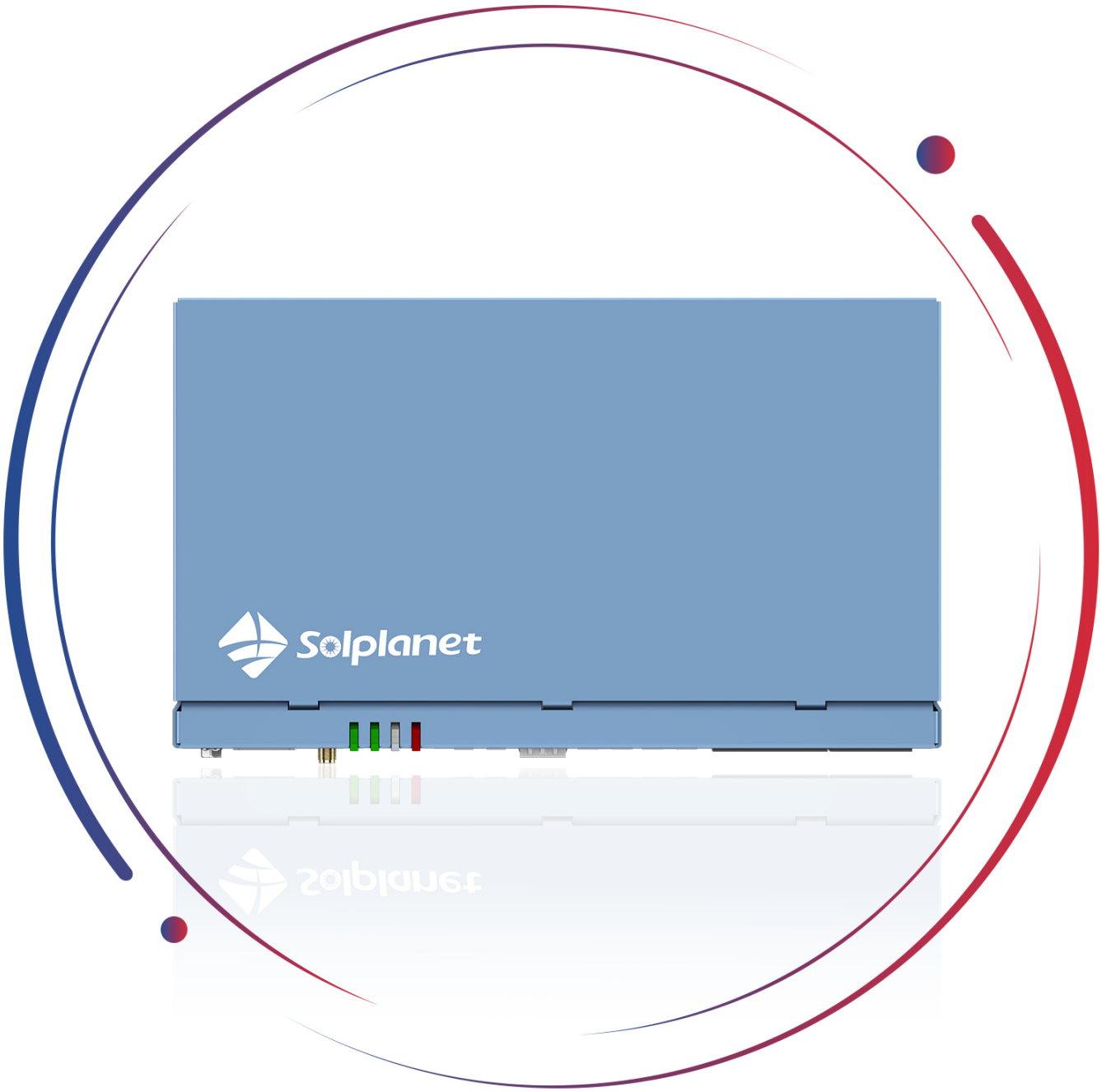


Ai-Logger 2000

User Manual

Solplanet

Contents

1 General information

1.1 About This Document

This document describes the mounting, installation, commissioning, configuration, operation, troubleshooting and decommissioning of the product as well as the operation of the product user interface.

The contents of this user manual may be updated or revised due to on-going product development and continuous improvement. The information in this guide is subject to change without notice. The latest version of this document, the quick installation guide and further information are to be found in PDF format at www.solplanet.net.

It is recommended that this document is stored in an appropriate location and be available at all times.

1.2 Product Validity

This document is valid for the following model:

- Ai-Logger 2000
  It is designed for use with three-phase, grid-connected machines, including the Draco 320KW, Monoceros 150KW, and derivatives.

1.3 Target Group

This document is intended for qualified persons who must perform the tasks exactly as described in this user manual.

All installation work must be performed by appropriately trained and qualified persons.

Qualified persons must possess the following skills:

- Knowledge of how the Ai-Logger 2000 works and is operated.
- Training in how to deal with the dangers and risks associated with installing, repairing and using electrical devices.
- Training in the installation and commissioning of electrical devices.
- Knowledge of all applicable laws, standards and directives.
- A thorough understanding of this document’s contents and strict adherence to all outlined safety information.
- Not adhering to the prescribed instructions may potentially void the manufacturer's warranty. If in doubt please contact the local Solplanet service team.

1.4 Symbols

DANGER

Indicates a hazardous situation which, if not avoided, will result in death or serious injury.

WARNING

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

Indicates a situation which, if not avoided, can result in property damage.

Information that is important for a specific topic or goal, however not related to safety.

2 Safety

2.1 Intended Use

- The device is a compact solution for monitoring and managing multi-model composite systems. It integrates ports, converts protocols, collects data, and enables centralized monitoring and maintenance.
- The product is intended for indoor applications only.
- The logger collects comprehensive data from your solar plant, including inverters, smart energy meters, weather stations, environmental sensors, among other equipment.
- The type label must be permanently attached to the product and must be in a legible condition.
- This document does not replace any regional, state, provincial, federal or national laws, regulations or standards that apply to the installation, electrical safety and use of the product.

2.2 Important Safety Instructions

Before installing, operating, or maintaining the equipment, read this document thoroughly and follow all safety instructions (including those on the equipment).

⚠ DANGER

Touching the exposed conductors of the ABUS communication port may result in an electric shock hazard!

The communication line from the ABUS communication port is directly connected to the inverter's AC side. Contact with live conductors when the upstream switch is not disconnected will result in a fatal risk of electric shock.

- To use the ABUS communication port, install the product in a restricted area.
- Before installing the communication line for ABUS communication port, the upstream AC circuit breaker must be turned off.
- Do not touch communication lines or connection terminals for ABUS communication during normal operation of the product.

⚠ DANGER

Damage to electrical cables and utility service lines can cause personal injury!

Electrical cables or utility service lines (gas or water) may be mounted externally on walls.

- Ensure no cables or utility service lines mounted on the wall or inside the wall cavity are damaged when drilling.

⚠ WARNING

Danger to life due to risk of fatal electric shock from damages to the measuring device caused by overvoltage !

Overvoltage can damage a measuring device and result in voltage being present in the enclosure of the measuring device. Touching the live enclosure of the measuring device results in death or lethal injuries due to electric shock.

- Only use measuring devices with a measurement span equal to or higher than maximum voltage range of the product.

NOTICE

High voltage with risk of electric shock.

- The ABUS communication port remains energized after disconnection and cannot be operated immediately. Wait at least 30 seconds for the capacitor to discharge before handling.

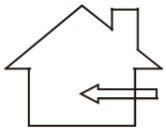
NOTICE

Damage to the product due to electrostatic discharge risk.

Internal components of the product can be irreparably damaged by electrostatic discharge.

- Always ground yourself before handling any component.

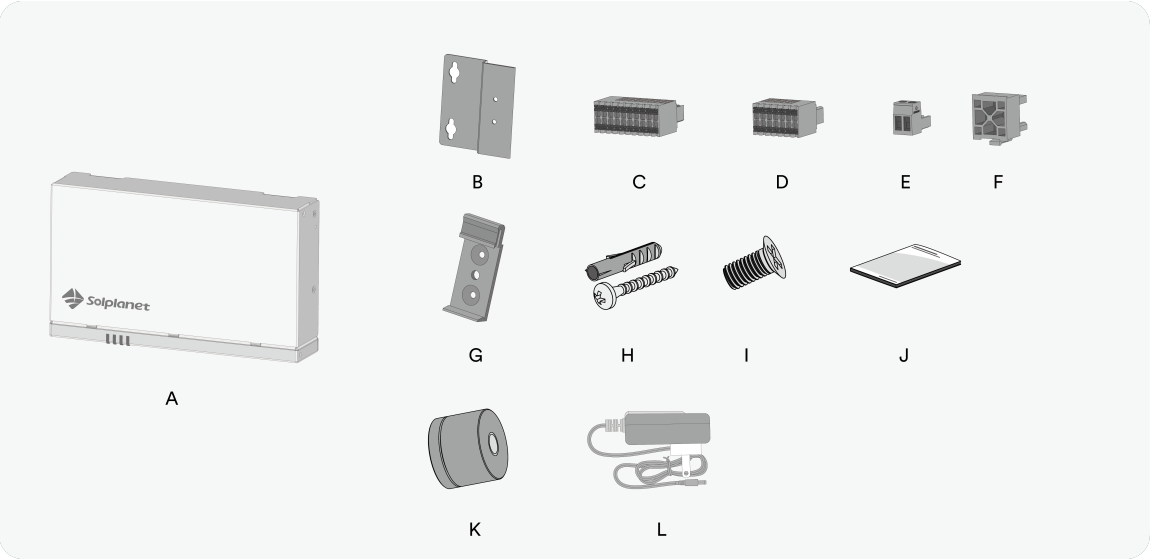
2.3 Symbols

	Beware of high voltage and operating current! The product operates at a high voltage and current. Work on the product must only be carried out by skilled and authorized personnel.
	WEEE Designation Do not dispose of the product together with household waste. Dispose the product in accordance with local disposal regulations for electronic waste applicable in the country of installation.
	CE marking The product complies with the requirements of the applicable EU directives.
	Observe the documentation Read and understand all documentation supplied with the product.
	Indoor equipment The product is intended exclusively for indoor use.

3 Unpacking and storage

3.1 Scope of Delivery

Check the scope of delivery for completeness and any visible external damage. Contact your distributor if the scope of delivery is incomplete or damaged.



NO.	Name	Quantity
A	Ai-Logger 2000	1
B	Mounting bracket	2
C	Terminal (20 pin)	1
D	Terminal (14 pin)	2
E	Terminal (2 pin)	1
F	ABUS Terminal	1
G	DIN rail mounting bracket	2
H	Wall anchor with screw	4
I	M3 screws	4
J	Quick installation guide	1
K	Wi-Fi antenna	1
L	12 V Power Supply Adapter	1

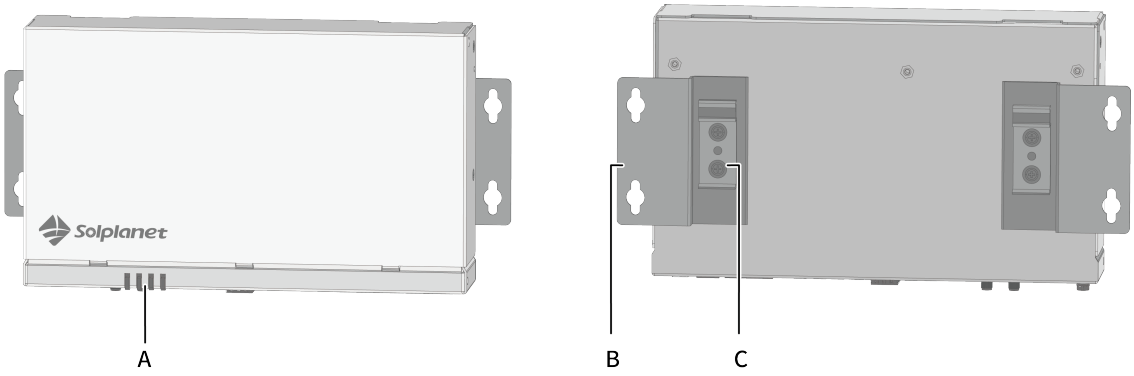
3.2 Product Storage

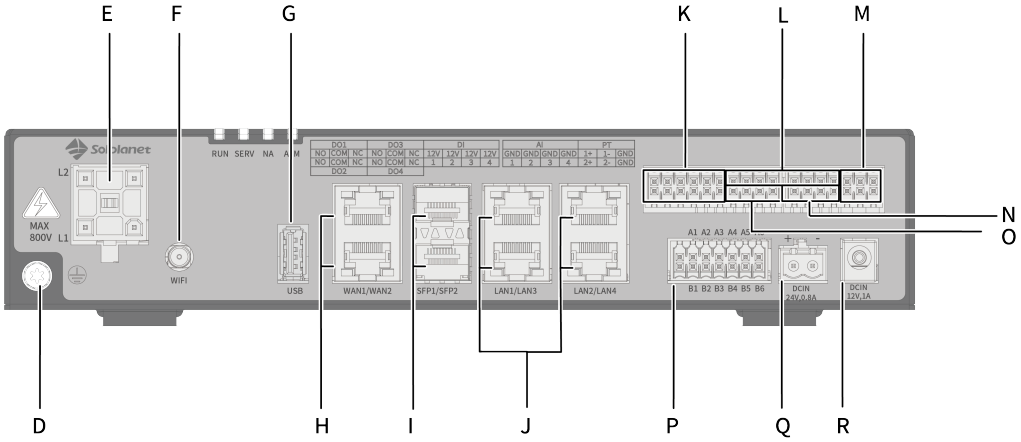
Suitable storage is required if the Ai-Logger 2000 is not installed immediately:

- Store the product in its original packaging within a clean, well-ventilated, and dry room.
- The storage temperature must be between -40°C to +70°C, , with a non-condensing relative humidity between 5% to 95%.
- Protect the device againstharsh environment factors, including rapid temperature fluctuation and collision.

4 Inverter overview

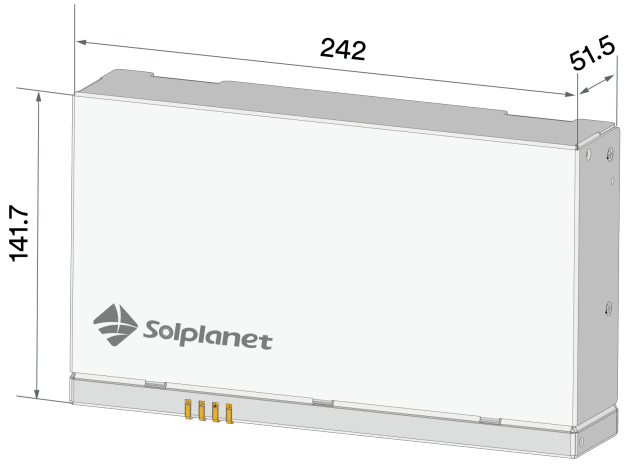
4.1 Product Description





No.	Name	No.	Name
A	LED indicators	J	Fast Ethernet ports (LAN1/2/3/4)
B	Mounting brackets	K	Digital signal output port
C	DIN rail mounting bracket	L	12 V power output port
D	Additional grounding screw	M	PT temperature sensor port (PT100/1000)
E	ABUS communication port	N	Analog signal input port
F	Wi-Fi antenna port	O	Digital signal input port (DI)
G	USB port	P	RS485 communication port
H	Fast Ethernet ports (WAN1/2)	Q	24 V power input port
I	Fiber optic communication port (SFP1/2)	R	12 V power input port

4.2 Dimensions



Unit：mm

4.3 LED Indicator

The LED light indicator panel serves as a human-machine interface to indicate the current working status of the system.

LED indicator	LED	Description
System operation indicator (RUN)		Green light off: Unit is either not powered or faulty.
		Green light on: System is powered and operating normally.
Alarm status indicator (ALM)		Red light off: No alarms, or system is not powered.
		Red light on: Emergency/Alarm, system stopped or the core module malfunctioning.
Communication connection indicator (SERV)		Green light off: No connection to remote server.
		Green light on: Connected to remote server.

After inserting the USB flash drive, the running light gives priority to indicate the status of the USB flash drive operation and maintenance. After inserting the USB flash drive, it blinks slowly, blinks quickly during the execution of the upgrade and log export, and stays on permanently after the execution.

4.4 Interfaces and Functions

The device is a compact, high performance solution for monitoring and managing multi-model composite systems. It integrates various ports, converts protocols, collects and aggregates data, and enables centralized monitoring and maintenance.

Wi-Fi Communication Interface

This product includes a standard WLAN wireless communication function, intended exclusively for near-field communication and parameter setup.

RS485 Communication Interface

This product is equipped with six RS485 ports, allowing connections to PV inverters, smart meters, weather stations and other third-party devices. It supports centralized management of up to 80 PV inverters. It automatically assigns RS485 addresses to the connected inverters, and allows mantainance and remote configuration, including renaming devicesbased on their serial numbers.

ABUS Communication Interface

An integrated ABUS interface enables data exchange with inverters via the AC power line.

Ethernet WLAN Port

Northbound communications: features two WLAN 100 Mbps fast Ethernet ports, typically used to connect to cloud servers, local SCADA systems, or Modbus management systems.

Ethernet LAN Port

Southbound communications: features four LAN fast Ethernet communication ports for interfacing with downstream devices such as Modbus TCP protocol compatible inverters, or video surveillance systems.

SFP Optical Interface

Two fiber-optic interfacessupport ring network configurations among multiple Ai-Logger 2000 units and servers.

Digital Signal Input Port (DI)

Regional compatibility: The DI port is available for connecting to power control devices in different markets such as DRMs devices in the Australian market or ripple control receivers in Germany – ensuring broad compliance and adaptability.

Digital Signal Output Port (DO)

Four digital signal output ports can provide control signals to external systems and devices.

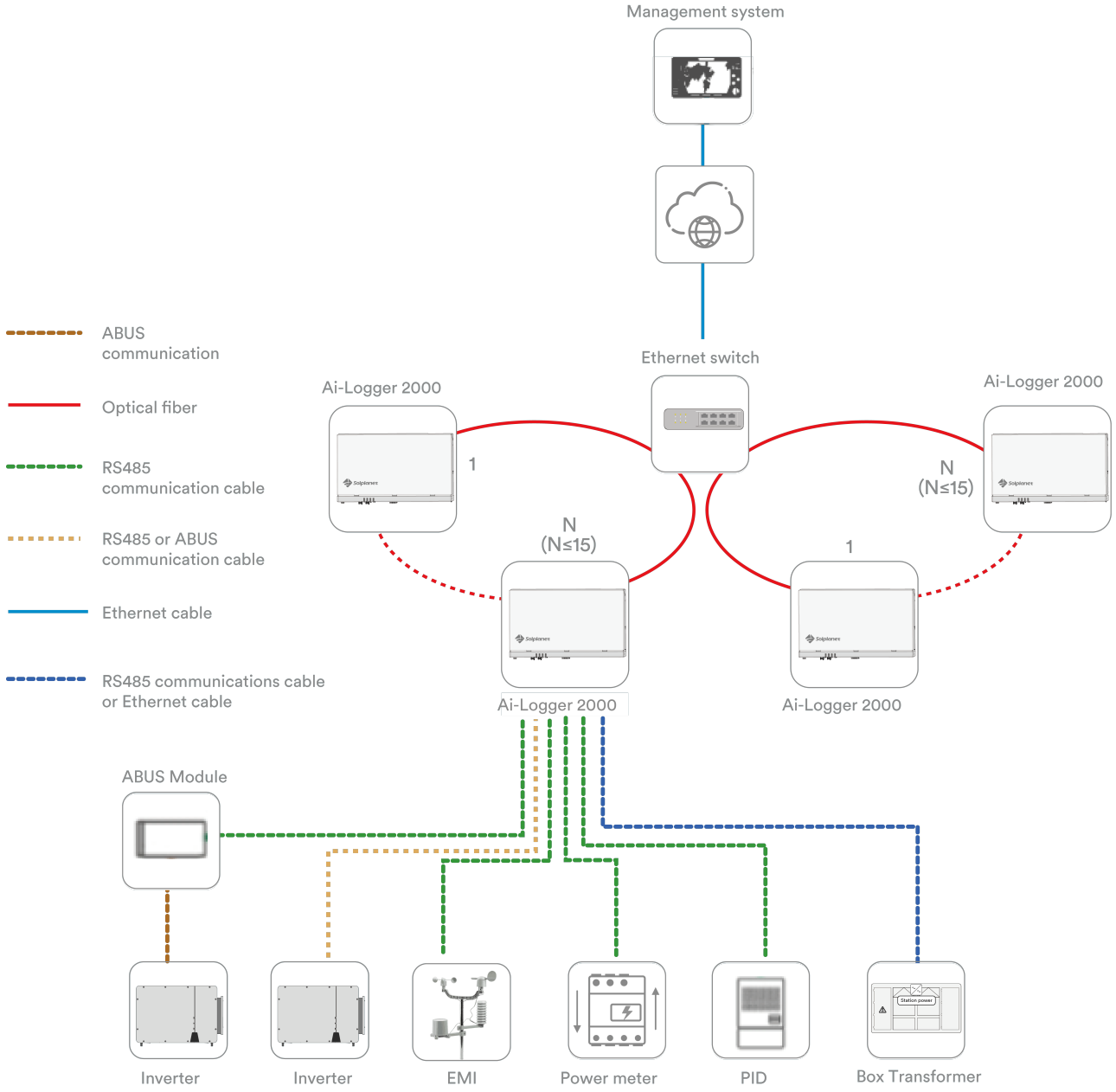
USB Port

A USB port enables quick firmware updates and log exports by inserting a USB flash drive.

