

A1-Micro 1 in 1

300 W / 400 W / 450 W / 500 W / 600 W User Manual

Version 0.0

www.solaxpower.com



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About This Manual

Scope of Validity

This manual is an integral part of A1-Micro 1 in 1 Series. It describes the installation, electrical connection, commissioning, maintenance and troubleshooting of the product. Please read it carefully before operating.

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

Note:

"A1-Micro" Series refers to the single-phase isolated microinverter that can convert direct current to alternating current.

"300P" refers to rated power 300 W."400P" refers to rated power 300 W.

"450P" refers to rated power 300 W. "500P" refers to rated power 300 W.

"600P" refers to rated power 300 W.

Target Group

The installation, maintenance and grid-related setting can only be performed by qualified personnel who

- Are licensed and/or satisfy state and local jurisdiction regulations.
- Have good knowledge of this manual and other related documents.

Conventions

The symbols that may be found in this manual are defined as follows.

Symbol	Description
⚠ DANGER	Indicates a hazardous situation which, if not avoided, will result in death or serious injury.
MARNING	Indicates a hazardous situation which, if not avoided, could result in death or serious injury.
CAUTION!	Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.
NOTICE!	Provides tips for the optimal operation of the product.

Radio Interference Statement

This equipment has been tested and found to comply with the requirements of CE EMC, which means that it will not be affected by electromagnetic interference. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Change History

Version 00 (2024-05-17)

Initial release

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1 Safety

1.1 General Safety

This series microinverter has been meticulously designed and thoroughly tested to comply with the relevant state and international safety standards. Nevertheless, like all electrical and electronic equipment, safety precautions must be observed and followed during the installation of the microinverter to minimize the risk of personal injury and ensure a safe installation.

Please thoroughly read, comprehend, and strictly adhere to the comprehensive instructions provided in the user manual and any other relevant regulations prior to the installation of the microinverter. The safety instructions in this document serve as supplementary guidelines to local laws and regulations.

SolaX shall not be liable for any consequences resulting from the violation of the storage, transportation, installation, and operation regulations outlined in this document. Such consequences include, but are not limited to:

- Inverter damage caused by force majeure events, such as earthquakes, floods, thunderstorms, lightning, fire hazards, volcanic eruptions, and similar events.
- Inverter damage due to human causes.
- Usage or operation of the microinverter in violation of local policies or regulations.
- Failure to comply with the operation instructions and safety precautions provided with the product and in this document.
- Improper installation or usage of the microinverter in unsuitable environmental or electrical conditions.
- Unauthorized modifications to the product or software.
- Inverter damage occurring during transportation by the customer.
- Storage conditions that do not meet the requirements specified in this document.
- Installation and commissioning performed by unauthorized personnel who lack the necessary licenses or do not comply with state and local regulations.

! WARNING!

• These servicing instructions are for use by qualified personnel only. To reduce the risk ofelectric shock, do not perform any servicing other than that specified in the operating instructions unlessyou are qualified to do so.

1.2 Safety Instructions

Save these important safety instructions. Failure to follow these safety instructions may result in damage to the microinverter and injury or even loss of life.

A1-Micro 1 in 1 series micromicroinverter is designed and tested to meet all applicable North

American and International safety standards. However, like all electrical and electronic equipment, safety precautions must be observed and followed during installation and operation of the A1-Micro 1 in 1 series microinverter to reduce the risk of personal injury and to ensure a safe installation. Installation, commissioning, service, and maintenance of A1-Micro 1 in 1 series microinverter must only be performed by authorized personnel that are licensed and/or satisfy state and local jurisdiction regulations.

Before starting installation or commissioning, read the entire manual carefully to ensure correct and safe installation or commissioning. All US electrical installations must comply and be in accordance with all the state, local, utility regulations, and National Electrical Code ANSI/NFPA 70.

/!\ DANGER!

• Danger to life due to high voltages in the microinverter! Before connecting the product to the electrical utility grid, contact the local utility company. Children should be supervised to ensure that they do not play with the appliance.

/ WARNING!

 This document does not replace and is not intended to replace any local, state, provincial, including without limitation applicable in the jurisdiction of installation.
 SolaX assumes no responsibility for the compliance or non-compliance with such laws or codes in connection with the installation of the product.

∕!\ WARNING!

• Do not operate the microinverter when the device is running.



· Risk of electric shock!

! WARNING!

• When handling battery, adhere to all manufacturer safety instructions!

! WARNING!

• Only accessories shipped with the microinverter are recommended for use. Using other accessories may result in a fire or injury to the user.

∕!\ WARNING!

Do not disassemble any parts of the microinverter which are not mentioned in the
installation guide. It contains no user-serviceable parts. See warranty for instructions
on obtaining service. Attempting to service the microinverter yourself may result in a
risk of electric shock or fire and will void your warranty.

∕!\ WARNING!

- The microinverter input and output circuits are isolated from the enclosure. This
 system does not include an isolation transformer and should be installed with an
 ungrounded PV array in accordance with the requirements of ANSI/NFPA 70, NEC
 690.41.
- Equipment grounding is the responsibility of the installer and must be performed in accordance with all applicable Local and National Codes.

! WARNING!

 Before operating the microinverter, ensure that the microinverter is grounded properly. This product must be connected to a grounded, metal, permanent wiring system, or an equipment-grounding conductor must be run with the circuit conductors and connected to the equipment grounding terminal or lead on the product.

MARNING!

 When a ground fault is indicated, normally grounded conductors may be ungrounded and energized or normally ungrounded conductors may be grounded.

! WARNING!

- Keep away from flammable and explosive materials to avoid fire.
- Do not install or store the system in a corrosive environment where it may be exposed to ammonia, corrosive gases, acids, or salts (e.g.: chemical plant, fertilizer storage areas, tanneries, near volcanic ash eruption).

! WARNING!

 Neither touch the positive nor the negative pole of the PV connecting device. Never touch both poles at the same time.

! WARNING!

• The input and output circuits are isolated from the enclosure and that system grounding, when required by Sections 690.41, 690.42, and 690.43 of the National Electric Code, ANSI/NFPA 70, is the responsibility of the installer.

∕!\ WARNING!

 This unit is not provided with a GFDI device. This inverter or chargecontroller must be used with an external GFDI device as required by the Article 690 of the National Electrical Code for the installation location.

/ CAUTION

• A1-Micro 1 in 1 series microinverter only supports a certain type of lithium-ion battery! (Manufacturer certified battery)

!\ CAUTION!

- Possible damage to health as a result of the effects of radiation!
- Do not stay closer than 7.87 in/20 cm to microinverter for a long time.

!\ CAUTION!

- Danger of burn injuries due to hot enclosure parts!
- During operation, the enclosure may become hot.

/!\ CAUTION!

- Risk of electric shock from energy stored in the capacitor.
- Never operate on the microinverter couplers, the Mains cables, battery cables and PV cables when power is applied. After switching off the PV, battery and Mains, always wait for 5 minutes to fully discharge the intermediate circuit capacitors before unplugging DC, battery and Mains couplers.

! CAUTION!

 The unit contains capacitors that remain charged to a potentially lethal voltage after the MAINS, battery and PV supply have been disconnected. Hazardous voltage will be present for up to 5 minutes after disconnection from the power supply.

! CAUTION!

• Use insulated tools when installing the device. Individual protective tools must be worn during installation, electrical connection and maintenance.

!\ CAUTION!

When accessing the internal circuit of the microinverter, it is very important to wait 5
minutes before operating the power circuit or demounting the electrolyte capacitors
inside the device. Do not open the device beforehand since the capacitors require
time to sufficiently discharge!

NOTICE!

• The microinverter is heavy. Use of lift equipment is recommended.

NOTICE!

• Make sure that existing wiring is in good condition and that wire is not undersized.

NOTICE

 Measure the voltage between terminals UDC+ and UDC- with a multi-meter (impedance at least 1Mohm) to ensure that the device is discharged before working (35VDC) inside the device.

NOTICE!

 Wiring methods in accordance with the National Electrical Code, ANSI/NFPA 70 are to be used.

