress protection rating	IP67				
Operating ambient temperature range	-40 ~ 65°C				
Humidity	0 ~ 100% RH (condensing)				
Storage temperature	-40 ~ 65°C				
<b>GENERAL</b>					
Dimensions (W x H x D)	260 × 212 × 40 mm				
Weight	4.1 kg				
Cooling concept	Natural convection				
Communication	Built-in Wi-Fi				
Monitoring	SolaX Cloud				

\* Refer to local requirements for exact number of microinverters per branch

### Communication Diagram



# Micro-inverter



## X1-Micro 4 in 1

1300W / 1500W / 1600W / 1800W  
2000W / 2200W



### High Efficiency

- Max. 2200VA output power
- Max. 20A DC input current
- Four MPPT channels, small size, light weight



### Assured Safety

- Built-in Rapid Shutdown compliant
- Safety protection relay integrated
- IP67 protection degree



### Intelligent Design

- Reactive power control
- Built-in industrial grade Wi-Fi module
- Easy to install and maintain



### Flexible Adaptability

- Easy and flexible expansion of system capacity
- Support AC coupling solution
- Support 1-phase microinverter integration into 3-phase power grids\*



	X1-Micro 1300	X1-Micro 1500	X1-Micro 1600	X1-Micro 1800	X1-Micro 2000	X1-Micro 2200
<b>DC INPUT</b>						
Commonly used module power per input	300 ~ 505+ W	320 ~ 540+ W	360 ~ 600+ W	400 ~ 600+ W	400 ~ 670+ W	400 ~ 670+ W
Max. PV input voltage	60 V					
MPPT voltage range	22 ~ 60 V					
Start-up voltage	20 V					
Max. PV input current	4 × 12 A	4 × 14 A	4 × 15 A	4 × 16 A	4 × 18 A	4 × 19.5 A
Max. input short circuit current	4 × 20 A	4 × 20 A	4 × 25 A	4 × 25 A	4 × 25 A	4 × 25 A
No. of MPP trackers	4					
Strings per MPP tracker	1					
<b>AC OUTPUT</b>						
Rated AC output power	1300 VA	1500 VA	1600 VA	1800 VA	2000 VA	2200 VA
Maximum continuous output power	1300 VA	1500 VA	1600 VA	1800 VA	2000 VA	2200 VA
Maximum continuous output current	5.91 A @220 V 5.66 A @230 V 5.42 A @240 V	6.82 A @220 V 6.53 A @230 V 6.25 A @240 V	7.28 A @220 V 6.96 A @230 V 6.67 A @240 V	8.19 A @220 V 7.83 A @230 V 7.50 A @240 V	9.10 A @220 V 8.70 A @230 V 8.34 A @240 V	10.00 A @220 V 9.57 A @230 V 9.17 A @240 V
Rated grid voltage/range	1 / N / PE, 220 / 230 / 240 V					
Nominal AC voltage range	180 ~ 264 V					
Nominal AC frequency	50 Hz / 60 Hz					
AC frequency / range	50 ± 5 Hz / 60 ± 5 Hz					
Maximum units per 10AWG branch*	4@220 V 4@230 V 5@240 V	4@220 V 4@230 V 4@240 V	4@220 V 4@230 V 4@240 V	3@220 V 3@230 V 3@240 V	3@220 V 3@230 V 3@240 V	3@220 V 3@230 V 3@240 V
Maximum units per 12AWG branch*	3@220 V 3@230 V 4@240 V	3@220 V 3@230 V 3@240 V	3@220 V 3@230 V 3@240 V	2@220 V 2@230 V 3@240 V	2@220 V 2@230 V 2@240 V	2@220 V 2@230 V 2@240 V
Power Factor range	~ 1 (0.8 lagging to 0.8 leading)					
THDi (Rated power)	< 3%					
<b>EFFICIENCY</b>						
Max. efficiency	96.50%					
Nominal MPPT efficiency	99.50%					
Night power consumption	< 40 mW					
<b>STANDARD</b>						
Safety	IEC62109					
EMC	IEC 61000, EN 62920, EN 301489, EN 55011					
Grid connection standard	IEC 61727, IEC 62116, EN 50549, VDE 4105, UNE217001, UNE217002, RD244/647, NTS Version 2.1 TYPE A, INMETRO, PEA/MEA					
<b>ENVIRONMENT LIMIT</b>						
Ingress protection rating	IP67					
Operating ambient temperature range	-40 ~ 65°C					
Humidity	0 ~ 100% RH (condensing)					
Storage temperature	-40 ~ 65°C					
<b>GENERAL</b>						
Dimensions (W x H x D)	322 x 242 x 48.5 mm					
Weight	6.2 kg					
Cooling concept	Natural convection					
Communication	Built-in Wi-Fi					
Monitoring	SolaX Cloud					

\* Refer to local requirements for exact number of microinverters per branch

### Communication Diagram