- The USB stick must be USB 2.0 compatible and can only have one FAT32 formatted partition.

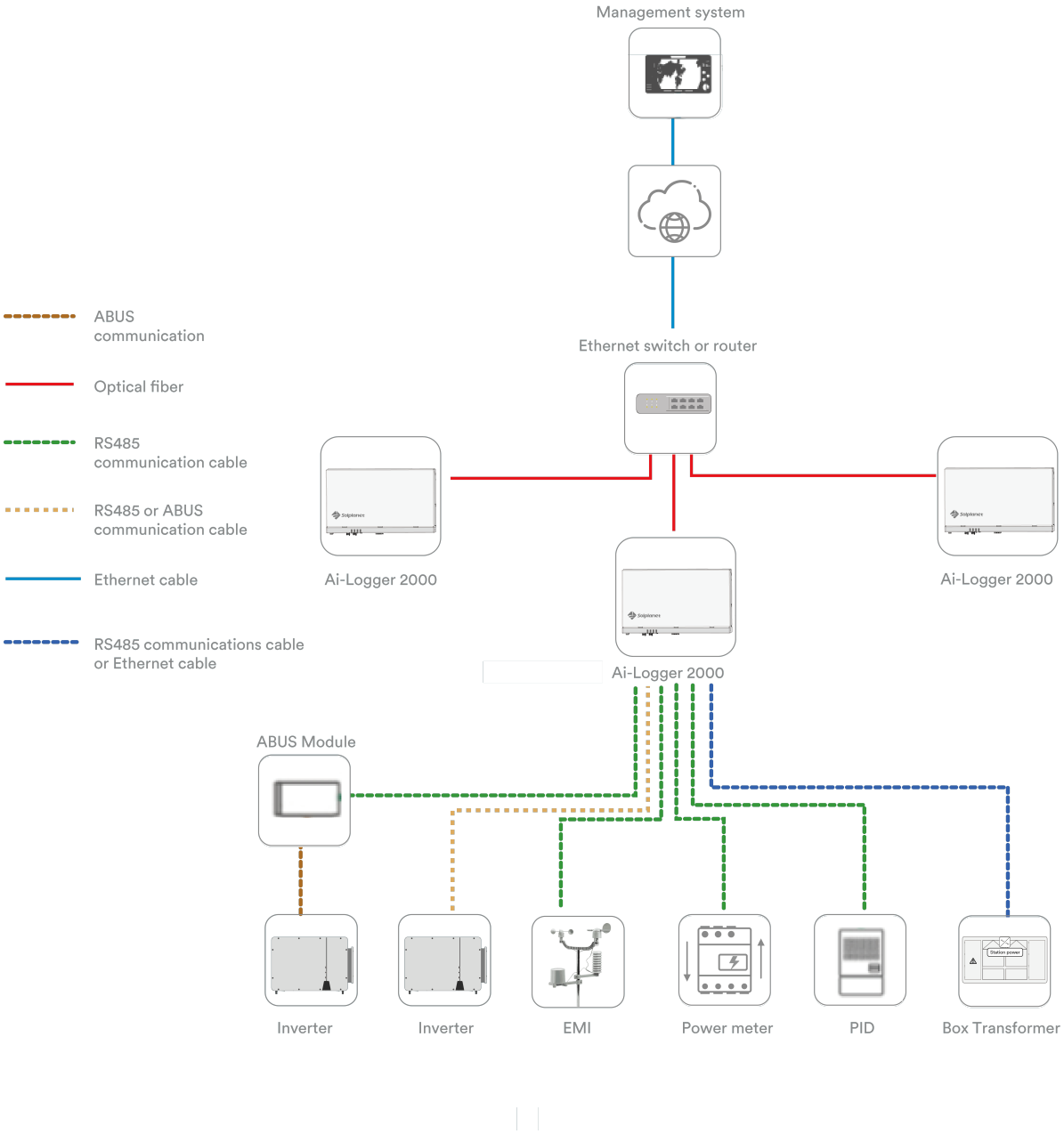
4.5 Typical Networking Scenarios

Ring Topology



- An optical ring network consisting of Ai-Logger 2000 devices can include up to 15 units, each connecting to inverters, environmental monitors, meters and other peripheral devices.
- Scalability: Multiple optical ring networks can be aggregated to a central management system by converging them via Ethernet switches.

Star Topology



- Multiple Ai-Logger 2000 devices can be connected to the management system after aggregation via Ethernet switches.
- The maximum communication distance between the Ai-Logger 2000 and an Ethernet switch is 12 km with an optional 100 Gigabit optical module, or 10 km with an optional Gigabit optical module when using optical fiber, and up to 100 m when connecting an Ethernet cable.

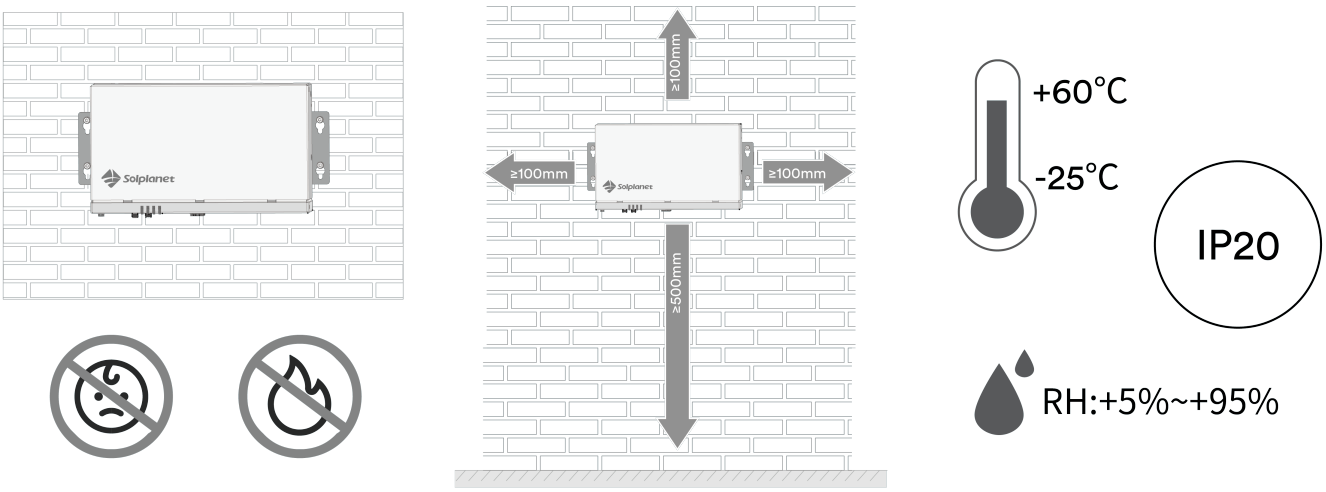
5 Mounting

5.1 Installation Environment

It is recommended that you select an appropriate height to install the Ai-Logger 2000 for ease of operation and maintenance.

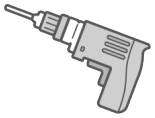
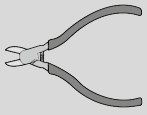
Please note the following when selecting the mounting location:

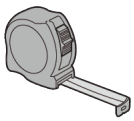
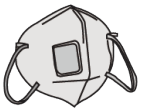
- The Ai-Logger 2000 has a protection rating of IP20 and can only be installed indoors.
- It must be installed in a location that is inaccessible to children and at an appropriate height for operation and maintenance.
- To ensure optimal operation, an ambient temperature between -30°C and +60°C is recommended, and direct sunlight should be avoided.
- The ambient humidity in the installation location must not exceed 95%. High humidity may damage internal components.
- Ensure that the RS485 and Ethernet cable connection area is facing down when mounting on a wall or rail.
- Ensure that sufficient space is reserved around the Ai-Logger 2000. The recommended mounting position is 1,500 mm above the floor, mantaining a minimum clearance of 500 mm for maintenance access, as illustrated in the figure below.



5.2 Installation Tools

The following recommended installation tools are commonly used. Additional auxiliary tools may be required depending on on-site conditions.

Tools	Reference Picture	Usage
Impact Drill		Creates holes in walls or surfaces for wall-mounting installations.
Diagonal Pliers		Cuts cable ties and other thin wires.

Wire Stripper		Removes insulation cleanly from cables.
Rubber Hammer		Taps the expansion bolts into pre-drilled holes.
Utility Knife		Suitable for unpacking and general cutting tasks
Wire Cutter		Cuts cables or wires.
Marker		Marks measurements or reference points.
Vacuum Cleaner		Cleans dust and debris from the work area after drilling or cutting.
Steel Tape		Accurately measures distance.
Safety Goggles		Protects eyes during drilling, cutting, or hammering tasks.
Dust Mask		Prevents inhalation of dust or debris while drilling or cutting.

5.3 Mounting

The Ai-Logger 2000 supports wall and rail mounting.

5.3.1 Wall Mounting

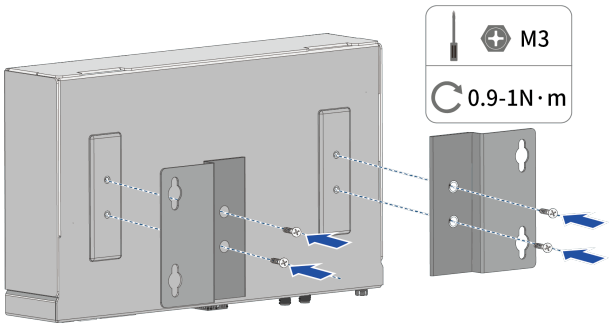
⚠ DANGER

Damage to electrical cables and utility service lines can cause personal injury!

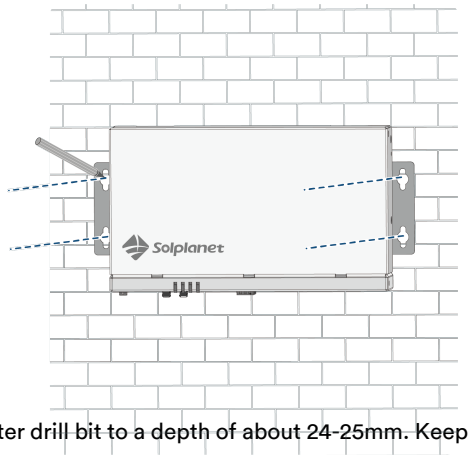
Electrical cables or utility service lines (gas or water) may be mounted externally on walls.

- Ensure no cables or utility service lines mounted on the wall or inside the wall cavity are damaged when drilling.

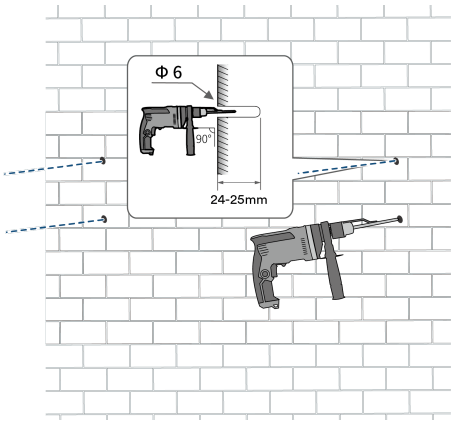
Step 1: Remove the machine from it packaging and ensure the mounting lugs are in place and secure.



Step 2: Select a strong and flat wall for installation. Confirm that the Ai-Logger 2000 can be firmly fixed to the wall. Use a level to adjust the device's orientation and mark the hole positions on the wall using unit's mounting holes.



Step 3: Drill 4 holes using a Ø6mm diameter drill bit to a depth of about 24-25mm. Keep the drill perpendicular to the wall during operation and avoid tilted holes.



⚠ WARNING

Dropping the device can cause personal injury!

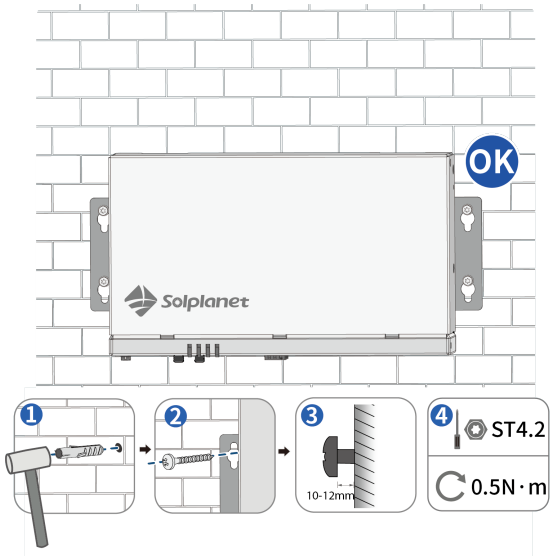
If the holes are drilled to incorrect depth and distance, the machine may fall from the wall.

- Always measure both the hole depth and distance before installation.

Step 4: After cleaning any dust from the hole. Partially tighten four expansion anchors, insert them vertically into each hole, and gently tap with a rubber mallet until they are fully seated.

Step 5: Drive the self-tapping screws into the expansion anchors, ensuring the self-tapping screw headsremain 10-12 mm away from the wall surface.

Step 6: Align the Ai-Logger 2000 lugs with the self-tapping screws. Hang the device on the wall, then tighten the screws to secure it in place.



Installation is complete.

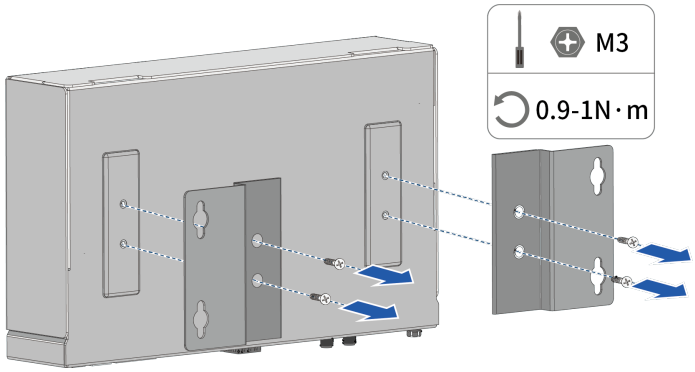
5.3.2 Rail Mounting

The Ai-Logger 2000 is not supplied with a mounting rail.If you choose this mounting method, you need to provide a 35 mm DIN standard rail.

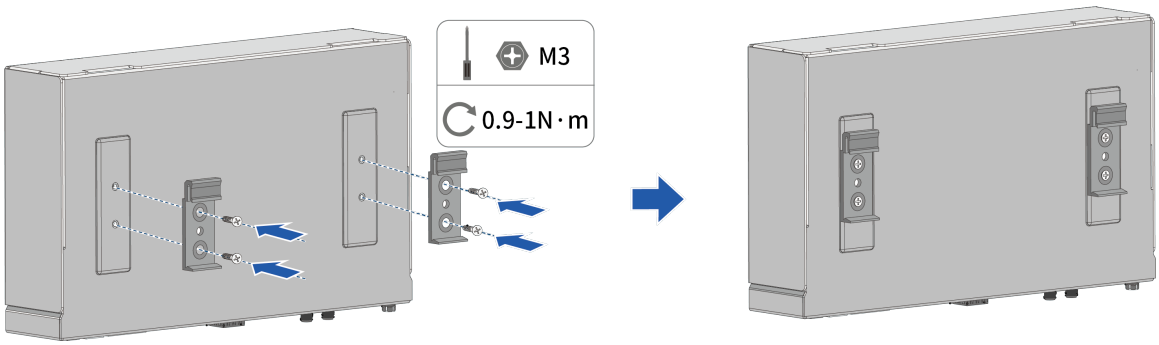
NOTICE

- Ensure the rail is long enough to securely hold the Ai-Logger 2000 securely; a minimum length of 280 mm is recommended.
- Confirm that the rail is firmly fixed before mounting the Ai-Logger 2000.

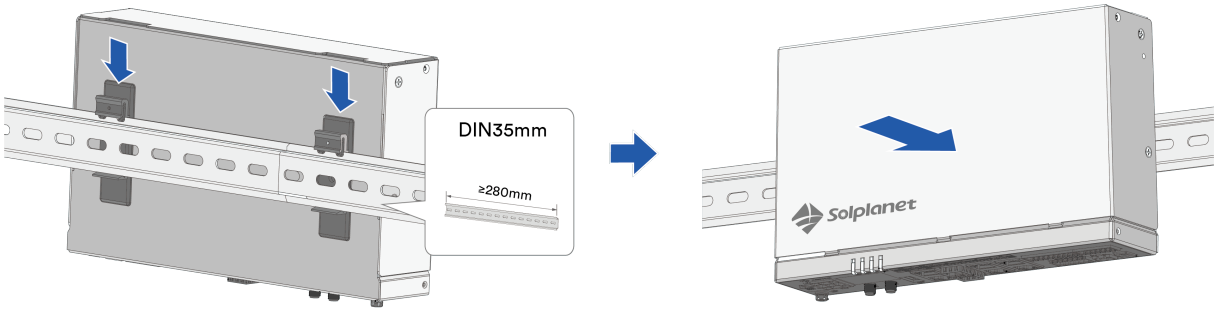
Step 1: Remove the lugs from the Ai-Logger 2000 using a Phillips screwdriver.



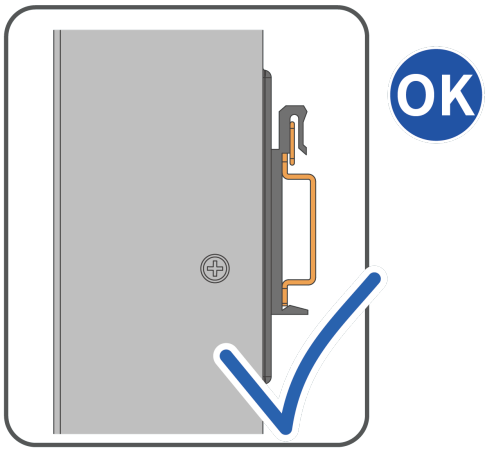
Step 2: Use the screws removed from the lugs to secure the rail catch.



Step 3: Hook the Ai-Logger 2000 onto the rail.



Step 4: Verifythat the Ai-Logger 2000 is securely installed.



Installation is complete.

6 Electrical connection

- When making electrical connections, ensure that all cables are securely connected to prevent loosening.
- The Ai-Logger 2000 does not have a dedicated power on button, only connect the power adapter after completing all other electrical connections.

6.1 Cables Specifications

Type	Recommended Cable Specification
PE cable	Outdoor copper-core cable with a cross-sectional area of 4 – 6 mm^2 or 12 – 10 AWG.
Network cable	Customers should provide their own network cable, preferably Cat 5e or higher, with shielded connectors.
RS485 communication cable	Two-core or multi-core outdoor shielded cable with a cross-sectional area of 0.2 – 2.5 mm^2 or 24 – 14 AWG.
DI signal cable	Two-core or multiple-core cable with a cross-sectional area of 0.2 – 1.5 mm^2 or 24 – 16 AWG.
Output power cable (12 V/100 mA)	
AI signal cable	
DO signal cable	
24 V input power cable (Optional)	Two-core cable with a cross-sectional area of 0.2 – 1.5 mm^2 or 24 – 16 AWG.

6.2 PE Cable Connection

WARNING

Leakage currents may result in an electric shock hazard !