NOTICE

• The input or output leads or AC output paralleling cable assembly or trunk cable supplied with this device has fine stranded, flexible conductors and if unterminated or if any factory-installed connectors have been removed, shall only be terminated using connections that have been rated for use with such conductors.

NOTICE

 GFDI is installed outside the microinverter and connected between the DC input negative terminal and the PE terminal to achieve negative grounding of the photovoltaic module

NOTICE

 Overcurrent protection for the ac output circuit is to be provided by the user, installer and agent and installed on the end of the bus in the distributor box.

2 Product Overview

2.1 Microinverter System Description

A microinverter system is composed of PV grid-connnected microinverters, PV modules, and grid. Microinverter data are transmitted to SolaX monitoring platform SolaXCloud.

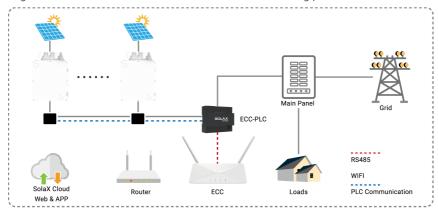


Figure 2-1 System overview diagram

A1-Micro 1 in 1 series

The A1-Micro 1 in 1 series manages system energy. Microinverters convert the direct current power generated from the PV modules into grid-compatible AC current. They send their operation data and the output information of PV modules to the monitoring platform, including PV voltage, current, power, etc., which is the foundation of the module-level monitoring.

Microinverters are divided into 1 in 1, 2 in 1, 4 in 1, etc., resting with how many PV modules it connects, which means that a microinverter can be linked to 1/2/4 modules separately. This manual focuses on 1 in 1 series.

PV grid-connected microinverter, a module-level solar Microinverter, is capable of effectively solving the single point of failure in the photovoltatic power generation system. The microinverter can can work by tracking the maximum power point of each PV module, which is known as Maximum Power Point Tracking (MPPT).

The A1-Micro 1 in 1 is integrated with MPPT, which means that even though a PV module runs abnormally or is shaded, other modules won't be affected and can operate the unshaded string at maximum efficiency point. This function plays an important role to improve the efficiency of a photovoltaic (PV) generation system.

Furthermore, A1-Micro device only carries a relatively low DC voltage, mitigating the risk of electric shock

PV module

A PV Module is an assembly of photovoltaic cells, also known as solar cells. To achieve a required voltage and current, a group of PV modules are wired into strings which are called PV arrays. A PV module is the essential component of any PV system that converts sunlight directly into direct current electricity.

ECC/ECC-PLC

The ECC is a communication device that provides network access to the PV array. The ECC-PLC collects production and performance data from the A1 Microinverters over on-site AC power lines and transmits the data to the ECC via RS485.

And then these data will transmit to the SolaXCloud through an internet or cellular modem connection. The ECC-PLC can monitor up to 40 A1 Microinverters. For details, refer to the ECC&ECC-PLC Installation and Operations Manual.

Grid

240V grid are supported.

SolaXCloud

SolaXCloud is an intelligent, multifunctional monitoring platform that can be accessed either remotely or through a hard wired connection. With the SolaX Cloud, the operators and installers can always view key and up-to-date data and set it remotely. You can log in to your user account at any time through a personal computer, IOS or Android device to view real-time monitoring data or historical data, and perform remote settings as needed.

2.2 Highlights

- Max output power up to 600VA with one independent input channels(MPPT)
- Up to 20A DC input current to be compatible with high power PV modules
- Built-in industrial grade PLC module for high reliability
- Safety protection relay integrated
- Support micro-grid, AC coupling solution with existing storage system
- Support the integration of a single-phase microinverter into a three-phase power grid system
- Support Zero Export Control
- With Reactive Power Control and Rapid Shutdown Function
- Easy to install and maintain with small size, light weight
- IP67 (type 6) protection class, more reliable

2.3 Appearance

2.3.1 Overview

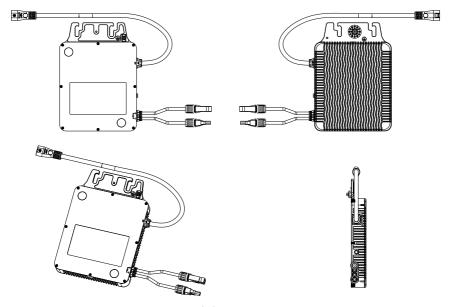


Figure 2-2 Apprearance

2.3.2 Dimensions

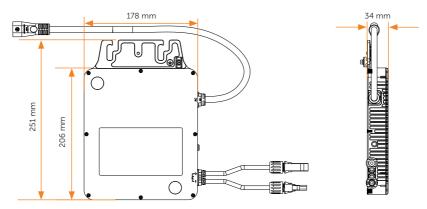


Figure 2-3 Dimensions

2.3.3 Terminals of Microinverter

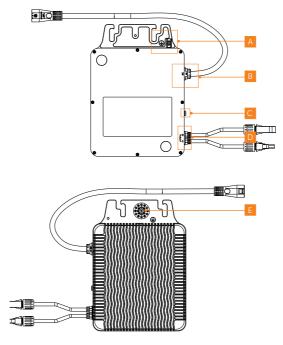


Figure 2-4 Terminals of Microinverter

Table 2-1 Description of terminals

No.	Item	Description
А	Spare ground cable clip	For standby earth connection.
В	AC terminal	For AC connection.
С	Indicator	Show the status of the device.
D	PV terminal	For PV connection.
E	Earth lug	A connection component for electrical devices which need grounding (perferred grounding method).

Description of Symbols 2.3.4

Table 2-2 Description of general symbols

	Table 2-2 Description of general symbols
Symbol	Description
	Refers to direct current.
\sim	Refers to alternate current.
	Grounding point.
	Table 2-3 Description of symbols on the microinverter or labels
Symbol	Description
©R C ₂₇₂₆₈₇ US	CSA certified.
	Beware of hot surface. The microinverter can become hot during operation. Avoid contact



during operatior.

Danger of high voltages.

Danger to life due to high voltages in the Microinverter!

Symbol

Description



Danger. Risk of electric shock!



Danger to life due to high voltage.

There is residual voltage in the microinverter which needs 5 min to discharge.

• Wait for 5 min before you open the upper lid or the DC lid.



Refer to the operating instructions.



The microinverter can not be disposed together with the household waste. Disposal information can be found in the enclosed documentation.

3 Preparation before Installation

3.1 Unpacking and Inspection

3.1.1 Unpacking

- The microinverter undergoes 100% testing and inspection before shipping from the manufacturing facility. However, transport damage may still occur. Before unpacking the Microinverter, please verify that the model and outer packing materials for damage, such as holes and cracks.
- Please unpack the microinverter according to the following figure.

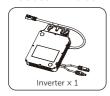


Figure 3-1 Unpacking the Microinverter

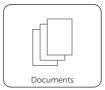
- Be careful when dealing with all package materials which may be reused for storage and relocation of the microinverter in the future.
- Upon opening the package, check whether the appearance of the microinverter is damaged or lack any accessories. If any damage is found or any parts are missing, contact your dealer immediately.

3.2 Packing Lists

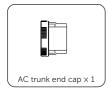
Included in the box:

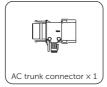




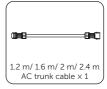


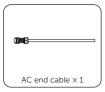
Sold separately:

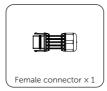


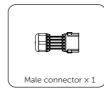


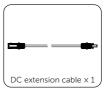












^{*} The actual quantity of accessories needs to be based on the number of microinverter to be installed.be installed. The quantity of materials in the packing list above is the recommended quantity for one microinverter. If you need to install multiple microinverters, the actual situation prevails.

3.3 Selection of Installation Location

The installation location selected for the microinverter is quite critical in the aspect of the guarantee of machine safety, service life and performance.

- It has the IP67 (type 6) ingress protection, which allows it to be installed outdoor;
- The installation position shall be convenient for wiring connection, operation and maintenance.

