

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*

* Feature to be upgraded in the future

A1-Micro 300P
A1-Micro 400P
A1-Micro 450P
A1-Micro 500P
A1-Micro 600P

DC INPUT					
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 _{sc}	20 A	20 A	25 A	25 A	25 A
No. of MPP trackers	1				
Strings per MPP tracker	1				
AC OUTPUT					
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%				
EFFICIENCY					
Peak efficiency	96.50%				
CEC efficiency	96.00%				
Nominal MPPT efficiency	99.50%				
Night power consumption	< 40 mW				
STANDARD					
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				
ENVIRONMENT LIMIT					
Ingress protection rating	Type 6				
Operating ambient temperature range	-40 ~ 70°C				
Humidity	0 ~ 100% RH (condensing)				
Storage temperature	-40 ~ 70°C				
GENERAL					
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