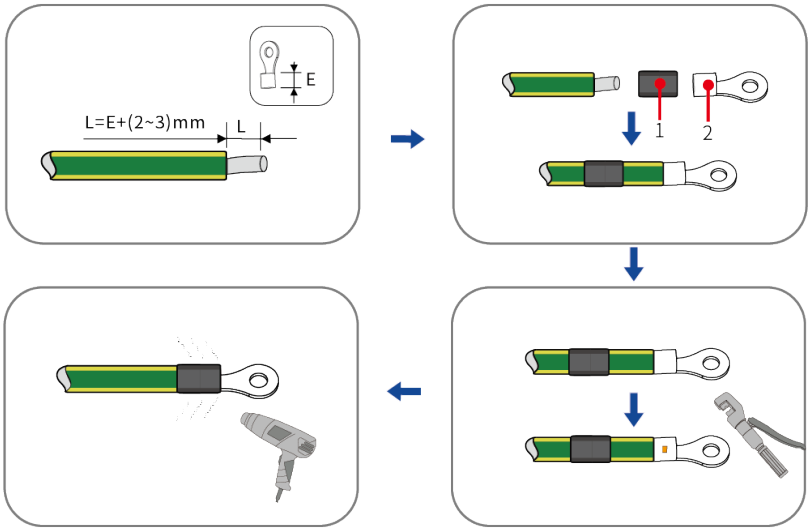
- If the protective earth wire is not properly connected or becomes disconnected, any contact between the machine's casing and an exposed conductor may result in leakage current flowing through the user, creating a risk of electric shock. Ensure the protective earth terminal is securely connected.
- The earth connection of this protective earth terminal does not replace the PE terminal connection in the AC wiring; both must be reliably grounded.

Requirements for the secondary protection ground cable:

Item	Description	Note
1	Screw	M4, provided by the customer
2	OT/DT terminal	M4, provided by the customer
3	Yellow and green ground cable	Compatible Terminal. Cable must match terminal specs

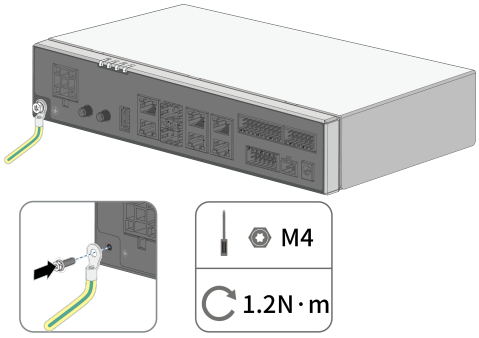
Procedure:

Step 1: Strip the grounding cable insulation. Insert the exposed conductor into the ring terminal lug and crimp firmly using a crimping tool.



1: Heat shrink tubing 2: OT/DT terminal (M4)

Step 2： Remove the screw from the ground terminal, insert the screw through the OT/DT terminal, and tighten the screw onto the terminal using a screwdriver.



Step 3： Apply paint or a protective coating to the grounding terminal to ensure corrosion resistance.

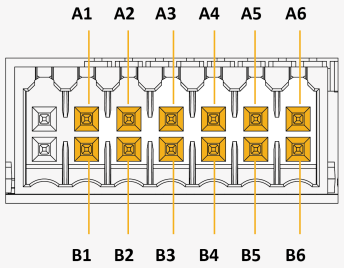
Installation is complete.

6.3 Communication Ports and Connections

6.3.1 RS485 Communication Connection

The Ai-Logger 2000 iis equipped with six independently isolated RS485 ports with default communication parameters of 9600 bps, 8N1. These parameters can be modified via the built-in web interface. Each ports can be used to connect to inverters and other devices with standard Modbus-RTU protocol.

The port descriptions are as follows:



RS485

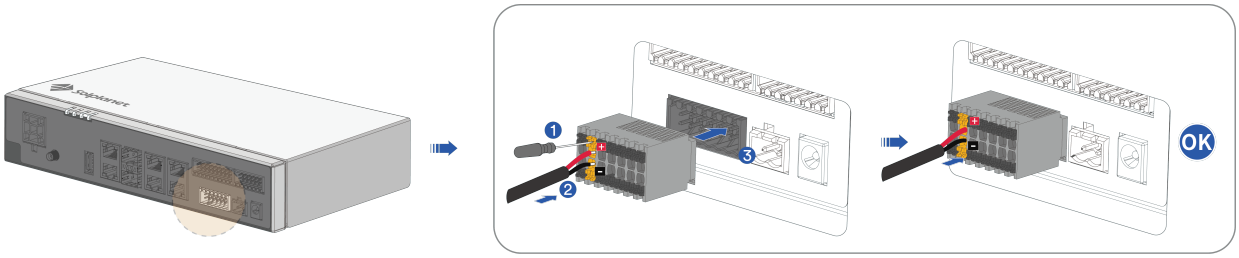
No.	Port	Description
RS485-1	A1(+)	RS485A, RS485 Differential Signaling+ RS485B, RS485 differential signaling-
	B1(-)	
RS485-2	A2(+)	
	B2(-)	
RS485-3	A3(+)	
	B3(-)	
RS485-4	A4(+)	
	B4(-)	
RS485-5	A5(+)	
	B5(-)	
RS485-6	A6(+)	
	B6(-)	

Procedure:

Step 1: Select a cable of the appropriate length, strip one end to the specified length, and connect it to the terminal block of the target device. For specific stripping and wiring operations, please refer to the user's manual of the corresponding target device.

Step 2: Strip the protective cover and insulation from the other end of the cable as indicated.

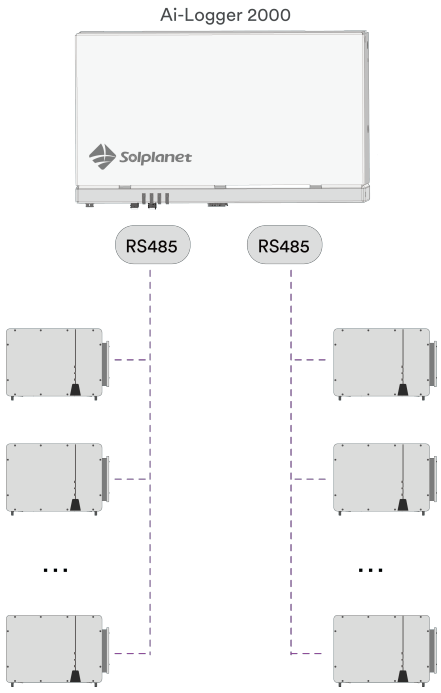
Step 3: Use a screwdriver to press the auxiliary hole on the Ai-Logger 2000's terminal block, insert the cable into the blockand tighten it. Finally, plug the terminal block into the COM port.



-- The terminal block can be pulled out by reversing the above steps.

--Installation is complete.

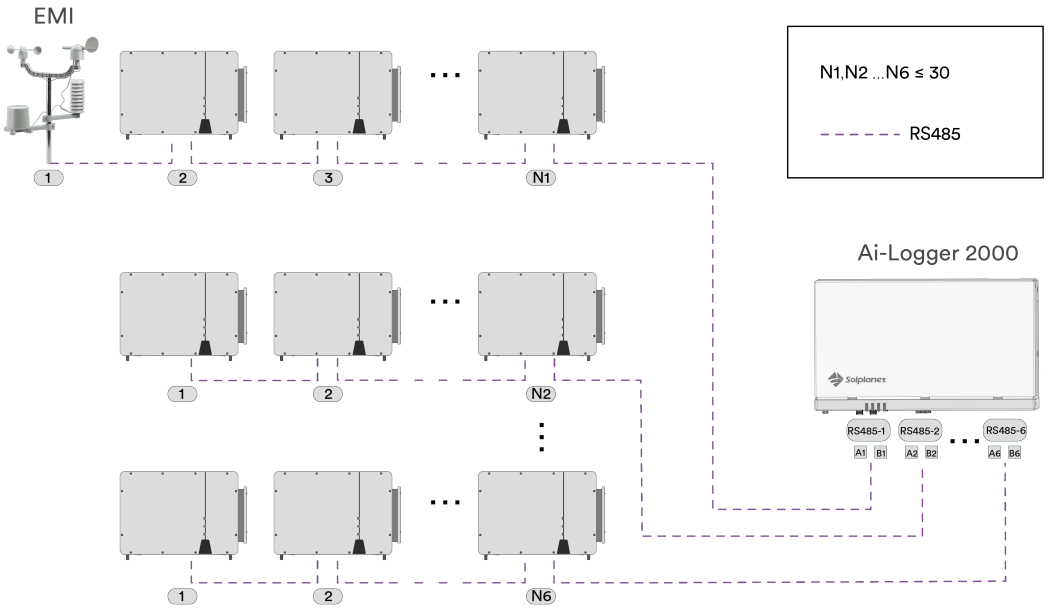
When the Ai-Logger 2000 is to be connected to multiple inverters simultaneously, it supports a daisy-chain configuration.



- A single unit supports up to 180 devices, and it is recommended that the number of devices connected to each RS485 channel is no more than 30.
- The baud rate of all devices in each daisy chain must be consistent with the Ai-Logger 2000's baud rate (9600 bps, 8N1).
- The addresses of all devices in each daisy chain must be within the address range set by Ai-Logger 2000, and cannot be duplicated, or it will lead to communication failure.
- Multiple inverters are connected to the same port, which can be automatically detected via the Ai-logger 2000's web interface.

Connect Multiple Inverters or Environmental Monitors

Multiple inverters and weather stations can be daisy-chained to the Ai-Logger 2000 via RS485.The device includes six inde pendent RS485 interfaces, each capable of connecting to up to 30 devices.

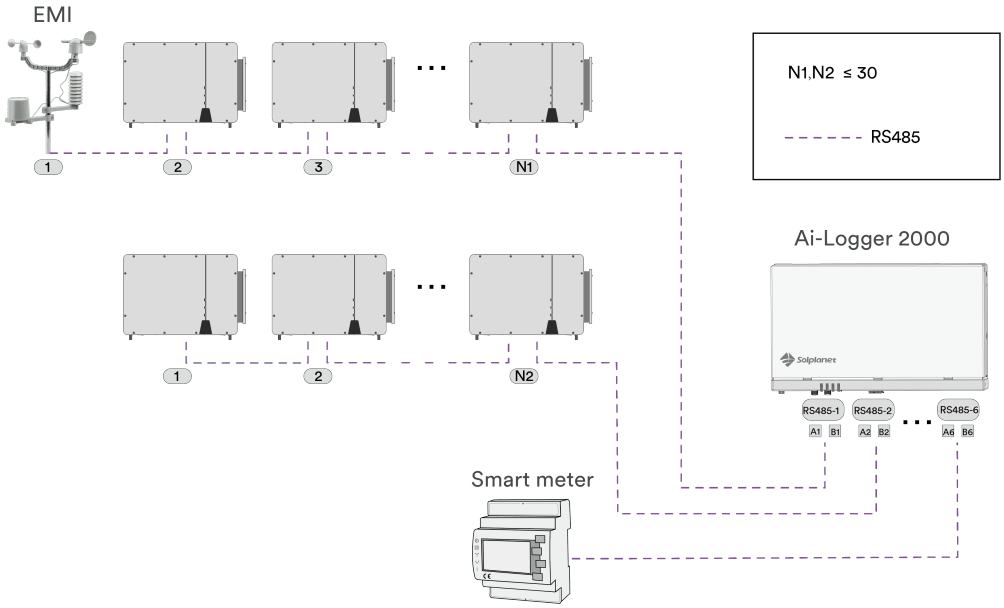


Connect Smart Meters

The Ai-Logger 2000 is compatible with smart meters that support the standard Modbus -RTU or the DL/T645 protocol. These meters can be used to limit the active power output.

By measuring power at the grid connection point and controlling the inverter's active power accordingly, the system ensures that output does not exceed the agreed value.

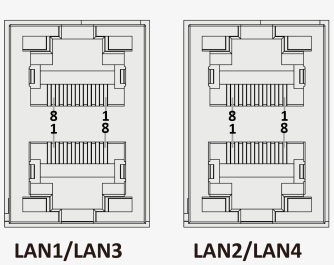
The smart meter must be connected to a separate RS485 interface to ensureoptimal data transmission speed of the active power information.



6.3.2 LAN Ethernet Communication Connection

The Ai-Logger 2000 features four LAN fast Ethernet communication ports for connecting to southbound network devices or computers. By default, the IP address is statically configured as 192.168.3.3, and can be modified through the built-in web interface.

The port descriptions are as follows:



No.	Description
LAN1 (Up)	Support 10/100 Mbps adaptive.
LAN3 (Down)	
LAN2 (Up)	
LAN4 (Down)	

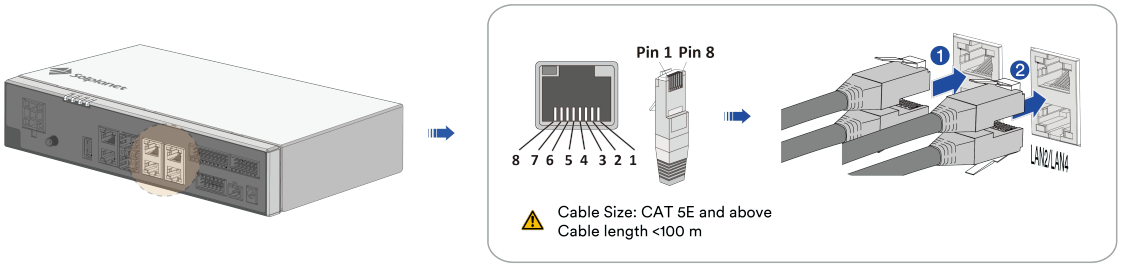
Procedure:

Customers must provide their own network cables; When preparing the cable:

- Select a shielded CAT 5E or higher-grade cable.
- It is recommended that the cable length does not exceed 100 m.

Step 1: Plug one end of the cable into the Ethernet port of the taget device (e.g. another network device or computer).

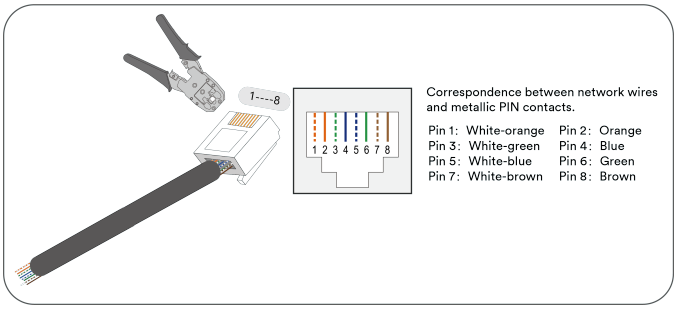
Step 2: Plug the other end of the network cable into any LAN port on the Ai-Logger 2000.



-- To disconnect, gently remove the network cable by pulling it in the opposite direction.

--Installation is complete.

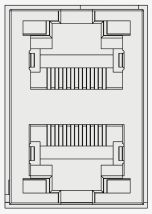
When crimping the cable, make sure that the shield of the cable is securely connected to the metal casing of the connector.



6.3.3 WAN Ethernet Communication Connection

The Ai-Logger 2000 is equipped with two fast Ethernet WAN ports for connecting to higher-level SCADA systems or routers. DHCP is enabled by default and can be modified via the built-in web interface.

The port descriptions are as follows:



WAN1/WAN2

No.	Description
WAN1 (Up)	Connect Ethernet switches, routers, computers, and other devices to operate.
WAN2 (Down)	

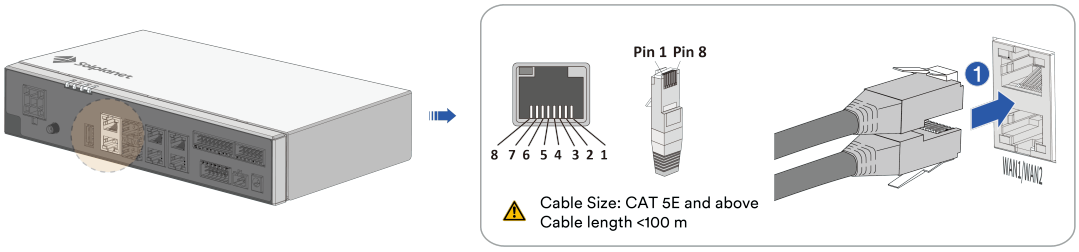
Procedure:

Customers must provide their own network cables. When preparing the cable:

- Select a shielded CAT 5E or higher-grade cable.
- It is recommended that the cable length does not exceed 100 m.

Step 1: Plug one end of the network cable into the Ethernet port of the device (monitoring device or router).

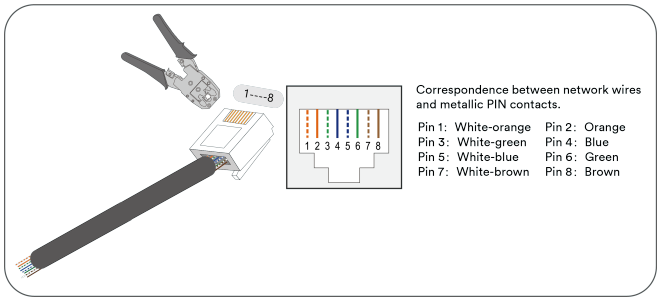
Step 2: Plug the other end of the network cable into the WAN port of the Ai-Logger 2000.



-- To disconnect, gently remove the cable by pulling it in the opposite direction.

--Installation is complete.

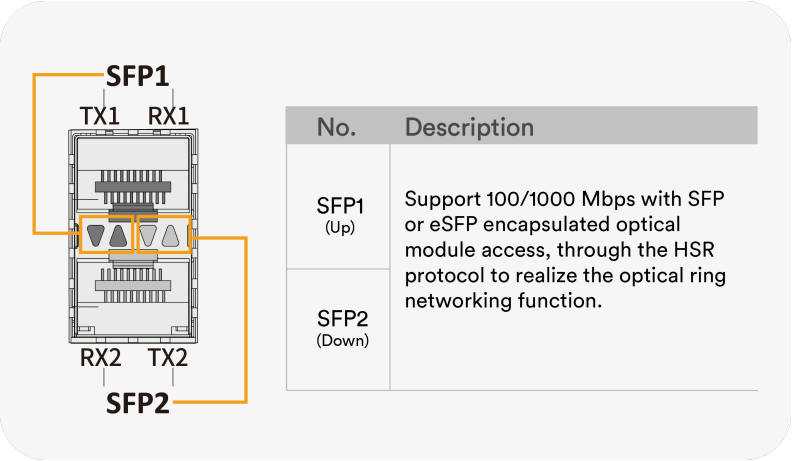
When crimping the cable, make sure that the shield of the cable is securely connected to the metal casing of the connector.



6.3.4 SFP Fiber Optic Communication Connections

Ai-Logger 2000 features two SFP ports supporting single-mode single-fiber or single-mode dual-fiber connections (non-standard). Users need to provide their own 1310/1550 nm single-mode optical modules.

The port descriptions are as follows:



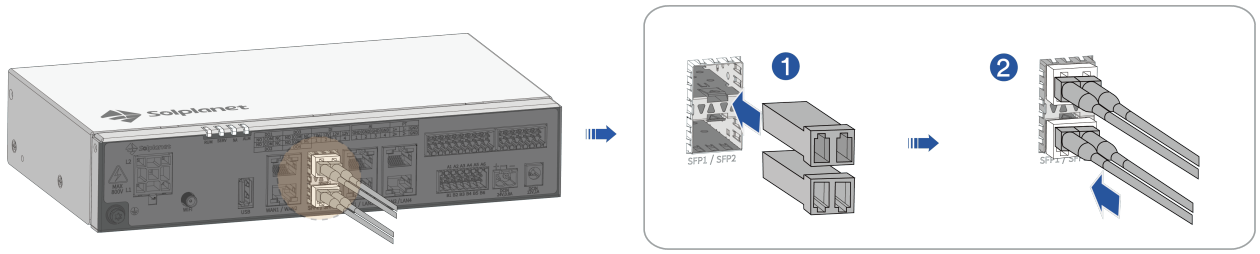
No.	Description
SFP1 (Up)	Support 100/1000 Mbps with SFP or eSFP encapsulated optical module access, through the HSR protocol to realize the optical ring networking function.
SFP2 (Down)	

Procedure:

- The optical module is optional. If you choose to install one, select a 100/1000 Mbps optical module according to the docking port of the optical switch. The optical module adopts SFP or eSFP package.
  - ✧ 100 Mbps modules support transmission distances > 12 km.
  - ✧ 1000 Mbps modules support transmission distances ⩾ 10 km.
- When inserting the optical module into the SFP1 port, please make sure the label side is facing up; when inserting into the SFP2 port, please ensure the label side is facing down.

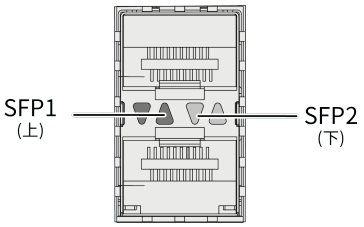
Step 1: Insert the optical module into the 'SFP1' or 'SFP2' port on the Ai-Logger 2000.

Step 2: Insert each fiber optic patch cords that come with the optical module into the corresponding port on the optical module.



Step 3: Connect the other end of the fiber optic patch cord to the SFP optical module on the receiving device.

Step 4: Refer to the Ethernet optical port indicator blinking status to verify normal operation.