3.3.1 Environment Requirement

Make sure the installation site meets the following conditions:

- The ambient temperature: -40°C to 70°C (-40°F to 158°F);
- The humidity shall be between 0-100%;
- Do not install the microinverter in the areas where the altitude exceeds 3000 m;

- Install the microinverter in a well-ventilated environment for heat dissipation;
- Do not install the microinverter in areas with flammable, explosive and corrosive materials:
- Do not install the microinverter in areas near combustibles and antennas;
- Install all microinverters and DC connectors under the PV modules.
- Avoid direct exposure to UV, rain and other harmful weather events.
- Avoid electromagnetic interference in case of the malfunction of electronic equipment.

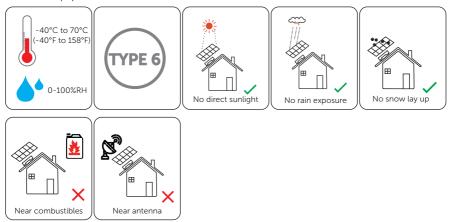


Figure 3-2 Environment Requirements

3.3.2 Installation Angel Requirement

NOTICE

• Install the microinverter on the bracket. Make sure the guide rail is parallel with the rail.

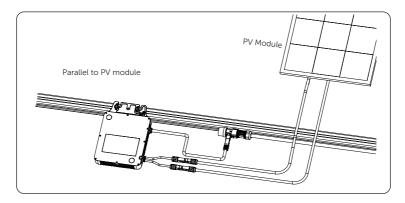
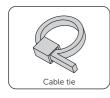


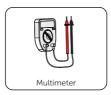
Figure 3-1 Correct installation

3.4 Tools Requirement

3.4.1 Recommended Equipment

Installation tools include but are not limited to the following recommended ones. If necessary, use other auxiliary tools on site.

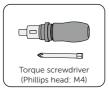








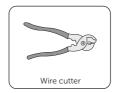




















3.4.2 Additional Required Material

Table 3-4 Additional required material

No.	Required Material	Requirements
1	AC circuit breaker	Current: 40 A for 10 AWG/32 A for 12 AWG
2	Guide rail	At least two guid rails
3	Sliding block	Matching with the guide rail
4	Screw	Matching with the guide rail

3.5 AC Branch Circuit Capacity

A1-Micro 300P/400P/450P/500P/600P can be used with the provided AC Trunk Cable and AC Trunk Connectors. The maximum number of microinverters on each AC branch is listed as follows:

Table 3-5 AC branch circuit capacity

	A1-Micro 300P	A1-Micro 300P	Maximum over current protection device
Maximum number per 10 AWG branch	32	24	50A
Maximum number per 12 AWG branch	25	19	40A

A1-Micro 4500P	A1-Micro 500P	Maximum over current protection device
21	19	50A
17	15	40A
A1-Micro 600P	Maximur protectic	n over current on device
16	50A	
12 40A		40A
	21 17 A1-Micro 600P	21 19 17 15 A1-Micro 600P Maximum protection 16

Note:

An AC branch can connect to 1-in-1/2 in 1/4-in-1 microinverters at the same time, provided that the total current is less than the AC branch circuit capacity stipulated in local rules and regulations.

How many microinverters that each AC branch can connect depends on the current-carrying capacity of the cable.

4 Installation

4.1 Accessories

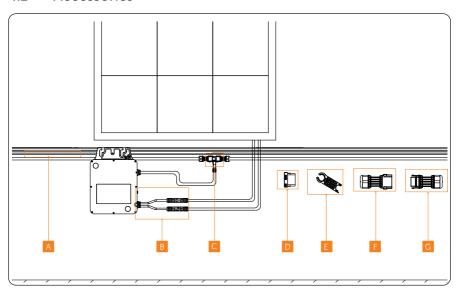


Figure 4-1 Accessories for single microinverter

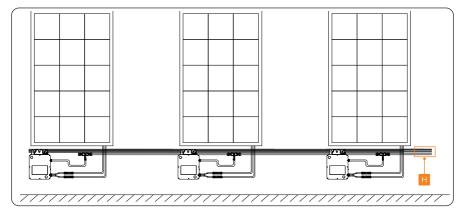


Figure 4-2 Other accessories for the whole system

No.	Description
А	AC trunk cable
В	PV cable
С	AC trunk connector
D	AC trunk end cap
E	AC trunk port disconnect tool
F	Female connector
G	Male connector
Н	AC end cable

NOTICE

• The above accessories are not included in the package and need to be purchased separately.

4.2 Microinverter Installation

! WARNING!

 Avoiding pulling or holding the AC cable with your hand directly. Hold the handle of the microinverter instead.

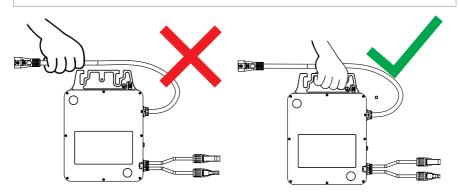


Figure 4-3 Avoiding pulling or holding the AC cable directly

/!\ WARNING!

• Pay attention to the earth lug. Risk of hand injury!

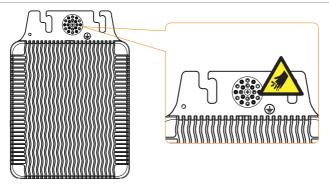


Figure 4-4 Risk of hand injury

Step 1: Rail Installation

A) The installer has to install the rails on the roof and fix them with screws to ensure a stable installation environment for microinverters.

Step 2: Plan the Number and Installation Location of Microinverters

A) Arrange the installation number and location of each microinverter according to the layout of the photovoltaic system.

B) Use a marker to mark the suitable areas of the rail for installing microinverters.

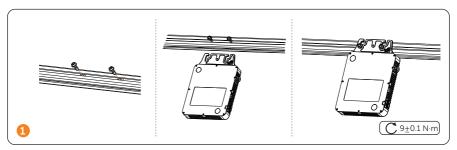
NOTICE

• Please adjust the terminal location on the AC trunk cable according to the distance between microinverters for a stable connection.

Step 3: Install the Microinverter on the Rail

- A) Place the sliding bolcks and screws on the maked place of the rail.
- B) Hang on microinverters. The sliver cover side with performance lable of the microinverter shall be placed upwards.

C) Tighten the screws.



NOTICE!

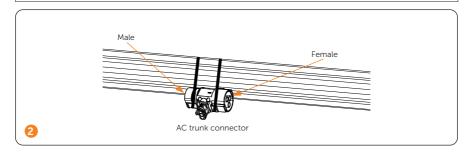
• Choose the screwdriver according to the corresponding screws of the rail.

Step 4: Place AC Trunk Cable on the Rail

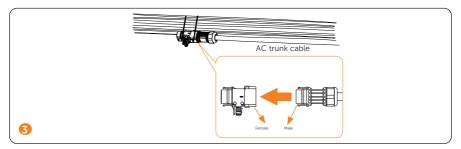
A) Place the AC trunk connector on the rail inwards (as shown below) and band it with cable ties.

NOTICE

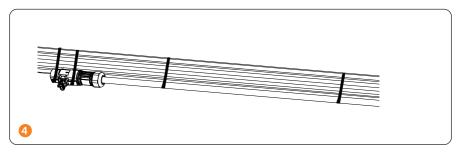
- In order to better fix the AC trunk cable, it is recommended to use more cable ties to band the AC trunk cable.
- Choose the cable tie according to the rail width and the length of self-purchased accessories.



B) Plug the male terminal of AC trunk cable into the female terminal of AC trunk connector.



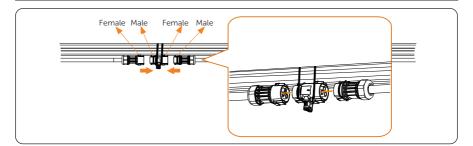
C) Band the AC trunk cable with cable ties. In order to better fix the AC cable, it is recommended to use more cable ties to band the AC cable.



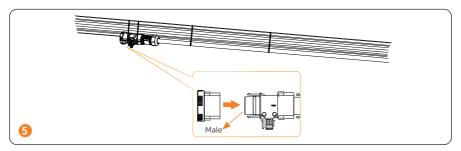
D) Repeat this step in sequence.

NOTICE!

• When connecting AC cables in the middle, please follow the diagram below.

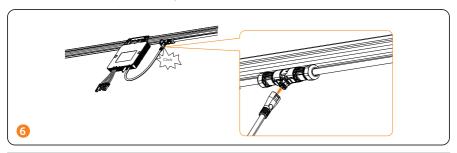


E) Cover vacant AC ports with AC trunk end cap.



Step 5: AC Trunk Cable Connection

A) Plug the AC connector of the microinverter into the trunk cable connector. The connection is completed when you hear a "click".

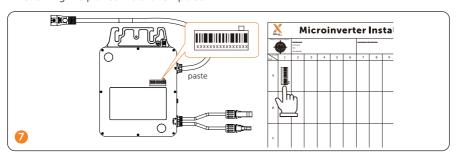


NOTICE!

- Avoid placing AC connectors nearby any drainage channels.
- If you need to disconnect the AC connector from the AC cable, use the AC Trunk Port Disconnect Tool (see packing list).

Step 6: Complete the Installation Map

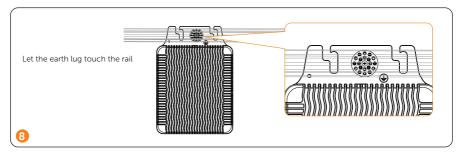
A) Remove the serial number label on the machine and attach to the installation map following the planed installation place.



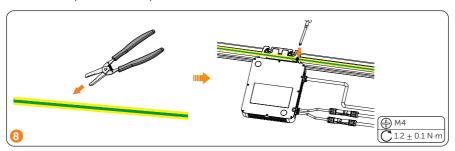
Step 7: Grounding methods

We provide two grounding methods for this series of microinverters. If the earth lug doesn't touch the rail or the rail is not on the ground, please try method 2.

Method 1 (major grounding method): Let the earth lug touch the rail.



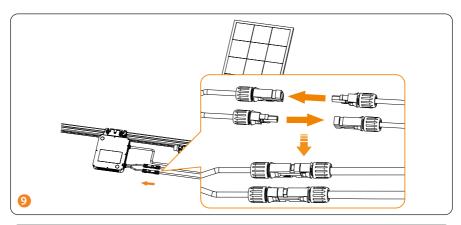
Method 2: Strip the PE cable, place the PE cable on the rail and fix it with screws.

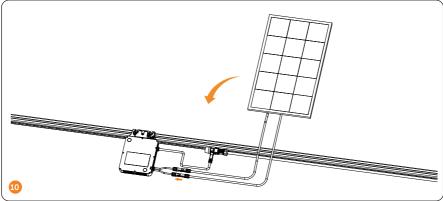


Step 8: Connect Multiple PV Modules to Microinverter. Cover the PV modules above the microinverters and fix the PV panels. Then connect it to the local grid.

VOTICE

- At least two or three trained and experienced workers are required to finish this step.
- If the pannels are too far from the microinverter, please use DC extension cables for connection.





4.3 Microinverter System Initiating

4.3.1 Initiate the System

- Checking before Power-on
 - » Check the device installed correctly and securely;
 - » All AC cables are connected correctly and securely;
 - » All DC cables are connected correctly and securely;
 - » Make sure all photovoltaic panels are connected correctly and securely;
 - » Make sure all the connectors which are not used should be sealed by covers;
 - » Make sure the microinverter is installed under the PV modules:
 - » Make sure all the connectors are free of water.
- **Step 1:** First turn on the AC breaker on the branch circuit and then the main AC breaker of the house.
- **Step 2:** Wait for about 2 minutes until the system is initiated.

4.4 Setup Monitoring System

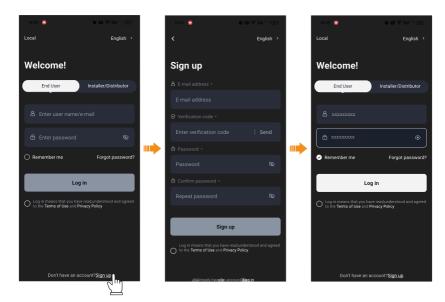
Step 1: Download APP.



Scan the QR code to download SolaXCloud App.

SolaXCloud

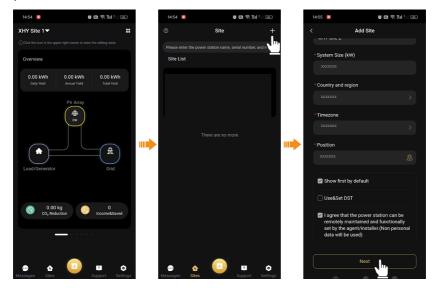
Step 2: Register an account and log in.



NOTICE

• Before configurating network, please make sure that A1-Micro 1 in 1, ECC and ECC-PLC have been connected as a system.

Step 3: Add a site.

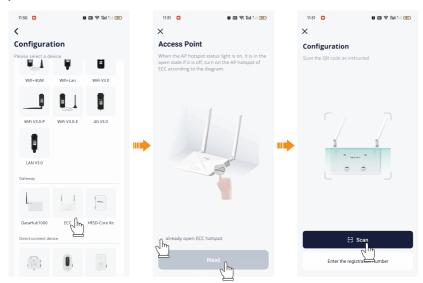


NOTICE

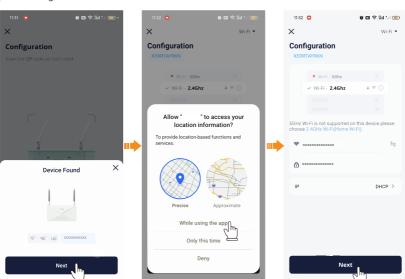
Click the corresponding notice to know more details about how to Add Site. If you
don't need reading these notices, click Skip.

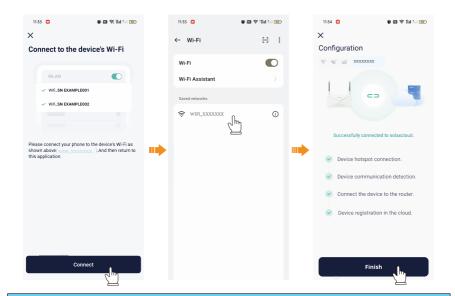


Step 4: Bind ECC in the added site.



Step 5: Cofigurate network for ECC.



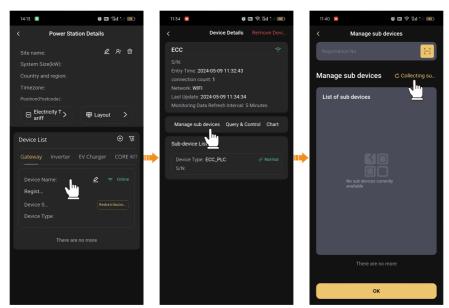


NOTICE

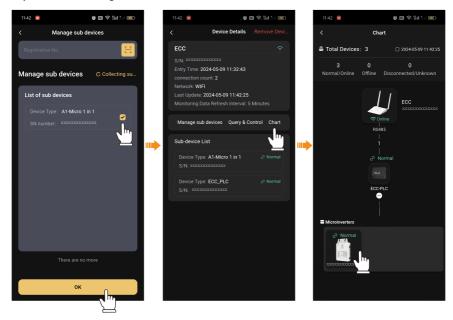
- After ECC configuration succeeds, the connected ECC-PLC will show on the Gateway list.
- Remember to switch to your home WiFi for the subsequent operation.



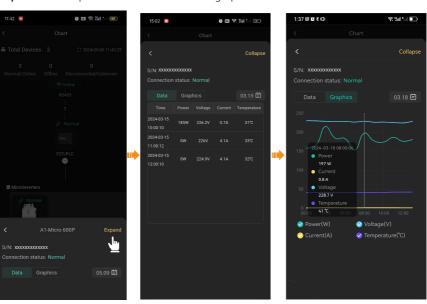
Step 6: Enter the Device Detail interface, click Manage sub devices and collecting sub devices to bind A1-Micro 1 in 1.

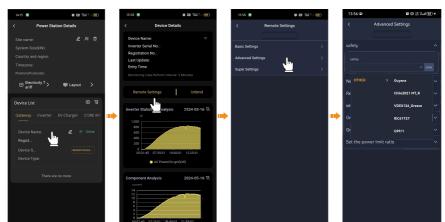


Step 7: After binding A1-Micro 1 in 1, click **Chart** to see more detail information.