Indicator	LED Status	Description
SFP1 (upper) SFP2 (lower)	Green and yellow off	No optical module is detected in the Ethernet optical port.
	Green steady on, yellow blinking at short intervals (0.1 s ON, and 0.1 s OFF)	The fiber link is being set up
	Green steady on, yellow blinking intermittently	The data is being transmitted
	Green steady on, yellow blinking at long intervals (0.1 s ON, and 1.9 s OFF)	The fiber link is operating normally.

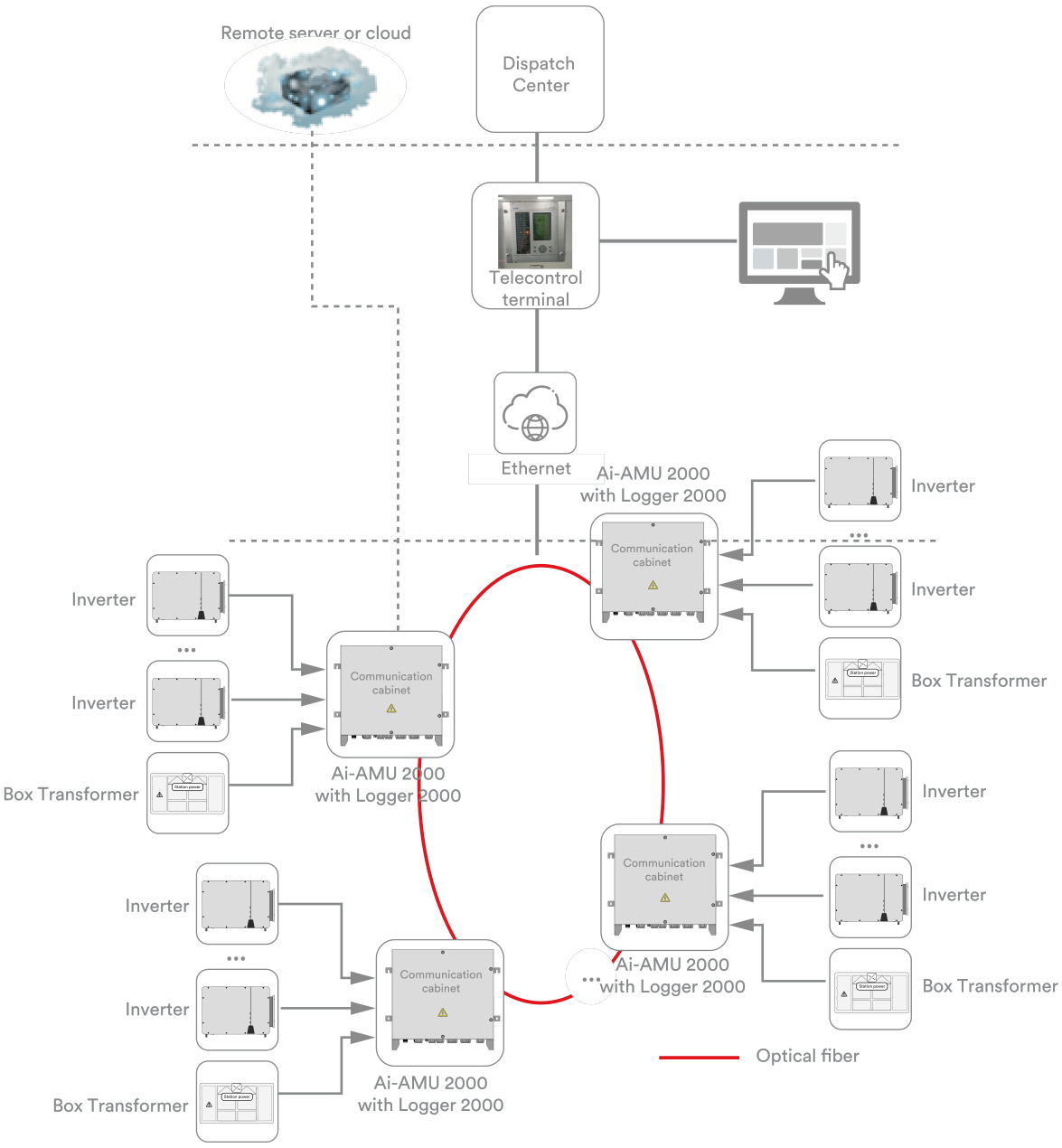
--When disassembling, first unplug the fiber optic patch cord , then remove the optical module by pulling it in the opposite direction.

--Installation is complete.

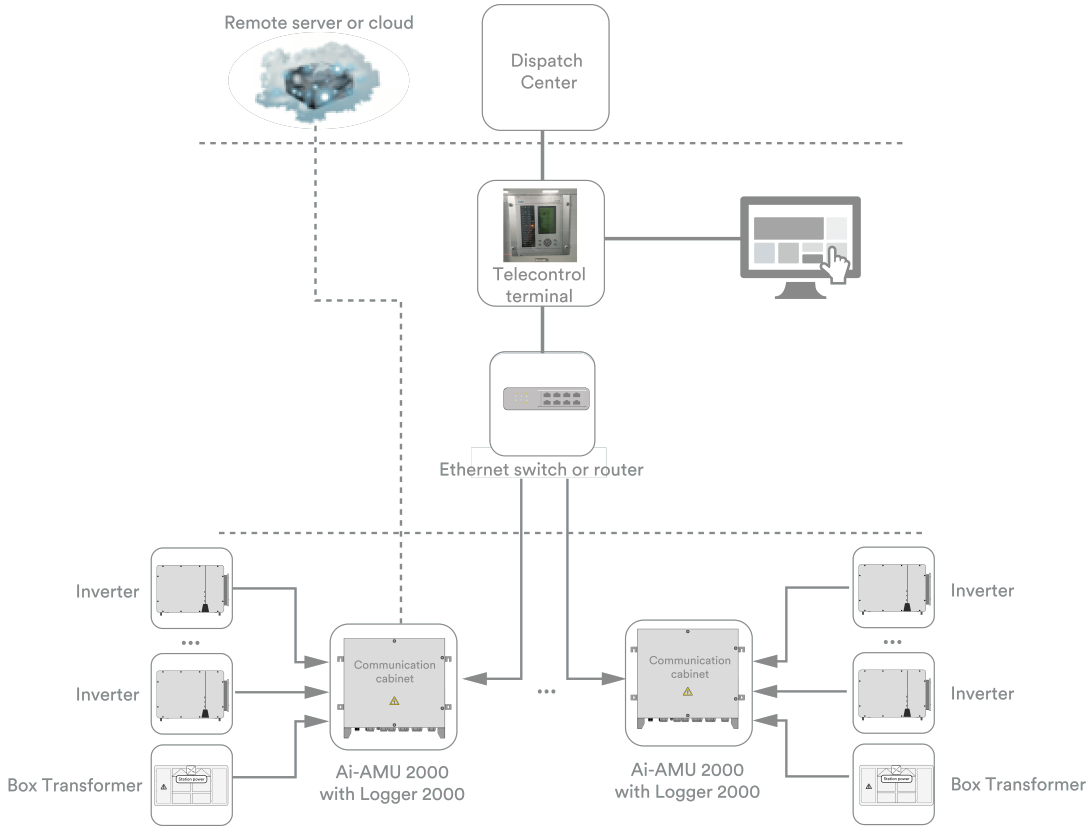
- Cable Removal: Press the cable catch to release the fiber optic patch cable.
- Module Removal: Use the puller on the optical module, allowing at least 0.2 seconds before completely removing it.

Ai-Logger 2000s can establish a ring network through fiber optic communication, or through a switch that supports the HSR protocol.

Fiber-Optic Ring Network Topology



Star Network Topology

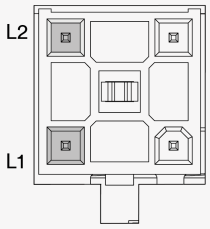


6.3.5 ABUS Communication Connection

An ABUS module is built-in, supporting single-phase AC networking at up to 800 V.

If the inverter supports ABUS communication, it can be connectedvia the AC power line, in this case, there is no need to connect the RS485 communication line of the inverter.

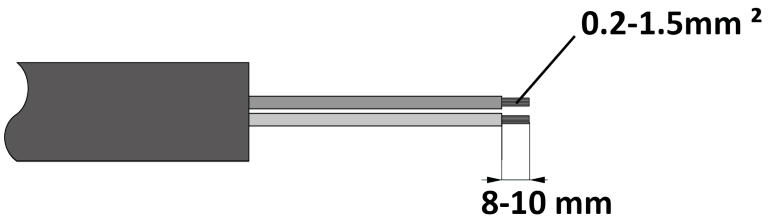
The port descriptions are as follows:



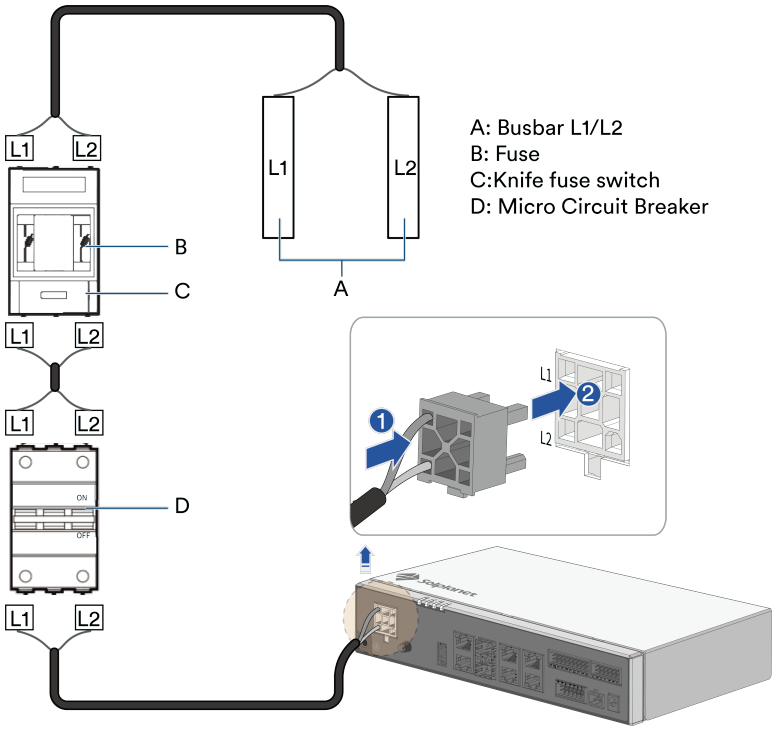
No.	Description
L2	Can be connected to string inverters equipped with ABUS communication.
L1	

Procedure:

Step 1: Strip the cable's protective covering and insulation as shown.



Step 2： Connect the cables to L1 and L2 on the ABUS terminal block and tighten them. Finally, plug the ABUS terminal block into the ABUS port.



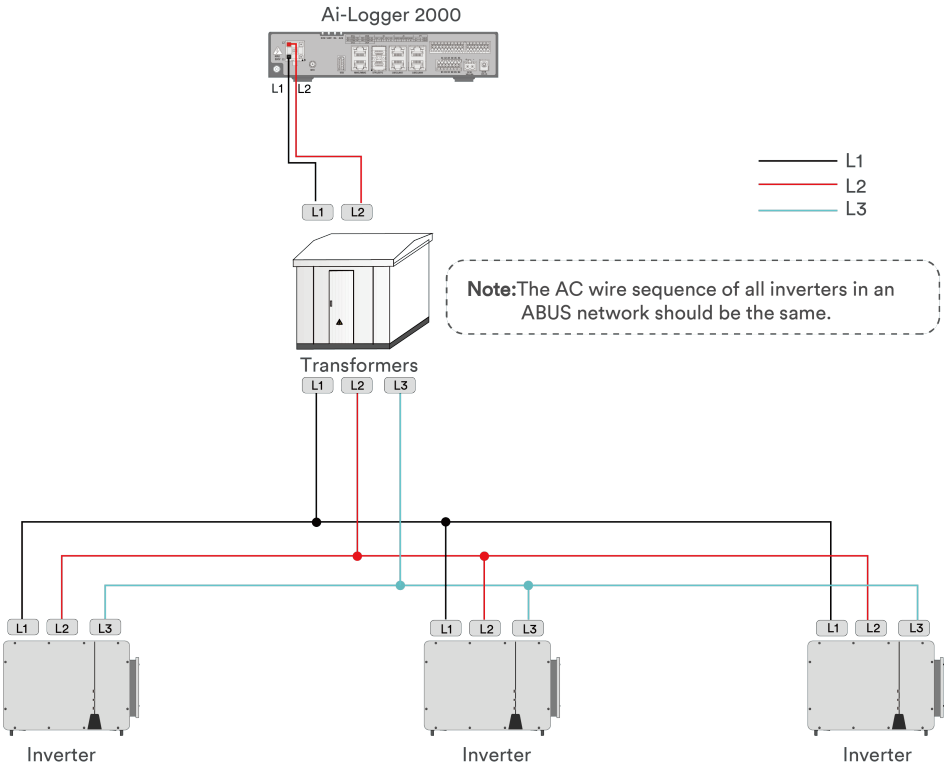
Step 3： Select the appropriate length of cable, strip the other end to the appropriate length and connect it to the miniature circuit breaker.

-- To disassemble, first pull out the ABUS terminal block first, then detach the L1 and L2 cables in the opposite direction.

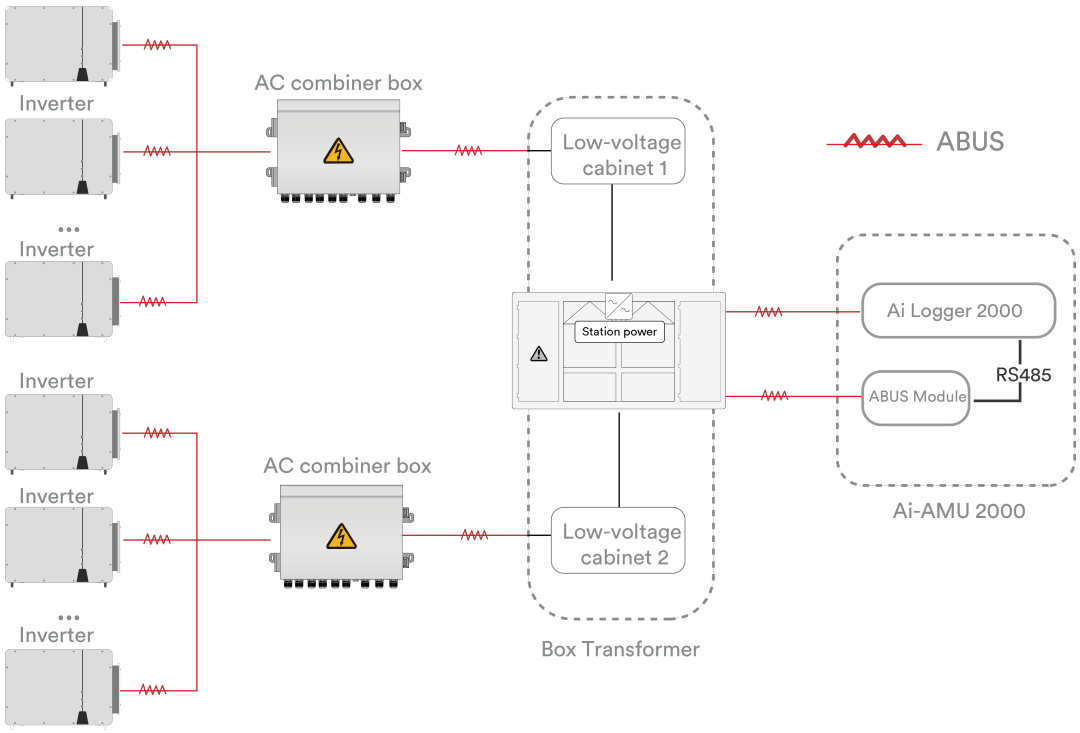
--Installation is complete.

Single-Phase: Connect L1 and L2 as shown in the diagram to avoid communication issues or command loss.

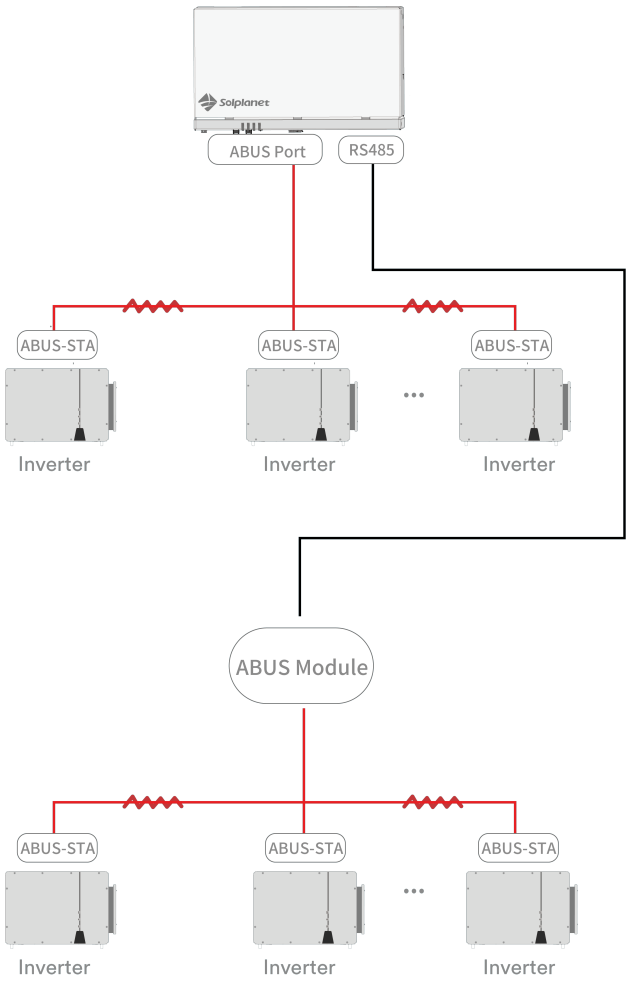
- If both the Ai-Logger 2000 and inverter support ABUS communication, they can connect via AC power line. In this case, the RS485 communication line to the inverter is not required.
- When using ABUS communication, ensure a miniature circuit breaker and a knife-fused switch are installed to prevent short circuits and potential damage to the device.



ABUS Network



Dual ABUS AC Network



6.3.6 Wi-Fi Communication Connection

The Ai-Logger 200 includes a built-in Wi-Fi module that works in hotspot mode, allowing local operation and maintenance (O&M) from a computer connected to its hotspot.

The default Wi-Fi hotspot name is product's serial number (SN), and the default password is 88888888. These information is also printed on the product label. For security reasons, users are recommended to change the Wi-Fi hotspot password immediately after the first login.

Procedure:

Step 1: Attach the Wi-Fi antenna from the accessory pack by twisting it clockwise onto the Wi-Fi port.

-- The Wi-Fi antenna can be removed by unscrewing it in the opposite direction.

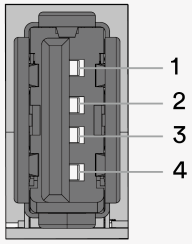
--Installation is complete.

- Recommended communication distance is less than 3 meters.

6.3.7 USB Communication Connection

Use a USB 2.0 or USB 2.0 protocol-compatible flash drives with only one FAT32 formatted partition. Sandisk or Kingston brands are recommended.

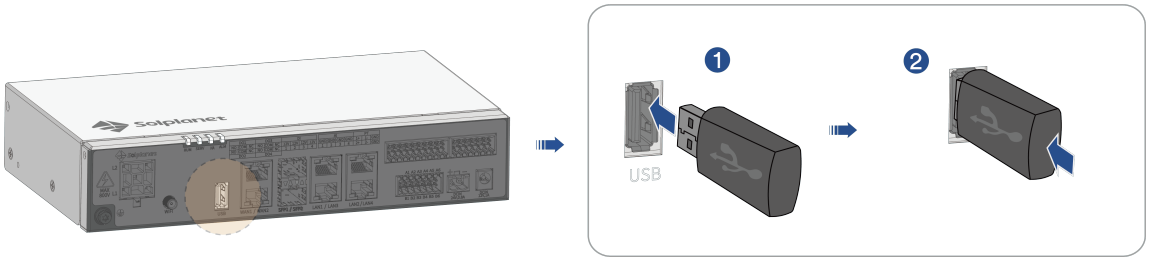
The port descriptions are as follows:



No.	Description
1	Performs local maintenance operations such as firmware upgrades and data exports for the Ai-Logger 2000.
2	
3	
4	

Procedure:

Step 1: Plug the USB memory stick directly into the USB port.



-- To remove, pull the USB memory stick out in the opposite direction.

--Installation is complete.

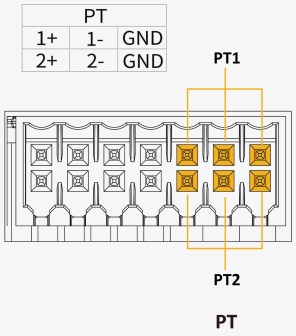
6.4 Other local interface connections

6.4.1 PT Temperature Sensor Connection

The Ai-Logger 2000 has two PT ports that support 3-wire or 2-wire PT100/PT1000 temperature sensors.

When connecting the PT port to a 2-wire PT100/PT1000, use a shorting cable to connect the 'GND' and '-' terminals on the corresponding port.

The port descriptions are as follows:

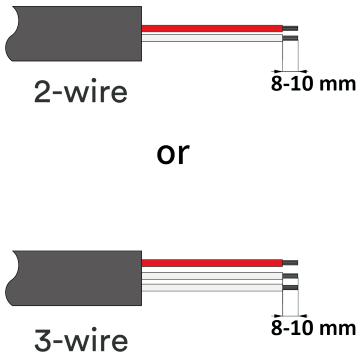


No.	Port	Description
PT1	1+	Supports 3-wire or 2-wire PT100/PT1000 temperature sensor connection. 3-wire sensors max. cable lengths: PT100 < 2 m. PT1000 < 20 m. 2-wire sensors max. cable length: PT100/PT1000 < 2 m.
	1-	
	GND	
PT2	2+	
	2-	
	GND	

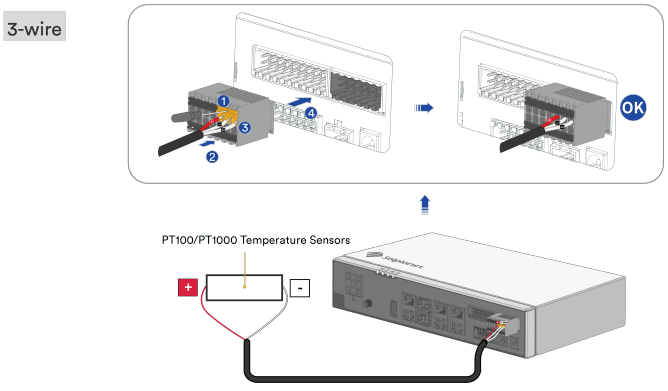
Procedure:

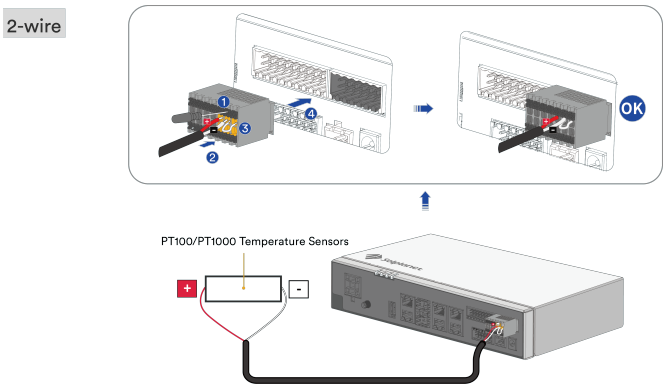
Step 1: Select a cable of suitable lenght, strip one end to the appropriate length, and connect it to the PT100/1000 temperature sensor. For specific stripping and wiring instructions, please refer to the sensor's user manual.

Step 2: Strip the protective cover and insulation from the other end of the cable as shown.



Step 3: Insert a screwdriver into the auxiliary hole on the terminal block, insert the cable, then tighten the screw. Finally, plug the terminal block into the PT port.





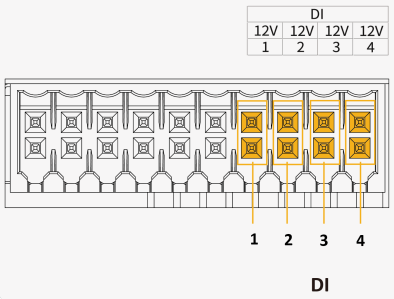
-- The terminal block can be pulled out in reverse order during disassembly.

--Installation is complete.

6.4.2 Digital Input (DI) Signal Connections

Digital inputs for connecting DI-type grid dispatch commands or alarm signals, with a recommended signal transmission distance not exceeding 10 m.

The port descriptions are as follows:

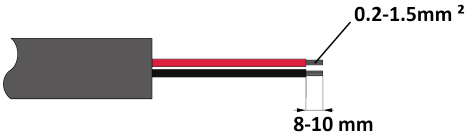


No.	Port	Description	
1	DI_1	12 V	Supports 4-way passive dry contact signal access.
		1	
2	DI_2	12 V	
		2	
3	DI_3	12 V	
		3	
4	DI_4	12 V	
		4	

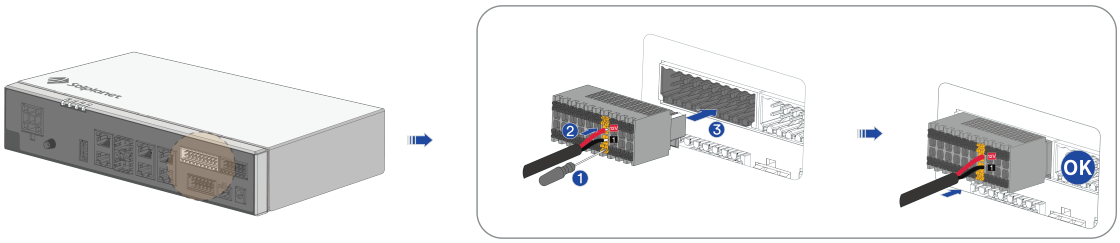
Procedure:

Step 1: Select a cable of appropriate length, strip one end to the appropriate length and connect it to the dry contact, for specific stripping and wiring instructions, please refer to the user manual of the corresponding product.

Step 2: Strip the protective covering and insulation from the other end of the cable as shown.



Step 3: Use a screwdriver to press the auxiliary hole on the terminal block, insert the cable, and tighten. Finally, plug the terminal block into the DI port.



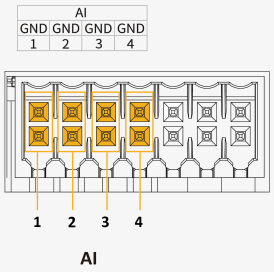
-- The terminal block can be pulled out in reverse order during disassembly.

--Installation is complete.

6.4.3 Analogue Input (AI) Signal connection

The Ai-Logger 2000 supports analogue signals from environmental monitoring sensors via the AI port. The recommended signal transmission distance is within 10 m.

The port descriptions are as follows:

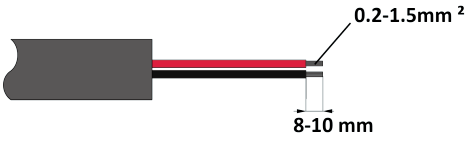


No.	Port		Description
1	AI_1	GND	
		1	
2	AI_2	GND	Supports 3-channel current-type AI signal access and 0 mA～20 mA, 4 mA～20 mA current input.
		2	
3	AI_3	GND	
		3	
4	AI_4	GND	
		4	

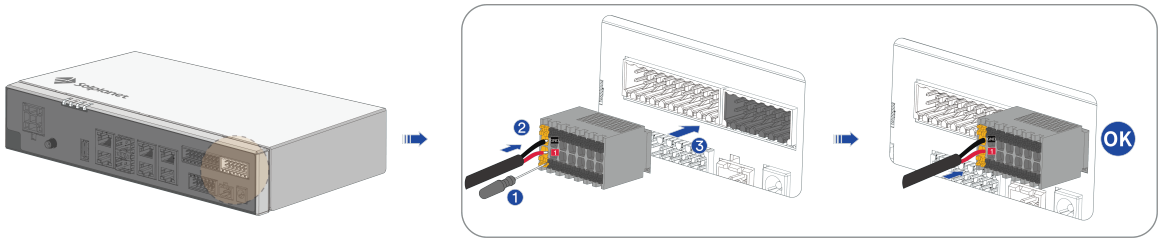
Procedure:

Step 1： Select a cable of appropriate length, strip one end to the appropriate length, and connect it to the environmental monitoring sensor port. For specific stripping and wiring instructions, please refer to the user manual of the corresponding product.

Step 2： Strip the protective covering and insulation from the other end of the cable as shown.



Step 3： Use a screwdriver to press the auxiliary hole on the terminal block, insert the cable, and tighten. Finally, plug the terminal block into the AI port.



-- The terminal block can be pulled out in reverse order during disassembly.

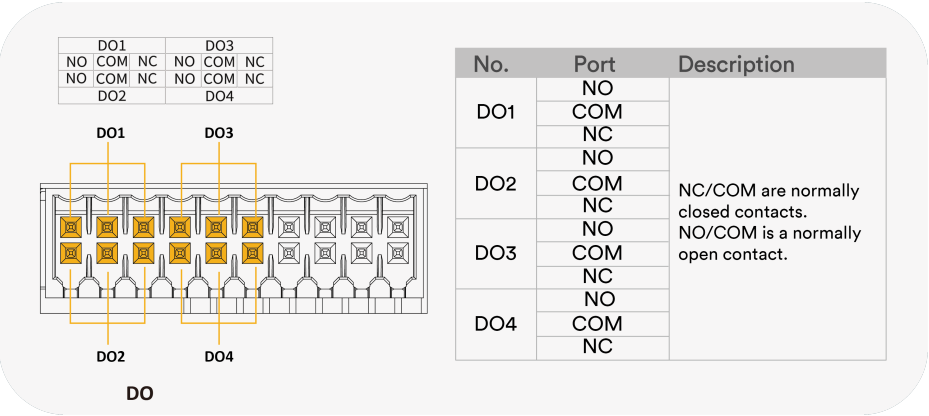
--Installation is complete.

6.4.4 Digital Output (DO) Signal Connection

The Ai-Logger 2000 supports 4 relay outputs. The maximum driving capacity of each DO port is 12 V/100 mA.

The NC/COM interface is normally closed, while the NO/COM interface is normally open. The recommended transmission distance is within 10 m.

The port descriptions are as follows:



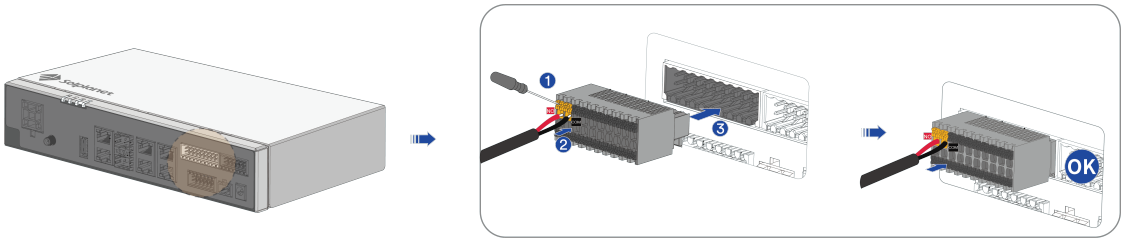
No.	Port	Description
DO1	NO	NC/COM are normally closed contacts. NO/COM is a normally open contact.
	COM	
	NC	
DO2	NO	
	COM	
	NC	
DO3	NO	
	COM	
	NC	
DO4	NO	
	COM	
	NC	

Procedure:

Step 1: Select a cable of appropriate length, strip one end to the appropriate length and connect it to the relay port. For specific stripping and wiring instructions, please refer to the user manual of the corresponding product.

Step 2: Strip the protective covering and insulation from the other end of the cable as shown.

Step 3: Use a screwdriver to press the auxiliary hole on the terminal block, insert the cable, then tighten. Finally, plug the terminal block into the DO port.



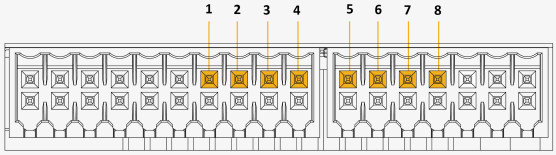
-- The terminal block can be pulled out in reverse order during disassembly.

--Installation is complete.

6.4.5 12 V Power Output Port Connection

Ai-Logger 2000 provides a 12 V power output port with a maximum output capacity of 0.1 A, typically used to drive an intermediate relay coil for acoustic and visual alarm scenarios. The recommended transmission distance is within 10 m.

The port descriptions are as follows:



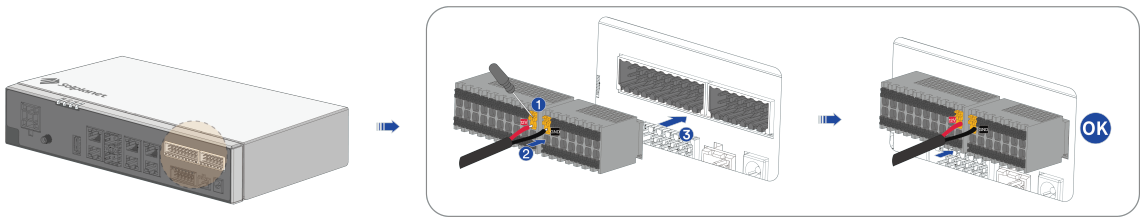
No.	Port	Description
1	12 V(+)	Positive cable (red) can be connected to any port 1-4
2	12 V(+)	
3	12 V(+)	
4	12 V(+)	
5	GND(-)	Negative cable (black) can be connected to any port 5-8
6	GND(-)	
7	GND(-)	
8	GND(-)	

Procedure:

Step 1: Select a cable of suitable length, strip one end to an appropriate length, and connect it to the 12 V power port. For specific stripping and wiring instructions, please refer to the user manual of the corresponding product.

Step 2: Strip the protective covering and insulation from the other end of the cable as shown.

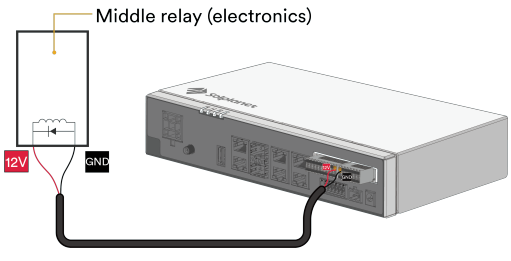
Step 3: Insert a screwdriver into the auxiliary hole, connect the cable to the terminal block, and tighten. Finally, plug the terminal block into the 12 V power output port.



-- The terminal block can be pulled out in reverse order during disassembly.

--Installation complete.

- Use an intermediate relay with a coil containing a renewable diode for device damage prevention.



7 System Operation

7.1 Checking Before Power-On

To ensure proper operation of the Ai-Logger 2000 after power-up, perform the following pre-power-up checks:.

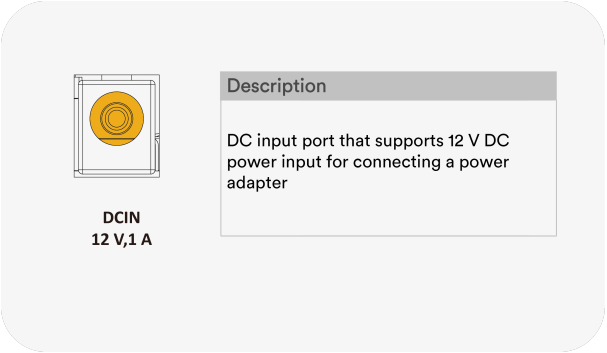
No.	Check That
1	The Ai-Logger 2000 has been securily and reliably installed.
2	Make sure that the grounding cables of the Ai-Logger 2000 are securely and reliably connected to the suitable grounding point.
3	All cables between the Ai-Logger 2000 and other devices are securely and reliably connected.
4	The RS485 communication cable is properly and reliably connected.
5	When communicating via the AC power line, confirm that the AC power line of the Ai-Logger 2000 is securely and reliably connected.
6	Cable bundling should be neat and orderly, with evenly spaced tiesthat are neither too tight nor too loose, and all facing the same direction.
7	No excess tape, cable ties, or other debris remain on the cables.

7.2 System Power-On

Mode 1: Power Supply through the Power Adapter

When powering the Ai-Logger 2000 via the power adapter, connect the power adapter cable and then switch on power from the AC outlet side.

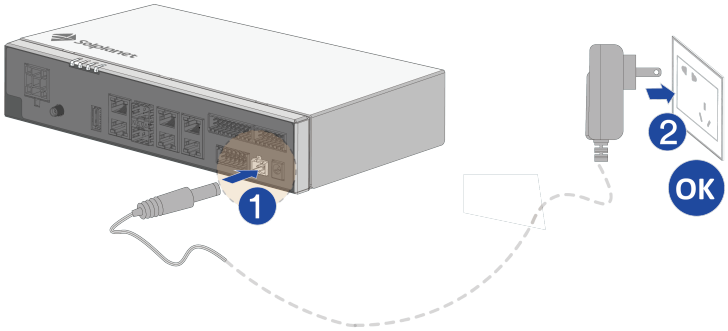
The port descriptions are as follows:



Procedure:

Step 1： Remove the 12 V power adapter from the accessory pack, Plug one end of the adapter cable to the Ai-Logger 2000's 12 V power input, as shown.

Step 2： Plug the power adapter into an AC outlet.

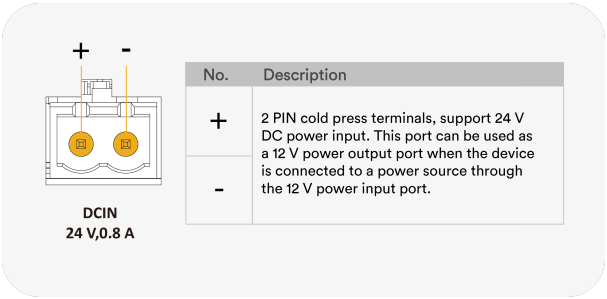


- The rated input voltage of the power adapter is 100 V AC to 240 V AC, and the rated input frequency is 50 Hz/60 Hz.
- Select an AC outlet that is compatible with the power adapter.

Mode 2: Powered by a DC Power Supply

When using a DC power supply, irst verify that the cable connecting the DC supply to the Ai-Logger 2000 is securely attached. Then close the front power switch on the DC supply.

The port descriptions are as follows:



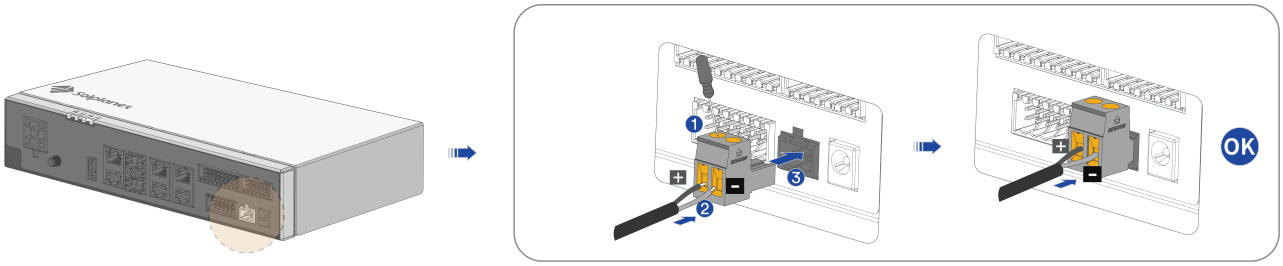
No.	Description
+	2 PIN cold press terminals, support 24 V DC power input. This port can be used as a 12 V power output port when the device is connected to a power source through the 12 V power input port.
-	

Procedure:

Step 1： Select a cable of suitable length, strip one end as required, and connect it to the DC power supply.

Step 2： Strip the protective covering and insulation from the other end of the cable as shown.

Step 3： Use a screwdriver to press the auxiliary hole on the terminal block, insert the cable, and tighten. Finally, plug the terminal block to the Ai-Logger 2000.



-- The terminal block can be pulled out in reverse order during disassembly.

--Installation is complete.

7.3 Commissioning Procedure

If all of the checks outlined above are satisfied, follow the steps below to commission the product:

1. Switch on the power to all inverters, PIDs, box transformers and weather stations.
2. Connect the power adapter and power on the Ai-Logger 2000.
3. Log in to the Ai-Logger 2000's embedded web interface and refer to section 8.5.1 "Date and Time Settings".
4. Set the address search range and baud rate of RS485 communication port through the embedded web interface of Ai-Logger 2000. For details, refer to Section 8.5.2. "Communication Setup".

- If a Modbus RTU protocol weather station or box transformer is connected, the parameters need to be set manually through the embedded web interface of the Ai-Logger 2000. For details, please refer to section 8.6.3 "Device Management".
- The addresses of all devices on each RS485 port must be within the Ai-Logger 2000's specified address range and must not be duplicated; otherwise, communication will fail.
- If the Ai-Logger 2000 finds a conflict among the RS485 addresses of the inverters, it will automatically reassign different addresses, eliminating the need to adjust each inverter's settings.

8 Web UI

8.1 Connection and Login

- The Ai-Logger 2000 features different types of users access permissions. Customer and Installer can view basic information , receive real-time fault notifications and monitor equipment status and information. Administrators, by default, have the rights to set and modify the parameters of Ai-Logger 2000 and its connected devices.