Step 8: Click Expand to check the data and graphics.





Step 9: For advanced settings, please consult your distributor to get password.

5 Troubleshooting and Maintenance

5.1 LED Indicator Status

Table 5-1 LED indicator status

LED Indicator Status	Description
Yellow light flash	Microinverter startup. If the light flashes once in 1s, flashes in 10s or still flashes after 10s, microinverter startup fails or DSP firmware is upgrading.
Yellow light steady on	Microinverter standby/self-checking.
Green light flash (5s)	Normal operation; normal AC grid; communicating with routher.
Green light flash (2s)	Normal operation; normal AC grid; no connection with routher.
Red light flash (2s)	No AC grid or AC grid outside the regulatory range.
Red light steady on	Error: non-grid abnormal fault. Machine fault like grounding detection fault and PV side fault.

About 10s after connection with DC power, the light turns yellow;

The yellow light flashes for 10s continuously and then keeps steady on which stands for microinverter self-check;

Afterwards, if the system is not powered on, the red light will flash, indicating for no grid existence;

After microinverter connects with DC power for the first time, red light flashes indicates for errors during microinverter startup.

5.2 Troubleshooting

This section contains information and procedures for resolving possible problems with the Microinverter , and provides the troubleshooting tips to identify and solve most problems that may occur. Please check the warning or fault information on the App and read the suggested solutions below when error occurs. Contact SolaX Customer Service for further assistance. Please be prepared to describe the details of your system installation and provide the model and serial number of the Microinverter .

Table 5-2 Troubleshooting

Code	Faults	Diagnosis and solutions
		Over Current Fault.
IE0001	TzFault	-Wait for about 10 seconds to check if the microinverter is back to normal.
		-Disconnect the DC switch and restart the microinverter.
		-Or seek help from us.
		Grid Lost Fault.
		-Check if the mains cable is loose.
IE0002	GridLostFault	-Wait for a while and the system will reconnect when the utility is back to normal. $ \\$
		-Or seek help from us.
		Grid Voltage Out of Range.
IE0003		-Check if the mains cable is loose.
	GridVoltFault	-Wait for a while and the system will reconnect when the utility is back to normal. $ \\$
		-Or seek help from us.
		Grid Frequency Out of Range.
IE0004	GridFreqFault	-Wait for a while and the system will reconnect when the utility is back to normal. $ \\$
		-Or seek help from us.
		PV Voltage Fault.
IE0005	PvVoltFault	-Check whether the PV is overvoltage.
		-Or seek help from us.
		DC Bus Voltage Out of Normal Range.
IE0006	BusVoltFault	-Check if the PV input voltage is within the operating range of the microinverter.
		-Disconnect PV wiring and reconnect.
		-Or seek help from us.
		DCI Overcurrent Protection Fault.
IE0009	DcInjOCP	-Wait for a while to check if the microinverter is back to normal.
		-Or seek help from us.

Troubleshooting and Maintenance

Code	Faults	Diagnosis and solutions
		Software Overcurrent Protection Fault.
IE0011	SW OCP Fault	-Wait for a while to check if the microinverter is back to normal.
IEUUII	3W OCF Fault	-Disconnect PV and grid, then reconnect.
		-Or seek help from us.
		Isolation Fault.
IE0013	IsoFault	-Check the connections of the microinverter.
		-Or seek help from us.
		Over Temperature Fault.
IE0014	TempFault	-Check if the microinverter and the ambient temperature exceeds the operating range.
		-Or seek help from us.
		DSP EEPROM Fault.
IE0028	EepromFault	-Disconnect PV wiring and reconnect.
		-Or seek help from us.
		Relay Fault.
IF0031	CridDalayFaylb	-Check the grid connection.
IE0031	GridRelayFault	-Restart the microinverter.
		-Or seek help from us.
		PowerTypeFault:
IF0036	PowerTypeFault	-Check the version of Module and DSP.
IEUU3U	rowerryperault	-Check the product SN number.
		-Or seek help from us.

5.3 On-Site Inspection (for qualified installer only)

Follow the steps below to troubleshoot a malfunctioning microinverter.

- **Step 1:** Check the voltage and frequency of utility do not exceed the range described in Technical Data of this manual.
- **Step 2:** Check the connection to the utility grid.

! WARNING!

- Risk of electric shock! Prior to servicing, always de-energize the AC branch circuit first.
- Avoid disconnecting the DC connectors under load.
- Step 3: Check the connection between microinverters on the AC branch circuit.
- **Step 4:** Check if all the AC breakers runs normally and are closed.
- **Step 5:** Check the DC connection between microinverters and the PV modules.
- **Step 6:** Check the DC voltage of PV modules is within the range decribed in Technical Data of this manual.
- **Step 7:** If the microinverter remains malfunctioning after the above steps, please consult our service support or apply for machine replacement.

! WARNING!

Never repair the malfunctioning mircoinverter by yourself!

5.4 Maintenance

Regular maintenance is required for the Microinverter. The table of "Proposal of Maintenance" below lists the operational maintenance for expressing the optimum device performance. More frequent maintenance service is needed in the worse work environment. Please make records of the maintenance.

! WARNING!

- Only qualified person can perform the maintenance for the Microinverter .
- Only use the spare parts and accessories approved by SolaX for maintenance.

5.4.1 Maintenance routines

Item	Check Notes	Maintenance Inverval
Safety check	 Check the items mentioned in section 1 "Safety" The safety check shall be performed by manufacturer's qualified person who has adequate training, knowledge, and practical experience. 	Every 12 months
Indicators	 Check if the indicators of the microinverter are in normal state. Check if the display of the microinverter is normal. 	Every 6 months
Electrical connection	 Ensure that all cables are firmly connected. Check the integrity of the cables, ensuring that there are no scratches on the parts touching the metallic surface. Verify that the sealing caps on idle terminals are not falling off. 	Every 6 months

Table 5-3 Proposal of Maintenance

5.4.2 Upgrading Firmware

Upgrade precautions



- If the DSP and Integrated WiFi Module firmware need to be upgraded, please note that WiFi Module firmware firmware must be upgraded first, then DSP firmware!
- Please make sure that the category format is correct, do not modify the firmware file name. Otherwise, the microinverter may not work!

! WARNING!

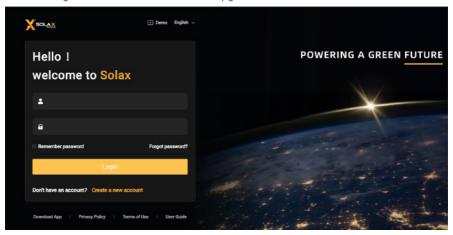
• For the Microinverter, ensure that the PV input voltage is greater than 20 V (upgrade on sunny days). Otherwise, it may cause serious failure during the upgrade process!



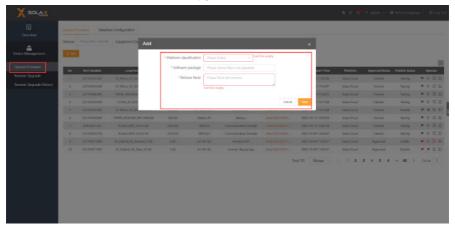
• If the firmware upgrade of Integrated WiFi Module or DSP fails or stops, please check whether the input voltage of PV module is greater than the microinverter startup voltage, and then repeat the upgrade steps.

Upgrade steps

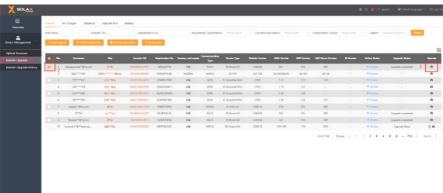
a. Log into www.solaxcloud.com to upgrade the microinverter.



b. Click **Upgrade Firmware**, **Add**, and fill in the information and upload firmware. Click **Sure** to finish firmware upgrade.



c. Select **Remote Upgrade**, choose the microinverter you want to upgrade and click the upgrade icon.