The Ai-Logger 2000 has a built-in web server that allows access to its embedded web interface via Ethernet port on a PC or tablet.

There are three connection methods:

1. Connect a PC/Laptop directly to the Ai-Logger 2000 LAN port using an Ethernet cable.
2. Connect the computer to the Ai-Logger 2000 WAN port via a router.
3. Use a wireless network card on the computer to connect directly to the Ai-Logger 2000 Wi-Fi hotspot.

Operating Environment Requirements:

Windows 7 and above operating system can be supported.

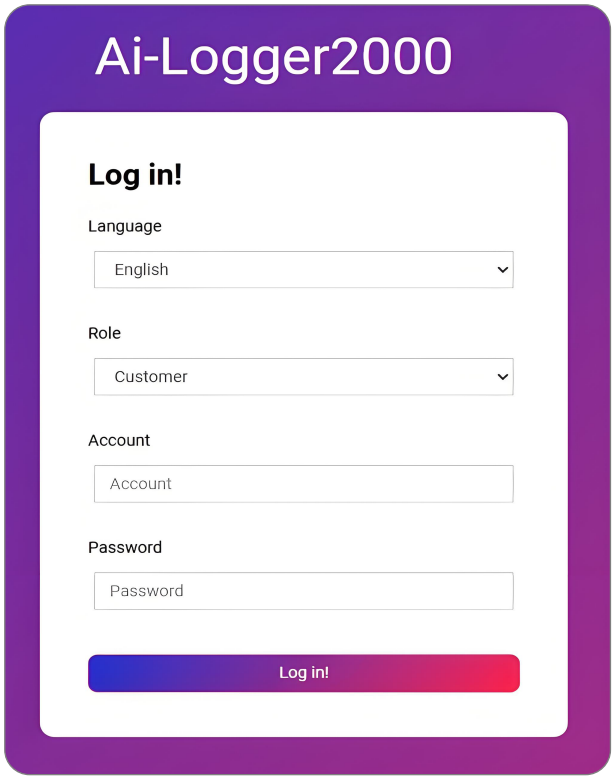
Recommended Browser: Chrome 52, Firefox 58. Internet Explorer is not recommended.

IP Configuration: Ensure correct configuration of the IP address, subnet mask and gateway for the Ai-Logger 2000, PC and network devices.

The Ai-Logger 2000 may be connected directly to a PC or via Ethernet.

Step 1: To connect to the built-in web server, enter the IP address or machine name of the Ai-Logger 2000 communication port into your browser. If you connect to a PC directly through the LAN port, enter http://192.168.3.3 in the address bar of your web browser and press the Enter key to enter the login screen..

Step 2: Select the appropiate <Language> and <Role>, then enter your <Account>and <Password>, and click on <Login >.



Parameter	Description
Language	Set the required language
Role	Options include Customer, Installer, and Administrator. Select 'Installer' for equipment testing.
Password	The first time you power up, please use the initial password 12345. After logging in, you must change the initial password and log in again. It is recommended to update the password regularly. After changing the password, please remember the password to ensure the security of the account. Long-term use of the password will increase the risk unauthorized access. In case of a forgotten password, the device must be restored to factory settings, which may result in data loss; such loss will be the responsibility of the user..

After logging into the WEB interface, if the page display is blank or the page does not respond when you click on any menu, try clearing the browser cache, refreshing the page, or logging in again.

End.

8.2 Web Interface

8.2.1 Description of the WEB Interface

- The WEB interface displayed in this document corresponds to the Ai-Logger 2000 software version; the data shown is for reference only and may differ from the actual system.
- Logging in with different user roles will display varying interface parameters. In this document, the "Installer" role is used to illustrate the operational interface..
- The parameter names, value ranges and default settings may be updated or adjusted in the future firmware releases, subject to the actual display.

- Grid, protection, power regulation, and characteristic parameters for the inverter must be configured by a qualified professional. Incorrect settings for grid protection and characteristics parameters may prevent the inverter from connecting to the grid, while incorrect power regulation settings may result in non compliance of the inverter with grid requirements, thus affecting the power generation.

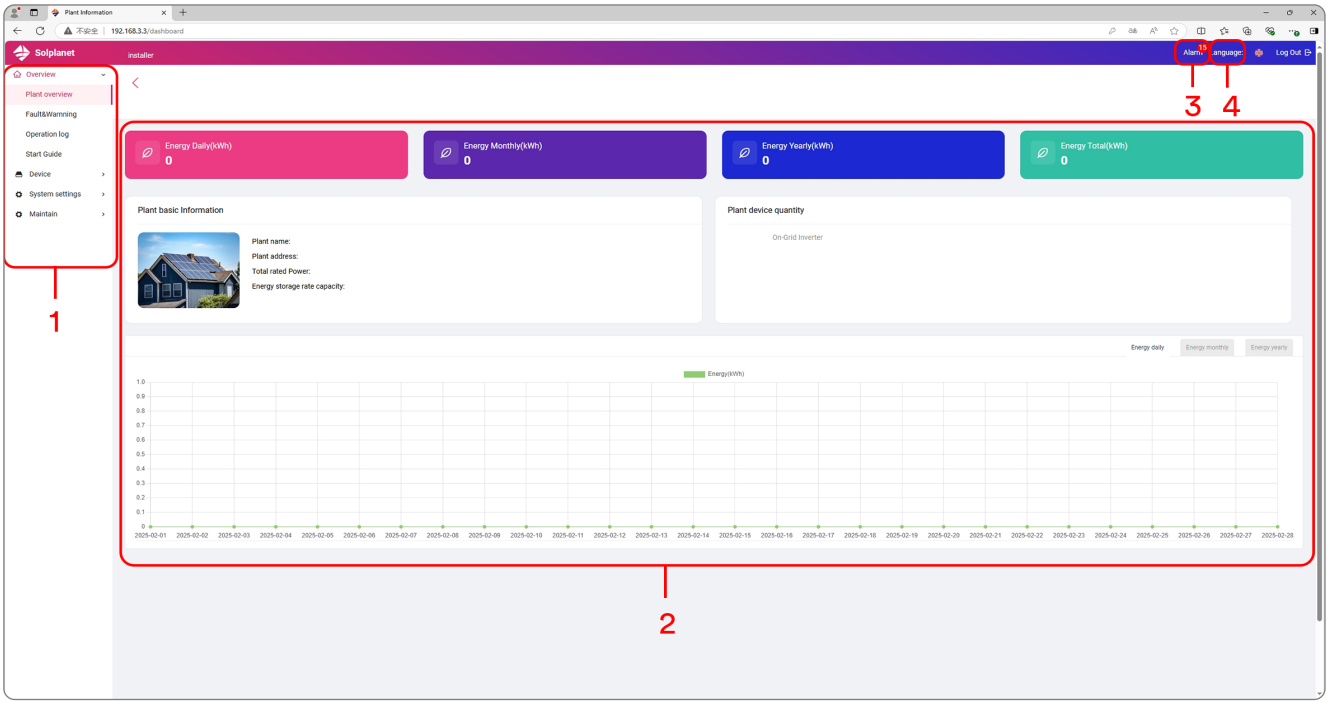
8.2.2 WEB Page Menu

Logging into the WEB interface with a different user name may result in a different interface menu and available settings.

● Indicates that the user has operating privileges for the menu; ○ Indicates that the user does not have operating privileges for the menu.

Menu					
First-Level Menu	Second-Level Menu	Third-Level Menu	Customer	Installer	Administrator
Overview	Plant Overview	-	●	●	●
	Fault & Warning	-	●	●	●
	Operation Log	-	●	●	●
	Start Guide	-	●	●	●
Device	Ai-Logger 2000	-	●	●	●
		-	●	●	●
	Inverter	Grid Standard Code	○	●	●
		Grid Protection	○	●	●
		Grid Frequency Protection	○	●	●
		Characteristic Parameter Settings	○	●	●
		Active and Reactive Power Settings	○	●	●
	Smart Meter	-	●	●	●
	Weather Station	-	●	●	●
	Transformer	Telemetry	●	●	●
		Telecommunication	●	●	●
		Settings	○	●	●
	PID	-	●	●	●
System Settings	Date & time	-	○	●	●
	Communication Setup	WiFi Settings	○	●	●
		Ethernet Settings	○	●	●
		Lan Port Settings	○	●	●
		RS485 Settings	○	●	●
	Monitor Log	-	○	●	●
Maintain	Firmware Upgrade	Ai-Logger 2000	○	●	●
		Inverter	○	●	●
	Security Settings	-	○	●	●
	Device Management	-	○	●	●
	User Management	-	○	●	●
	Export Logs	-	○	●	●

WEB Interface Layout Overview:

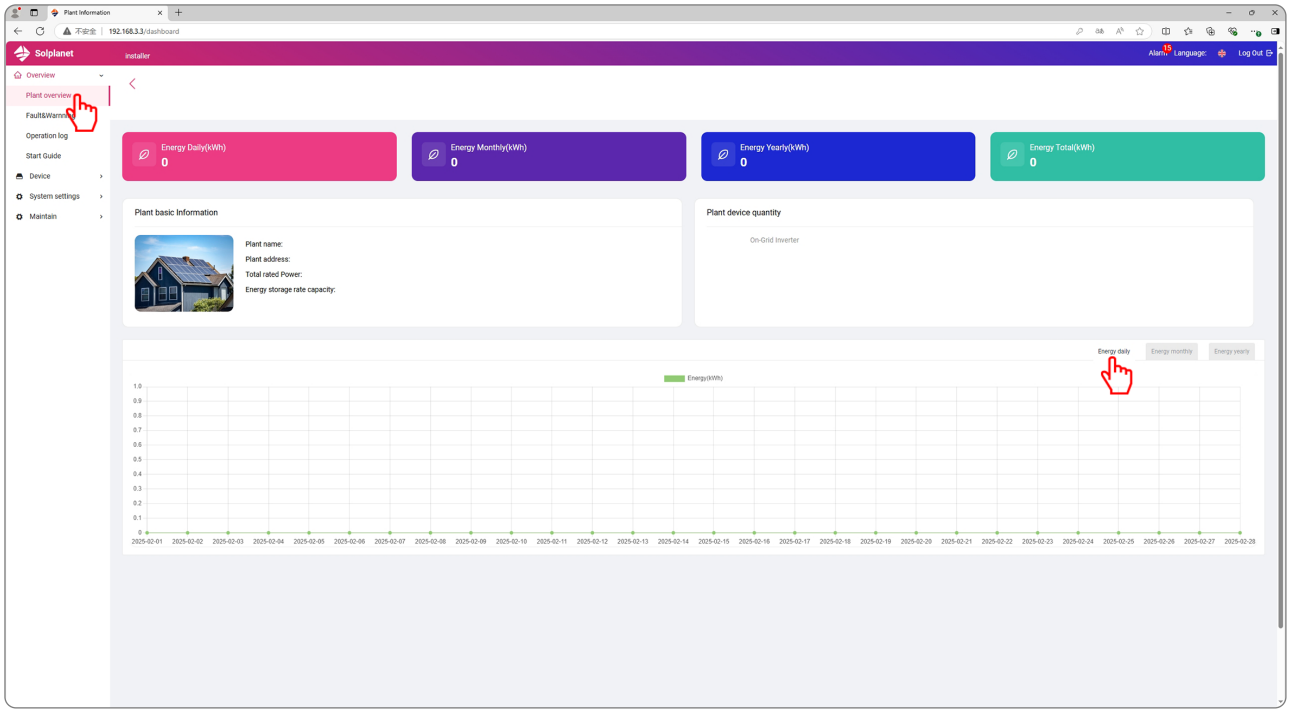


No.	Function	Description
1	First-Level, Second-Level and ThirdLevel Menus	To navigate within the interface, first select the corresponding first-level menu according to your operational needs, then select the second-level or third-level menu to view detailed information of the equipment or adjust the parameters.
2	Detail Screen	Displays detailed information or parameter settings for the selected menu option.
3	Alarm Icon	Display the current number of system alarms. Click this option to enter the alarm display interface.
4	Display Language	Allows you to select the language for the interface. You may need to log out and log in again to see the changes.

8.3 Overview

8.3.1 Plant Overview

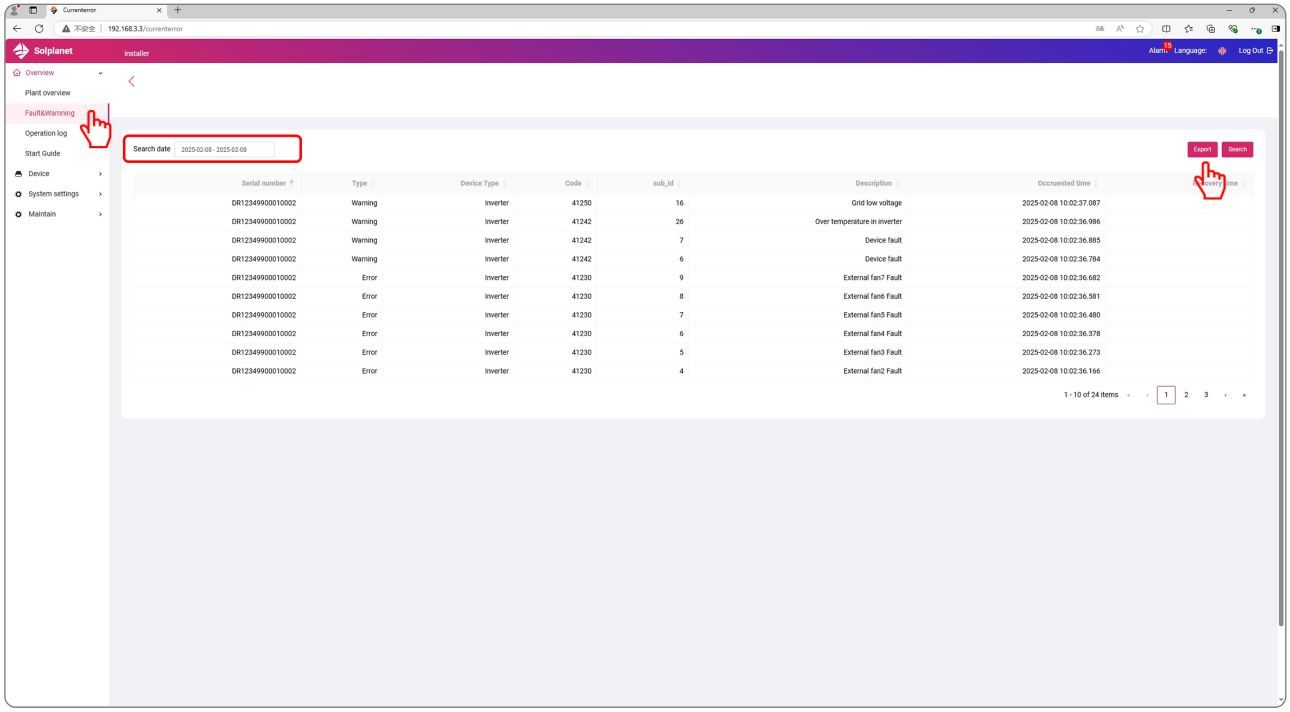
Click on 'Overview' > 'Plant overview' to access general system information. Click on 'Energy daily', 'Energy monthly' and 'Energy yearly' to switch between graphs.



- Daily storage data (monthly generation) is maintained for 1 year. Monthly storage data (annual generation) is maintained for 10 years.
- Yearly storage data (historical generation) is maintained for 10 years.

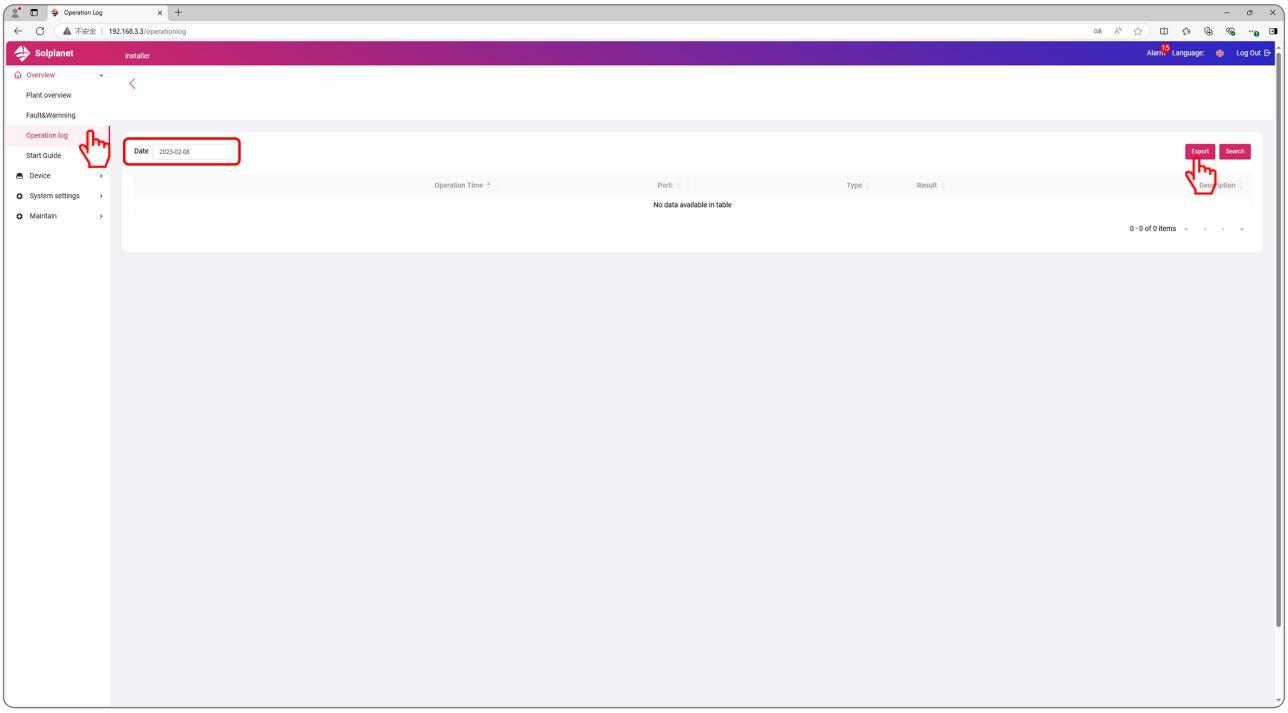
8.3.2 Fault & Warning

Click on 'Overview' > 'Fault&Warnning' to enter the fault information, you can fill in the keywords to search for specific fault details, and click on 'Export' to download the fault code information.



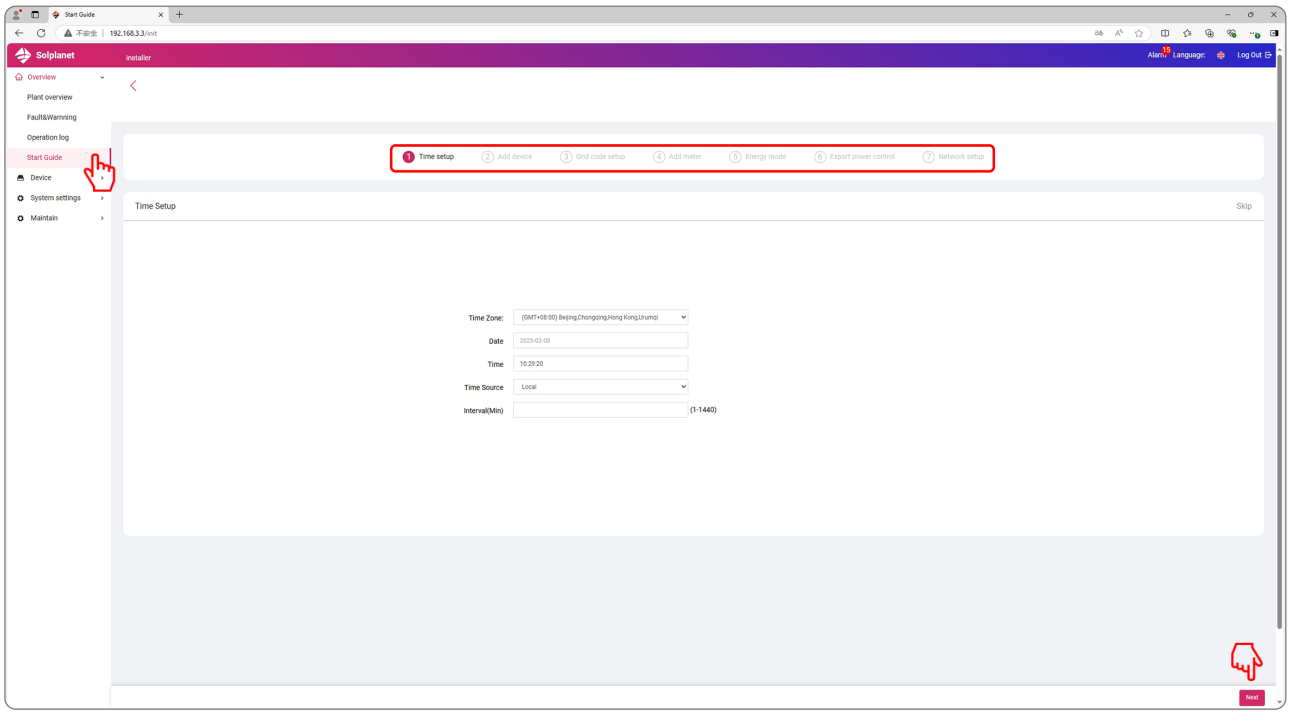
8.3.3 Operation Log

Click ‘Overview’ > ‘Operation Log’ to enter the operation log information list. You can query or export the operation log as needed.