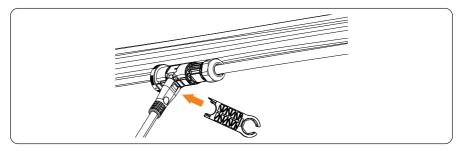
d. If you need batch upgrade, please select **Equipment Classification**, **Applicable Model** and **Update program** first. Then choose the models you want to upgrade, and click **Batch Upgrade**.



6 Decommissioning

6.1 Disassembling the Microinverter

- a. To disassembling the microinverter
 - » De-energize the AC breaker.
 - » Dismount the PV module from the guide rail for meter detection.
 - » Use a meter to check the DC cables and make sure no current flow exists in the wires between microinverter and module.
 - » Use an AC disconnect tool to remove AC sub connectors.



- » Screw off the screw of microinverter and remove the device from the guide rail.
- b. To replace the microinverter in our monitoring platform
 - » Use APP to scan or type in the SN of the microinverter to be used.
 - » Make sure the AC breaker is turned off and install the microinverter according to Installation Steps described in this manual.
 - » In SolaXCloud app, unbind the original microinverter and bind new model

6.2 Packing the Microinverter

- Load the microinverter into the original packing material if possible.
- If the original packing material is not available, you can also use the packing material which meets the following requirements:
 - » Suitable for the weight of product.
 - » Easy to carry
 - » Be capable of being closed completely

6.3 Transportation and Storage

If the microinverter is not put into use immediately, the transportation and storage requirements needs to be met:

Transportation

- Observe the caution signs on the packaging of microinverter before transportation.
- Wear protective gloves when carrying the equipment by hand to prevent injuries.

Storage

- The microinverter must be stored indoors.
- Do not remove the original packaging material and check the outer packaging material regularly.
- The storage temperature should be between -40°C to 70°C (-40°F to 158°F)
- The humidity should be between 0% and 100%.
- Stack the microinverter in accordance with the caution signs on the microinverter carton to prevent their falling down and device damage. Do not place it upside down.

6.4 Disposal of the Microinverter

Please dispose of the Microinverters or accessories in accordance with the disposal regulations for electronic waste applied at the installation site.

7 Technical Data

M = -l = l	A1-Micro	A1-Micro	A1-Micro	A1-Micro	A1-Micro
Model	300P	400P	450P	500P	600P
Max. PV array input power	240 to	320 to	360 to	400 to	400 to
[kWp]	410+	550+	600+	670+	670+
Max. PV voltage [d.c. V]			60		
MPPT voltage range [d.c. V]			22-60		
Max. PV current [d.c. A]	12	15	16	18	20
lsc PV array short circuit current [d.c. A]	20	20	25	25	25
Start output voltage [d.c. V]			20		
No. of MPPT trackers			1		
Strings per MPPT tracker			1		
AC Output					
Model	A1-Micro 300P	A1-Micro 400P	A1-Micro 450P	A1-Micro 500P	A1-Micro 600P
Rated output apparent power [VA]	300	400	450	500	600
Maximum continuous output power [VA]	300	400	450	500	600
Nominal AC voltage [a.c. V] ¹			240/211-264		
Nominal AC frequency / range [Hz] ¹			60/55-65		
Rated output current [a.c. A]	1.25	1.67	1.88	2.08	2.50
Power factor range		>0.99 (-0.8~0.8 adjı	ustable)	
Total harmonic distortion		<	3		

Note

^{*1} Norminal AC voltage/frequency range may vary according to local rules and regulations.

^{*2} Refer to local rules and regulations for the specific number of microinverters per branch.

• Efficiency, Standard and Environment limit

Model	A1-Micro 300P	A1-Micro 400P	A1-Micro 450P	A1-Micro 500P	A1-Micro 600P	
Peak efficiency [%]	96.50					
CEC Eciency [%]	96.50					
Nominal MPPT efficiency		99.50				
Night power consumption [mW]			< 63			
Compliance	UL 1741, l	JL 1741 SA, C Class B,	SA C22.2 No IEEE 1547, C		CC Part 15	
PV rapid shutdown	Conforms with NEC-2017 and NEC-2020 Article 690.12					
Ingress protection rating	Туре 6					
Operating temperature range [°C]	-40°C to 70°C (-40°F to 158°F)					
Humidity [%]		0 ~	100 (conden	sing		
Storage temperature [°C]		-40°C to	70°C (-40°F	to 158°F)		
General Data						
Model	A1-Micro 300P	A1-Micro 400P	A1-Micro 450P	A1-Micro 500P	A1-Micro 600P	
Dimensions (W/H/D)[mm]	178 × 251 × 34					
Net weight [kg]	2.5					
Heat dissipation treatment	Natural convection					
Monitoring ³	SolaXCloud					
Communication interface			PLC			

Note

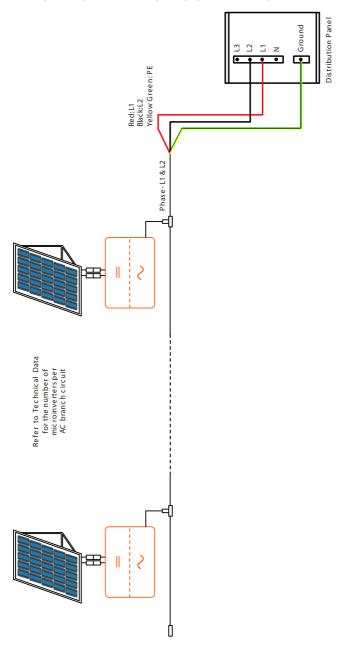
^{* 3} SolaX monitoring platform.

8 Appendix

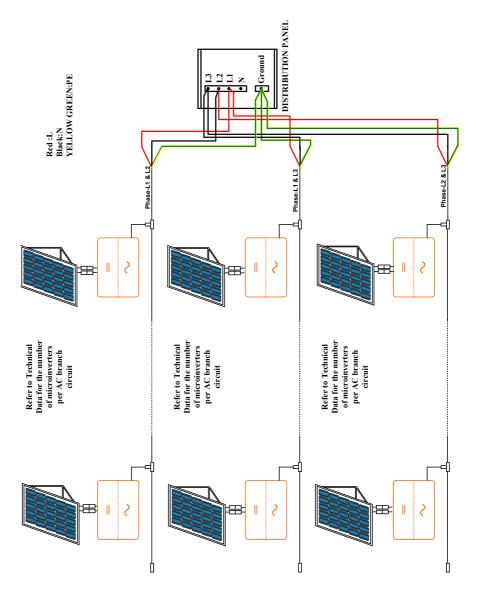
8.1 INSTALLATION MAP

		16				
		15				
		14				
a O	number:	13				
Σ	Gateway series number:	12				
0	- G	11				
lat		10				
tal		6				
ns	mation:	8				
7	Customer information:	7				
Microinverter Installation Map		9				
2		2				
<u>ō</u>		4				
<u> </u>		3				
2	Panel type: Azimuth: Tilt: Sheet_of_	2				
	Make sur e N for North	1				
SOLA.	Make sur e	ROW	∢	В	U	Ω

8.2 WIRING DIAGRAM -240VAC SPLIT PHASE:



8.3 WIRING DIAGRAM 240Vac Three-Phase



8.4 Minimum measurement and calculation accuracy requirements for manufacturers¹

Time frame	S	teady-state measuter	ments		
Parameter	Minimum measurement accuracy	Measure-ment window	Range		
Voltage, RMs	(±1% Vnom)	10 cycles	0.5 p.u. to 1.2 pu		
Frequency ²	10 mHz	60 cycles	50 Hz to 66 Hz		
Active Power	(<u>+</u> 5% Srated)	10 cycles	0.2pu <p<1.0 p.u.<="" td=""></p<1.0>		
Reactive Power	(±5% Srated)	10 cycles	0.2pu <p<1.0 p.u.<="" td=""></p<1.0>		
Time	1% of measured duration	N/A	5s to 600 s		
Time frame	S	Steady-state measutements			
Parameter	Minimum measurement accuracy	Measure-ment window	Range		
Voltage, RMs	(±2% Vnom)	5 cycles	0.5 p.u. to 1.2 pu		
Frequencyb	100 mHz	5 cycles	50 Hz to 66 Hz		
Active Power	Not required	N/A	N/A		
Reactive Power	Not required	N/A	N/A		
Time	2 cycles	N/A	100 ms < 5 s		

Note:

 $^{^*1}$ Measurement accuracy requirements specified in this table are applicable for voltage THD < 2.5% and individual voltage harmonics <1.5%

 $^{^{*}2}$ Accuracy requirements for freguency are applicable only when the fundamental voltage is greater than 30% of the nominal voltage.