8.3.4 Start Guide

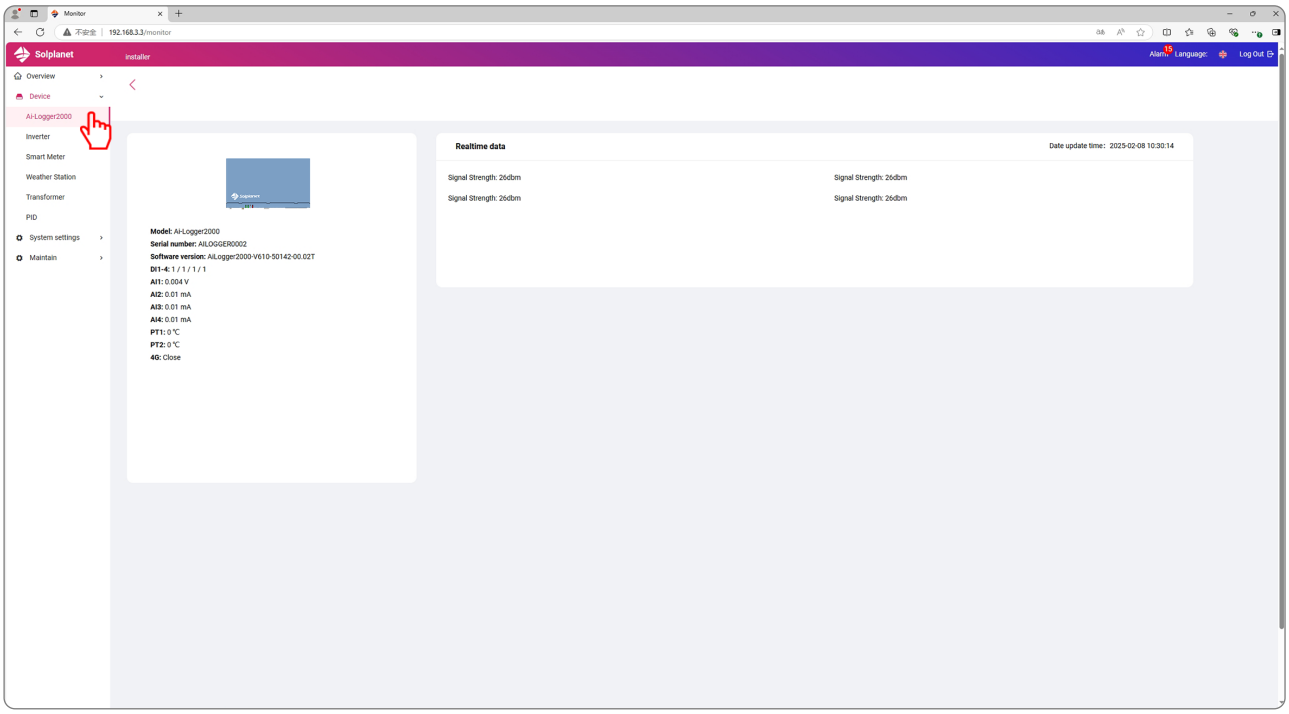
Click on ‘Overview’ > ‘Start Guide’ to access the startup wizard. Follow the on-screen steps to complete the initial configuration when using the system for the first time.



8.4 Device

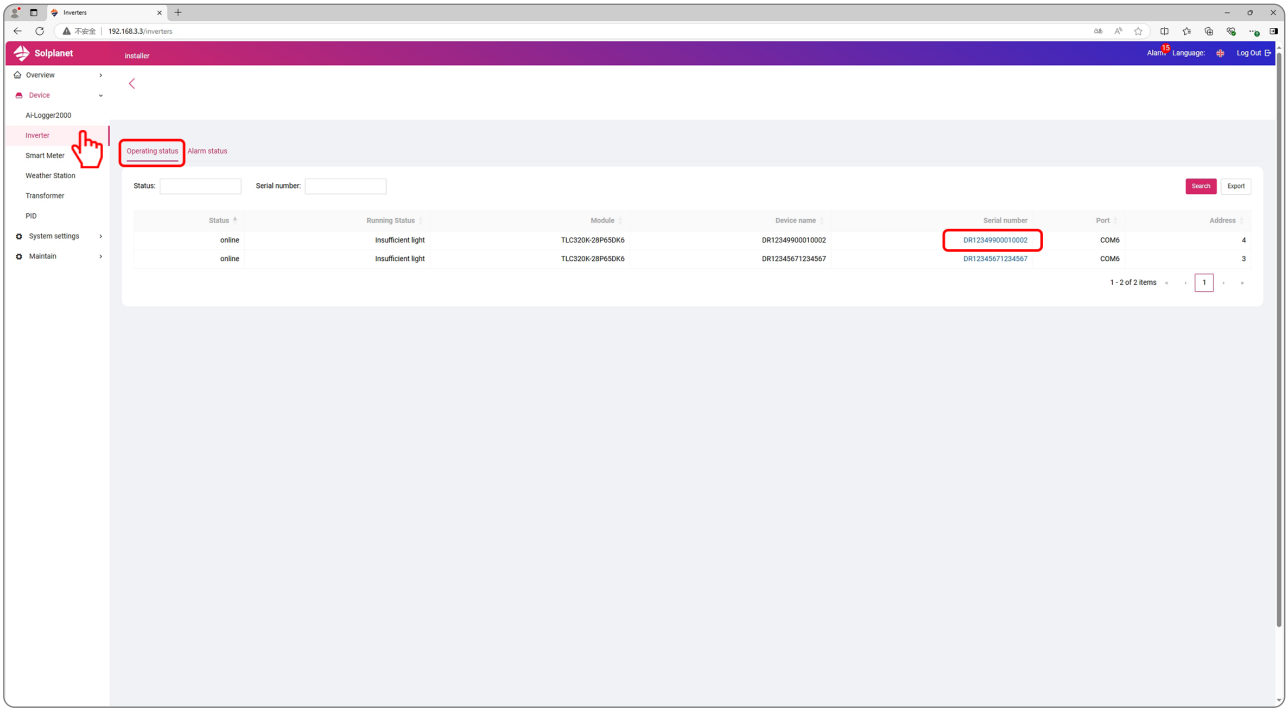
8.4.1 Ai-Logger 2000

Click on 'Device'>'Ai-Logger 2000' to view the detailed information about the Ai-Logger 2000, which supports 4-channel DI, 4-channel AI, 2-channel PT100/1000 inputs.

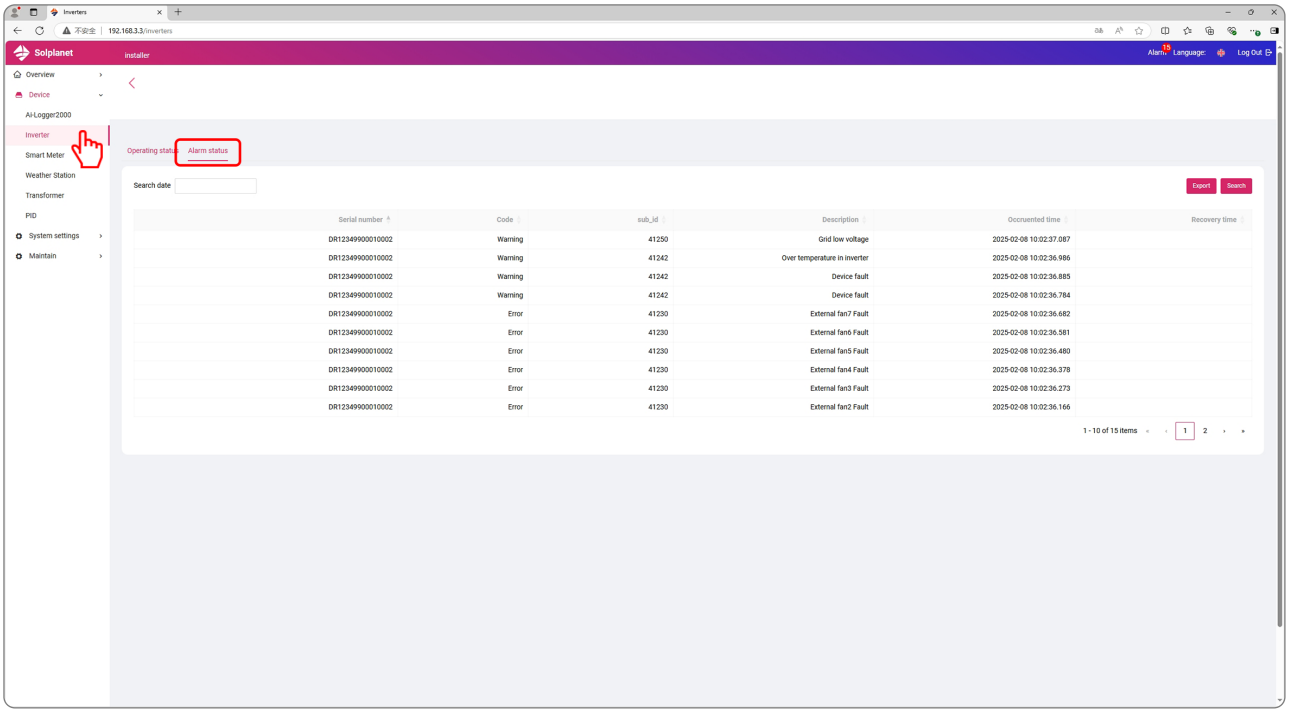


8.4.2 Inverter

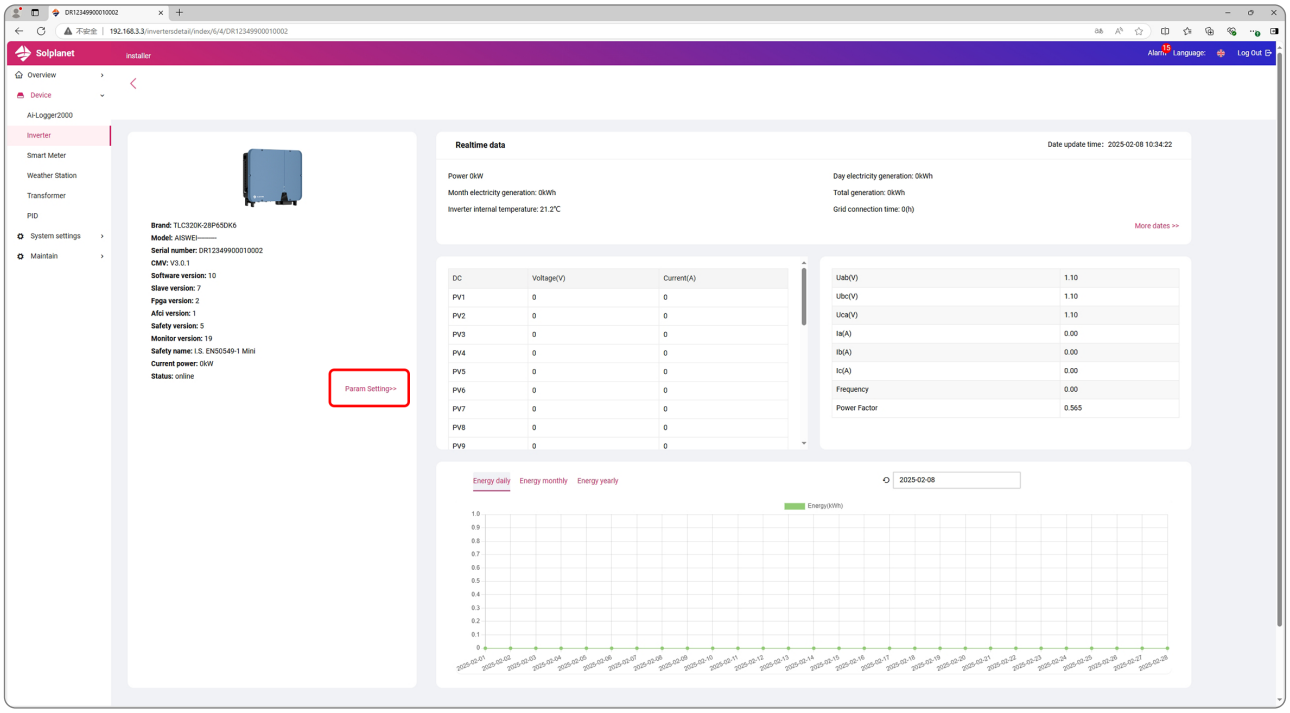
Click on 'Device' > 'Inverter' to enter the inverter list. Key information, such as running status, model, device name, serial number, operation status, etc, will be shown.



Click ‘Alarm Status’ to enter the fault information list for the inverters.

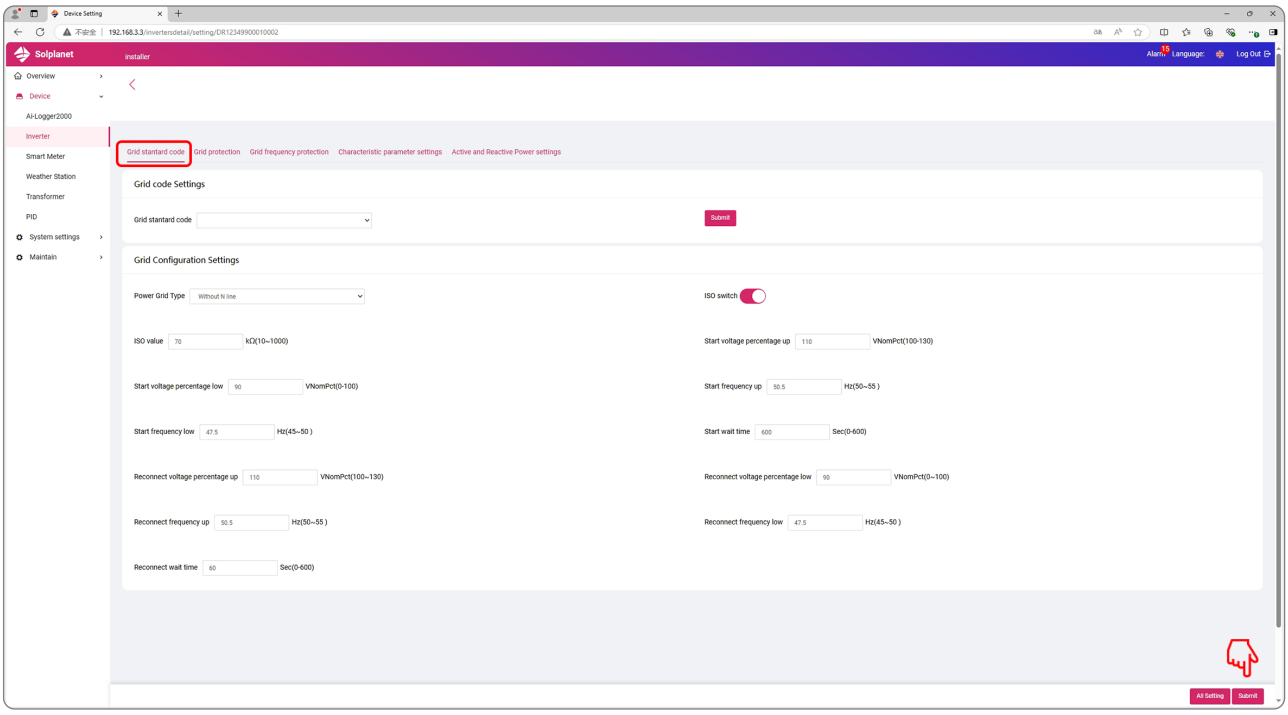


Click on “Running Status” In the list, click on an inverter serial number to go to the next level of real-time data detail page. The inverter device information and current real-time operation data will be displayed.



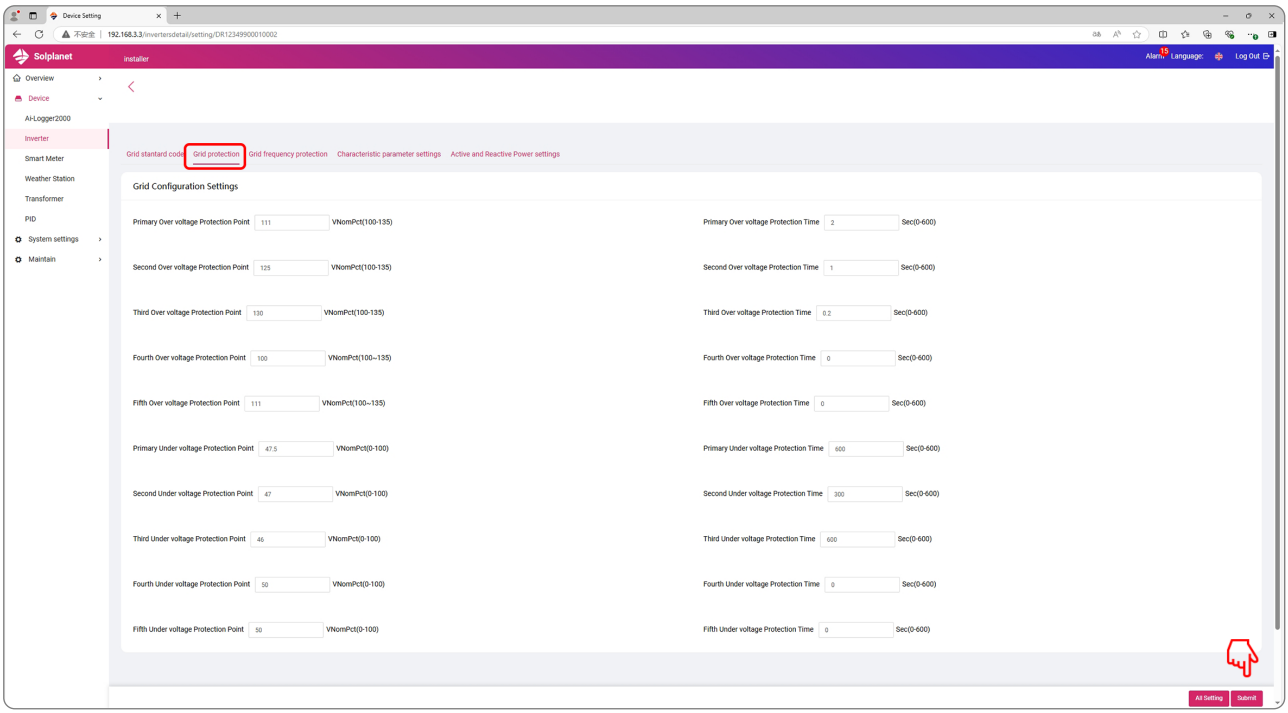
8.4.2.1 Grid Standard Code Settings

On the real-time data detail page, click ‘Parameter Settings’ and then ‘Grid Standard Code’ to set the grid parameters and startup reconnection settings.