8.5 Voltage Trip tests

Table 13—DER response (shall trip) to abnormal voltages for DER of abnormal operating performance Category III (see Figure H.9)

Shall trip—Category III						
Chall tuin	Default settin	Ranges of allowable	e settings ^b			
Shall trip function	Voltage (p.u. of nominal voltage)	Clearing time (s)	Voltage (p.u. of nominal voltage)	Clearing time (s)		
OV2	1.20	0.16	fixed at 1.20	fixed at 0.16		
OV1	1.10	13.0	1.10 - 1.20	1.0 - 13.0		
UV1	0.88	21.0	0.0 - 0.88	21.0 <u>2.0</u> – 50.0		
UV2	0.50	2.0	0.0 - 0.50	2.0 <u>0.16</u> - 21.0		

8.6 Low-Frequency ride-through tests&High-Frequency ride-through tests

B. Frequency ride-through

For certification testing purposes, the use of SRD V2.0 values are required.

IEEE 1547-2018 Table 19

Frequency ride-through requirements for DER of abnormal operating performance

Category III

(see Figure H.10 from IEEE 1547-2018) Frequency range Minimum time (s) Operating mode (Hz) (design criteria) 1547-2018 1547-2018 SRD V2.0 1547-2018 SRD V2.0 SRD V2.0 f > 62.0 f > 65.0 No ride-through requirements apply to this range 61.2 < f ≤ 63.0 < f ≤ Mandatory Mandatory 299 61.8 65.0 Operation^a Operation^a 58.8 ≤ f ≤ 57.0 ≤ f ≤ Continuous Continuous Infinite^c Indefinite 61.2 63.0 Operation^{a,b} Operation^{a,b} 57.0 ≤ f < 50.0 ≤ f < Mandatory Mandatory 299 299 57.0 Operation^a Operation^a f < 57.0 f < 50.0 No ride-through requirements apply to this range

Table 24—Parameters of frequency-droop (frequency-power) operation for DER of abnormal operating performance Category II, Category II, and Category III

Parameter	Default settings ^a			Ranges of allowable settings ^b		
Parameter	Category I	Category II	Category III	Category I	Category II	Category III
dbof, dbuf (Hz)	0.036	0.036	0.036	0.017°-1.0	0.017°-1.0	0.017°-1.0
kof, kuf	0.05	0.05	0.05	0.03-0.05	0.03-0.05	0.02-0.05
Tresponse (small-signal)	5	5	5	1–10	1–10	0.2–10

C. Frequency-droop

For certification testing purposes, the use of SRD V2.0 values are required.

IEEE 1547-2018 Table 24 Parameters of frequency-droop (frequency-power) operation for DER of abnormal operating performance

Category III

	Ranges of allowable settings ^a			
Parameter	1547-2018 Category III	SRD V2.0		
dbOF, dbUF (Hz)	0.017 ^b -1.0	0.017 -1.0		
kOF, kUF	0.02-0.05	0.02 - 0.07		
T _{response} (small-signal) (s)	0.2–10	0.2-10		

8.7 Frequency Trip

Fable 18—DER response (shall trip) to abnormal frequencies for DER of abnormal operating performance Category I, Category II, and Category III (see Figure H.10)

CL II 4 d	Default	settings ^a	Ranges of allowable settings		
Shall trip function	Frequency ^c (Hz)	Clearing time (s)	Frequency (Hz)	Clearing time (s)	
OF2	62.0	0.16	61.8-66.0	0.16-1 000.0	
OF1	61.2	300.0	61.0-66.0	180.0-1 000.0	
UF1	58.5	300.0°	50.0-59.0	180.0-1 000	
UF2	56.5	0.16	50.0-57.0	0.16-1 000	

P-Q 8.8

Table 28 - Characteristic 1: Default active power-reactive power settings for normal operating performance Category A and Category B DER

Active power-	Default val	ues for DER		
reactive power parameters	Category A	Category B		
P_3	$P_{ m rated}$			
P_2	0.5	P_{rated}		
P_1	The greater of 0.2 P_{rated} and P_{min}			
P'_1	The lesser of 0.2 P' _{rated} and P' _{min}			
P'_2	0.5 P'rated			
P'_3	$P'_{ m rated}$			
Q_3	25% of nameplate apparent power rating, absorption 44% of nameplate apparent power absorption			
Q_2	0			
Q_1	0			
Q'_1	0			
Q'_2	0			
Q'3	44% of nameplate apparent power rating, injection			
٤.	4470 of namepiate apparent power rating, injection			

NOTE— P_{rated} is the nameplate active power rating of the DER.

 P'_{rated} is the maximum active power that the DER can absorb.

 P_{\min} is the minimum active power output of the DER.

 P_{\min} is the minimum, in amplitude, active power that the DER can absorb. P' parameters are negative in value.

Table 29 — Characteristic 2: Active power-reactive power settings for normal operating performance Category A and Category B DER

Active power-	Values for DER			
reactive power parameters	Category A	Category B		
P_3	$P_{ m rated}$			
P_2	0.5	P_{rated}		
P_1	The greater of 0	0.2 Prated and Pmin		
P'_1	The lesser of $0.2 P'_{\text{rated}}$ and P'_{min}			
P'_2	0.5 P' _{rated}			
P' ₃	P'_{rated}			
Q_3	25% of nameplate apparent power rating, absorption	44% of nameplate apparent power rating, absorption		
Q_2	13% of nameplate apparent power rating, absorption 22% of nameplate apparent power rating, absorption			
Q_1	13% of nameplate apparent power rating, absorption 22% of nameplate apparent power absorption			
Q'_1	22% of nameplate apparent power rating, injection			
Q'2	22% of nameplate apparent power rating, injection			
Q'_3	44% of nameplate apparent power rating, injection			

NOTE—P_{rated} is the nameplate active power rating of the DER.

 P'_{rated} is the maximum active power that the DER can absorb.

 P_{\min} is the minimum active power output of the DER.

 P_{\min} is the minimum, in amplitude, active power that the DER can absorb.

Table 30—Characteristic 3: Active power-reactive power settings for normal operating performance Category A and Category B DER

Active power-	Values for DER				
reactive power parameters	Category A	Category B			
P ₃	$P_{ m rated}$				
P_2	0.5 P _{rated}				
P_1	The greater of 0.	The greater of 0.2 P_{rated} and P_{min}			
P'_1	The lesser of 0.2 P'_{rated} and P'_{min}				
P'_2	0.5 P'rated				
P'_3	$P'_{ m rated}$				
Q_3	25% of nameplate apparent power rating, absorption 44% of nameplate apparent po absorption				
Q_2	25% of nameplate apparent power rating, absorption 44% of nameplate apparent power absorption				
Q_1	0				
Q'_1	0				
Q'2	44% of nameplate apparent power rating, injection				
Q'_3	44% of nameplate apparent power rating, injection				

NOTE— P_{rated} is the nameplate active power rating of the DER. P'_{rated} is the maximum active power that the DER can absorb. P_{min} is the minimum active power that the DER can absorb. P'_{min} is the minimum, in amplitude, active power that the DER can absorb. P'_{pramin} is the minimum, in amplitude, active power that the DER can absorb. P'_{pramin} parameters are negative in value.

8.9 P-U

Table 31—Characteristic 1:
Default voltage-active power settings for normal operating performance
Category A and Category B DER

Voltage-active power	Default values for DER			
parameters	Category A	Category B		
V_1	1.06 V _N	$1.06 V_{\rm N}$		
P_1	$P_{ m rated}$	$P_{ m rated}$		
V_2	1.1 V _N	1.1 V _N		
P ₂ (applicable to DER that can only generate active power)	The lesser of 0.2 P_{rated} or P_{min}	The lesser of $0.2 P_{\text{rated}}$ or P_{min}		
P' ₂ (applicable to DER that can generate and absorb active power)	0	0		
Open loop response time	10 s	10 s		

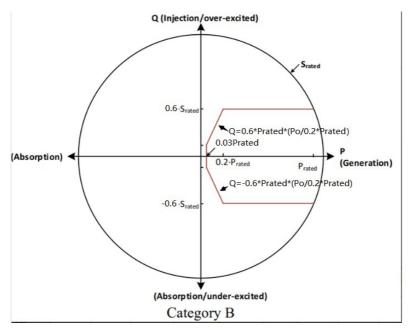
Table 32—Characteristic 2: Voltage-active power settings for normal operating performance Category A and Category B DER

Voltage-active power	Values for DER		
parameters	Category A	Category B 1.05 V _N	
V_1	$1.05 V_{\rm N}$		
P_1	P_{rated}	P_{rated}	
V_2	1.1 V _N	$1.1~V_{ m N}$	
P ₂ (applicable to DER that can only generate active power)	The lesser of 0.2 $P_{\rm rated}$ or $P_{\rm min}$	The lesser of $0.2 P_{\text{rated}}$ or P_{min}	
P' ₂ (applicable to DER that can generate and absorb active power)	P 'rated	$P'_{ m rated}$	
Open loop response time	90 s	90 s	

Table 33—Characteristic 3: Voltage-active power settings for normal operating performance Category A and Category B DER

Voltage-active power	Values for DER			
parameters	Category A	Category B		
V_1	1.09 V _N	$1.09 V_{\rm N}$		
P_1	P_{rated}	P_{rated}		
V_2	1.1 <i>V</i> _N	1.1 V _N		
P ₂ (applicable to DER that can only generate active power)	The lesser of 0.2 P_{rated} or P_{min}	The lesser of 0.2 P _{rated} or P _{min}		
P' ₂ (applicable to DER that can generate and absorb active power)	P'rated	P'rated		
Open loop response time	0.5 s	0.5 s		

8.10 Constant Reactive Power



8.11 Volt-Var Mode

Table 25 —Characteristic 1: Default voltage-reactive power settings for normal operating performance Category A and Category B DER

Voltage-reactive	Default values for DER			
power parameters	Category A	Category B		
V_{Rel}	V_N	$V_{\rm N}$		
V_2	$V_{\rm N}$	0.98 V _N		
Q_2	0	0		
V_3	$V_{\rm N}$	1.02 V _N		
Q ₁	0	0		
V ₁	0.9 V _N	0.92 V _N		
Q_1	25% of nameplate apparent power rating, injection	44% of nameplate apparent power rating, injection		
V4	1.1 V _N	$1.08 V_N$		
Q ₄	25% of nameplate apparent power rating, absorption	44% of nameplate apparent power rating absorption		
Open loop response time, T _r	10 s	5 s		

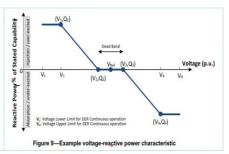


Table 26 —Characteristic 2: Voltage-reactive power settings for normal operating performance Category A and Category B DER

Voltage-reactive	Values	for DER
parameters	Category A	Category B
$V_{\rm Ref}$	1.05 V _N	1.05 V _N
V_2	1.04 V _N	1.04 V _N
Q_2	50% of nameplate reactive power capability, injection	50% of nameplate reactive power capability, injection
V ₃	1.07 V _N	1.07 V _N
Q ₁	50% of nameplate reactive power capability, injection	50% of nameplate reactive power capability, injection
V_1	$0.88 V_{\rm N}$	$0.88 V_{\rm N}$
Q_1 a	100% of nameplate reactive power capability, injection	100% of nameplate reactive power capability, injection
V_4	$1.1 V_{\rm N}$	1.1 V _N
Q ₄	100% of nameplate reactive power capability, absorption	100% of nameplate reactive power capability, absorption
Open loop response time, T _r	1 s	1 s

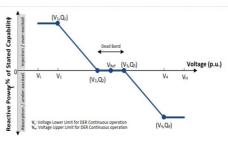


Figure 9—Example voltage-reactive power characteristic

Table 27—Characteristic 3: Voltage-reactive power settings for normal operating performance Category A and Category B DER

voltage-reactive	Tanks for DER				
power parameters	Category A	Category B			
$V_{\rm Ref}$	$0.95 V_{\rm N}$	$0.95 V_{\rm N}$			
V_2	$0.93 V_N$	$0.93 V_{\rm N}$			
Q ₂ 50% of nameplate reactive power capability, absorption		50% of nameplate reactive power capability, absorption			
V_3	0.96 V _N	$0.96 V_{\rm N}$			
Q_3	50% of nameplate reactive power capability, absorption	50% of nameplate reactive power capability, absorption			
V_1	$0.9 V_N$	$0.9 V_N$			
Q_1^a	100% of nameplate reactive power capability, injection	100% of nameplate reactive power capability, injection			
V_4	1.1 V _N	1.1 V _N			
Q4 100% of nameplate reactive power capability, absorption		100% of nameplate reactive power capability absorption			
Open loop response time, T _r	90 s	90 s			

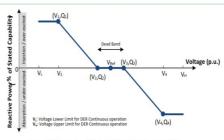


Figure 9—Example voltage-reactive power characteristic

8.12 Prioritation

		***************************************	Expected	active power (p.u. of rated power) (For power)	Expected	d reactive power for each enabled mode		
Step	AC test source voltage (p.u.)	AC test source frequency (Hz)	power (p.u. of rated power) (For PV)		(p.u. of rated	var (p.u. of rated power)	Power factor (unitless)	watt-var (p.u. of rated power)
1	1	60	0.5	0.5	0	0.44 inj	0.9 inj	0
2	1.09	60	0.4	0.25	0.44 abs	0.44 inj	0.9 inj	0
3	1.09	60.33	0.3	0.15	0.44 abs	0.44 inj	0.9 inj	0
4	1.09	60	0.4	0.25	0.44 abs	0.44 inj	0.9 inj	0
5	1.09	59.36	0.4	0.25	0.44 abs	0.44 inj	0.9 inj	0
6	1	59.36	0.6	0.45	0	0.44 inj	0.9 inj	For PV: 0.09 abs For PCS: 0
7	1	60	0.5	0.5	0	0.44 inj	0.9 inj	0
8	1	59.36	0.7	0.7	0	0.44 inj	0.9 inj	0.18 abs

Function Setting	Comments		
Voltage And Frequency Trip Parameters	Set to the widest range of adjustability		
Frequency-Watt Parameters	\boxtimes	Enabled with default values for the EUT's category	
Volt-Watt Parameters	×	Enabled with default values for the EUT's category, P ₂ =0.2*P _{rated} For EUT that can absorb power, set P ₂ =0	
Volt-Var Parameters		Enabled with default values for the EUT's category	
Watt-Var Parameters	×	Enabled with default values for the EUT's category	

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Warranty Registration Form



For Customer (Compulsory)

Name	Country
Phone Number	Email
Address	
State	Zip Code
Product Serial Number	
Date of Commissioning	
Installation Company Name	
Installer Name	Electrician License No.
For I	nstaller
Module (If Any)	
Module Brand	
Module Size(W)	
Number of String	Number of Panel Per String
Battery (If Any)	
Battery Type	
Date of Delivery	Signature

Please visit our warranty website: https://www.solaxcloud.com/#/warranty or use your mobile phone to scan the QR code to complete the online warranty registration.



For more detailed warranty terms, please visit SolaX official website: www.solaxpower.com, to check it.



CE Statement

SolaX Power Network Technology (Zhejiang) Co., Ltd. declares that this A1-Micro 1 in 1 is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU. In accordance with Article 10(2) and Article 10(10), this product allowed to be used in all EU member states.

Safe distance warning

Use the A1-Micro 1 in 1 in the environment with the temperature between -40°C to 70° C (-40°F to 158° F). The device complies with RF specifications when the device used at 20cm from your body. Risk of explosion if battery is replaced by an incorrect type.

Operation Frequency:

Frequency: 5.6-12 MHz

Output Power: -40 dBm/Hz



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