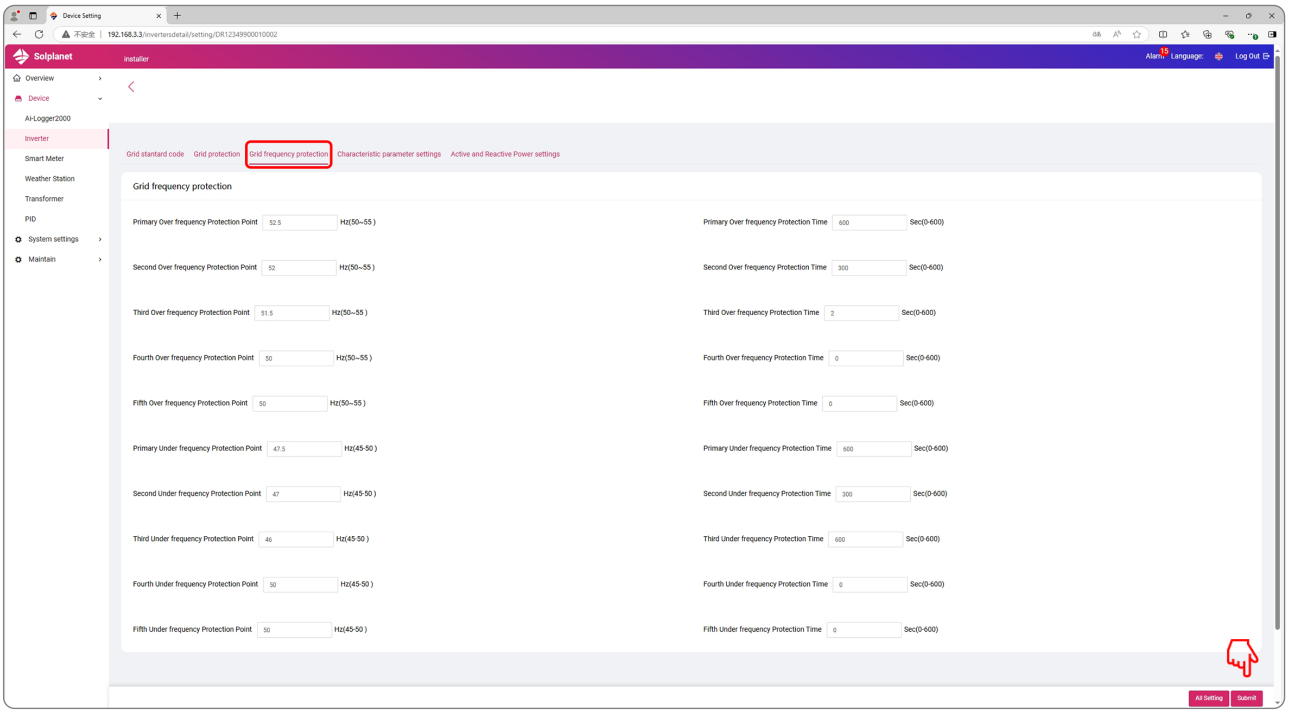
8.4.2.2 Grid Protection Settings

On the real-time data detail page, click ‘Parameter Settings’, and then ‘Grid Protection’ to set the grid voltage parameters.



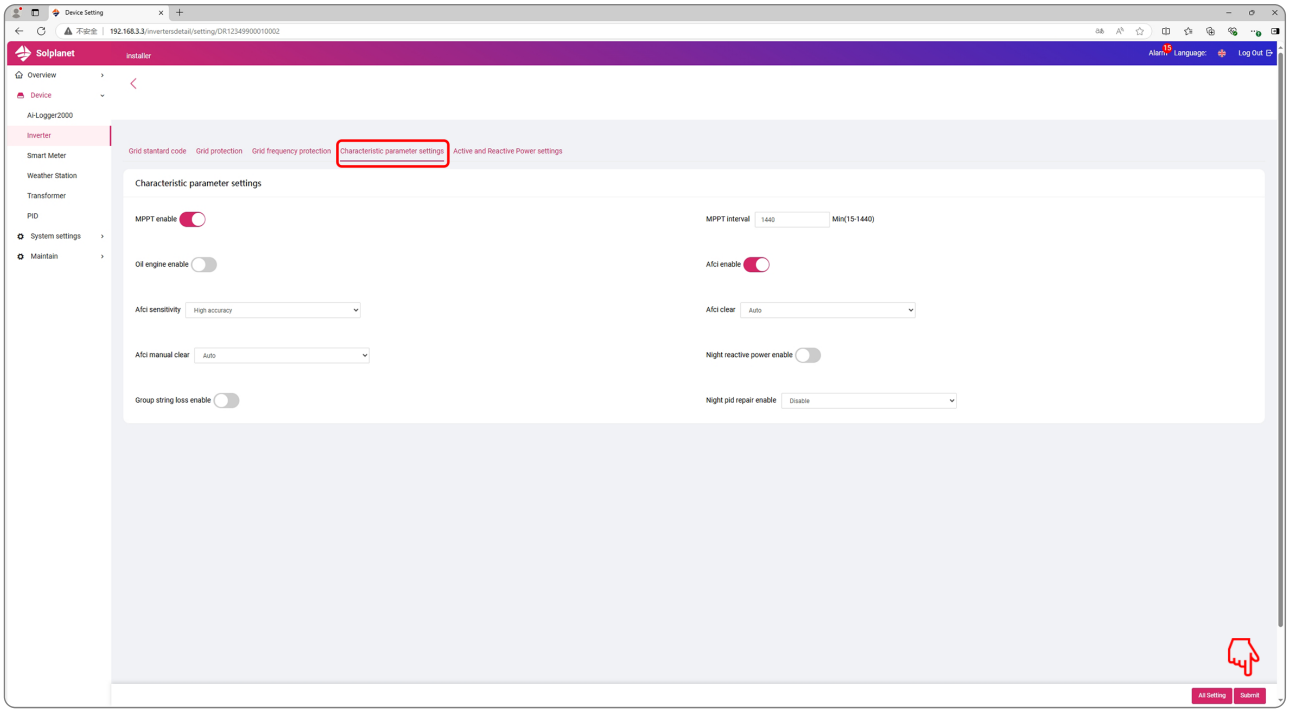
8.4.2.3 Grid Frequency Protection Settings

On the real-time data detail page, click ‘Parameter Settings’, and then ‘Grid Frequency Protection’ to set the grid frequency parameters.



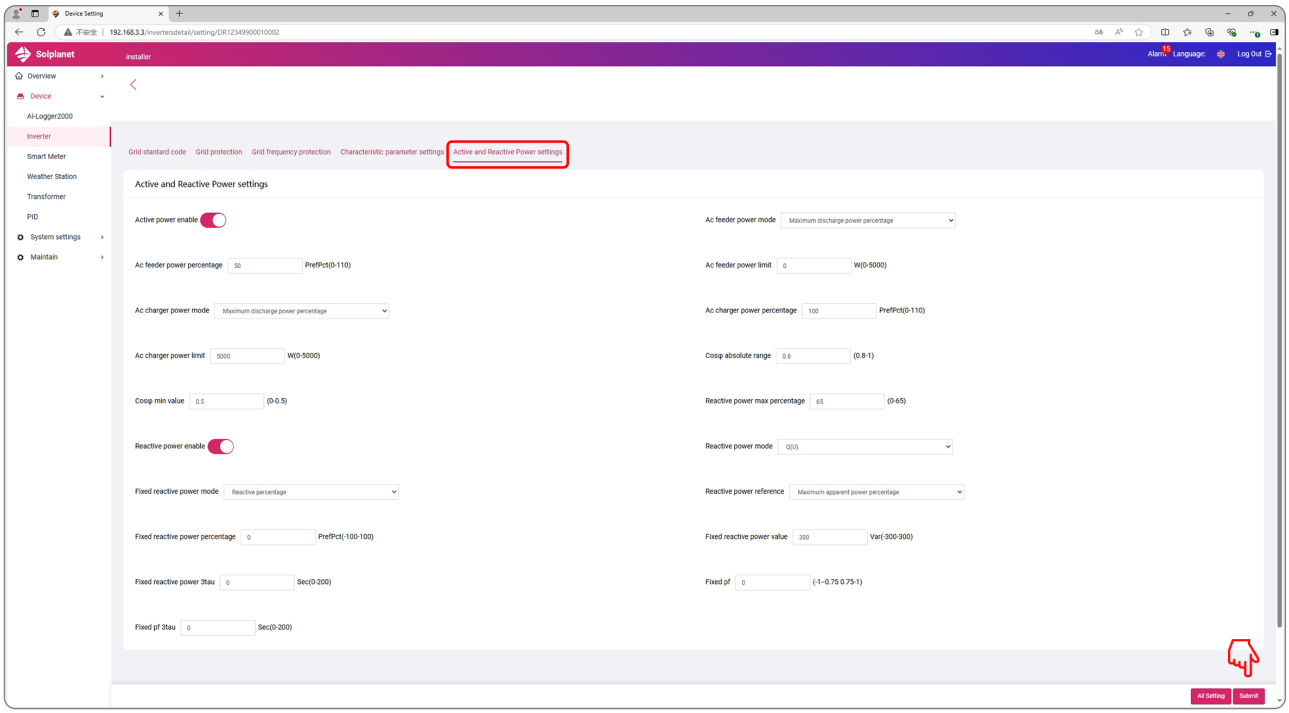
8.4.2.4 Characteristic Parameter Settings

On the real-time data detail page, click ‘Parameter Setting’, and then ‘Characteristic Parameter Settings’ to set the characteristic parameters.



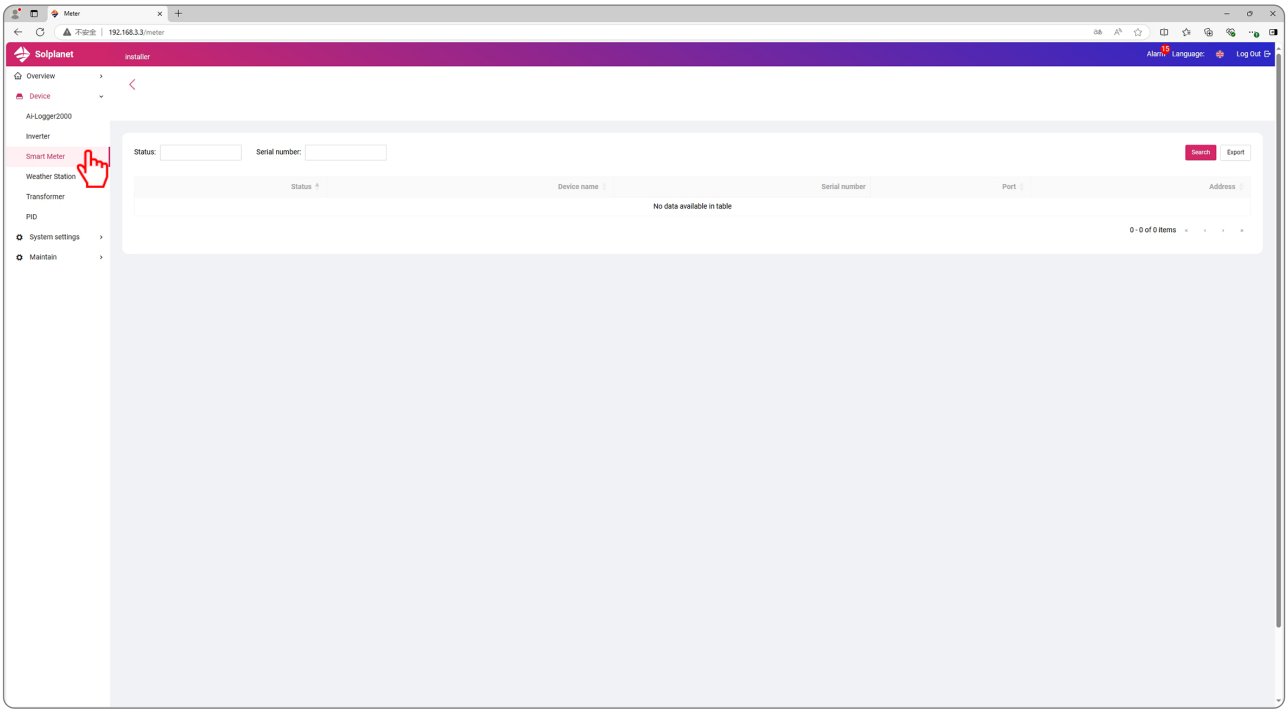
8.4.2.5 Active and Reactive Power Settings

On the real-time data detail page, click ‘Parameter Settings’, and then ‘Active Reactive Power Settings’ to set the active and reactive power parameters.



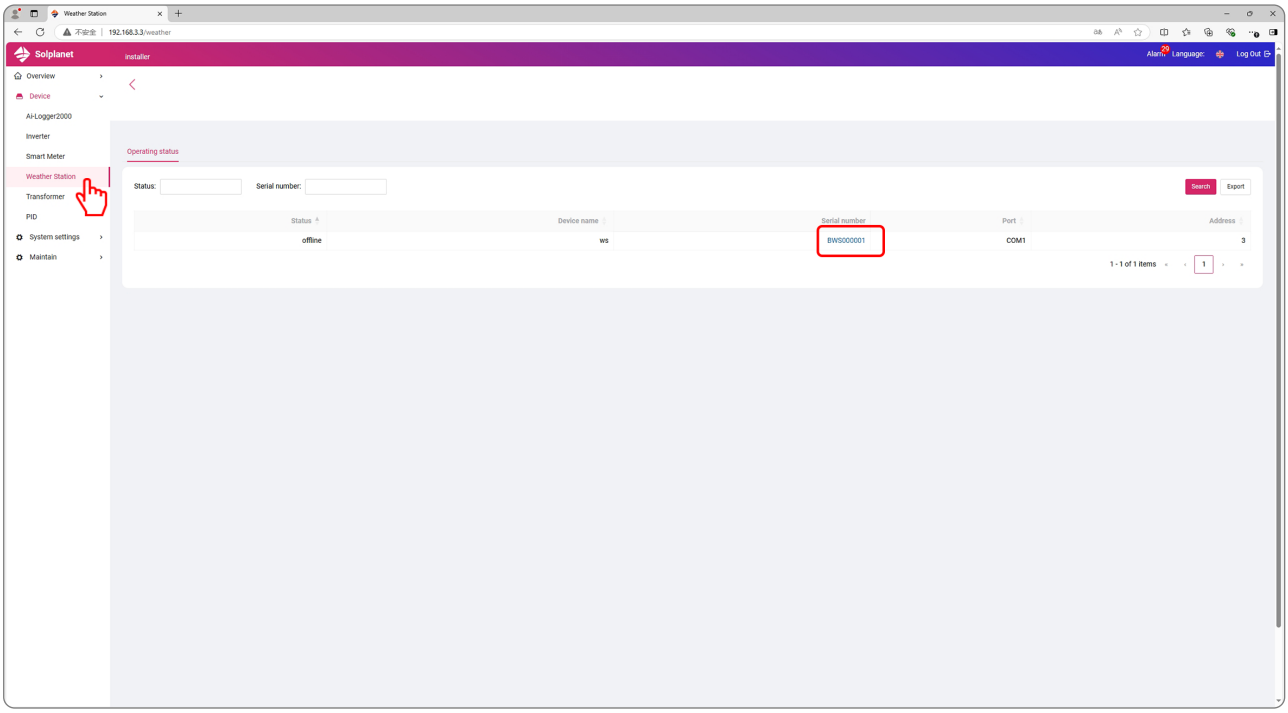
8.4.3 Smart Meter

Click on ‘Devices’ > ‘Smart Meter’ to access the information about smart meters.

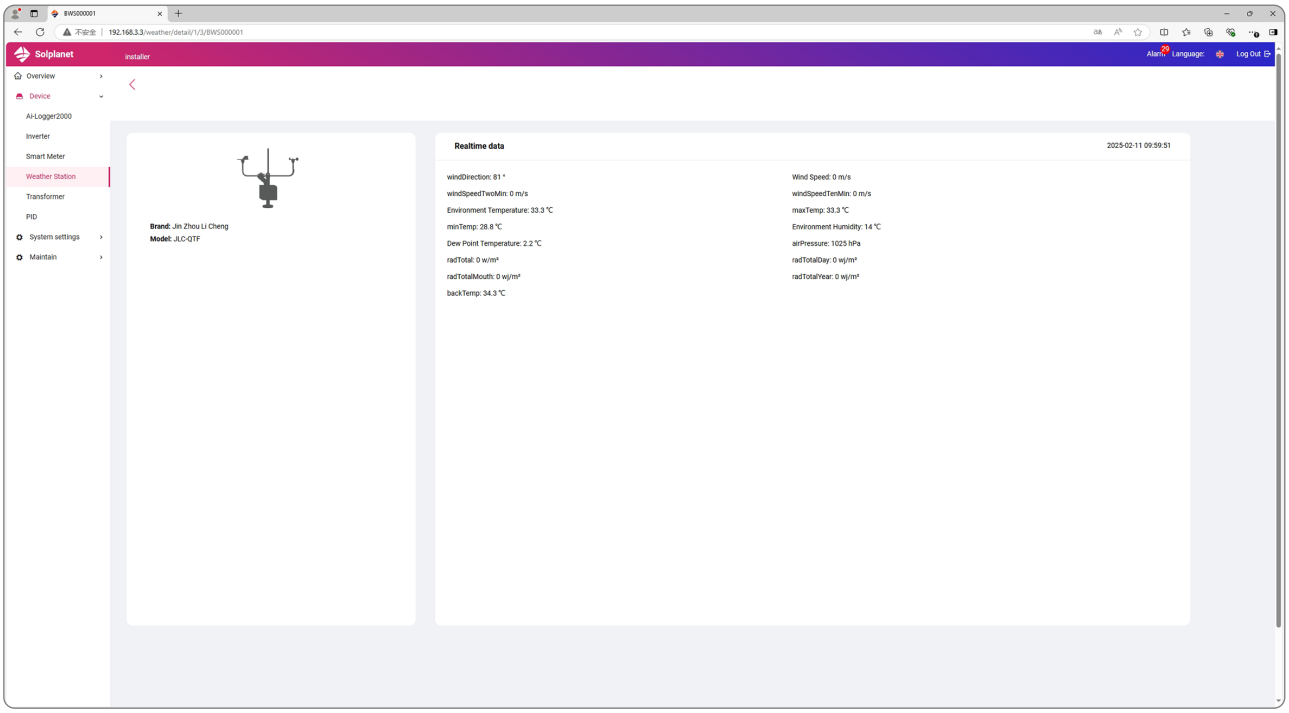


8.4.4 Weather Station

Click on ‘Devices’ > ‘Weather Station’ to enter the relevant information of the weather station and monitor its operating status.



Click on ‘Serial Number’ to view specific weather station related parameters and details.

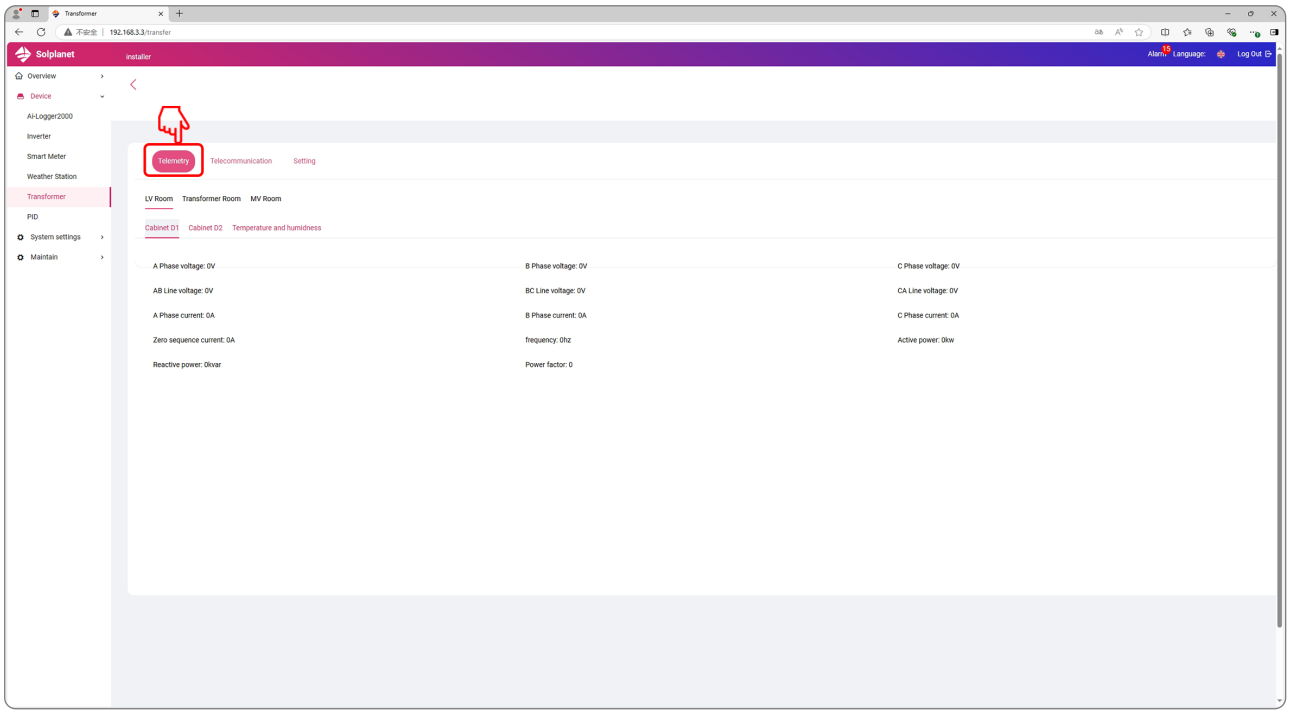


Due to different protocols among vendors, it is necessary to follow the provided vendor-specific protocols to correctly retrieve the weather station data. Currently supported modules are Jinzhou Sunshine (PC-4), Jinzhou Licheng (JLC-QTF).

8.4.5 Transformer

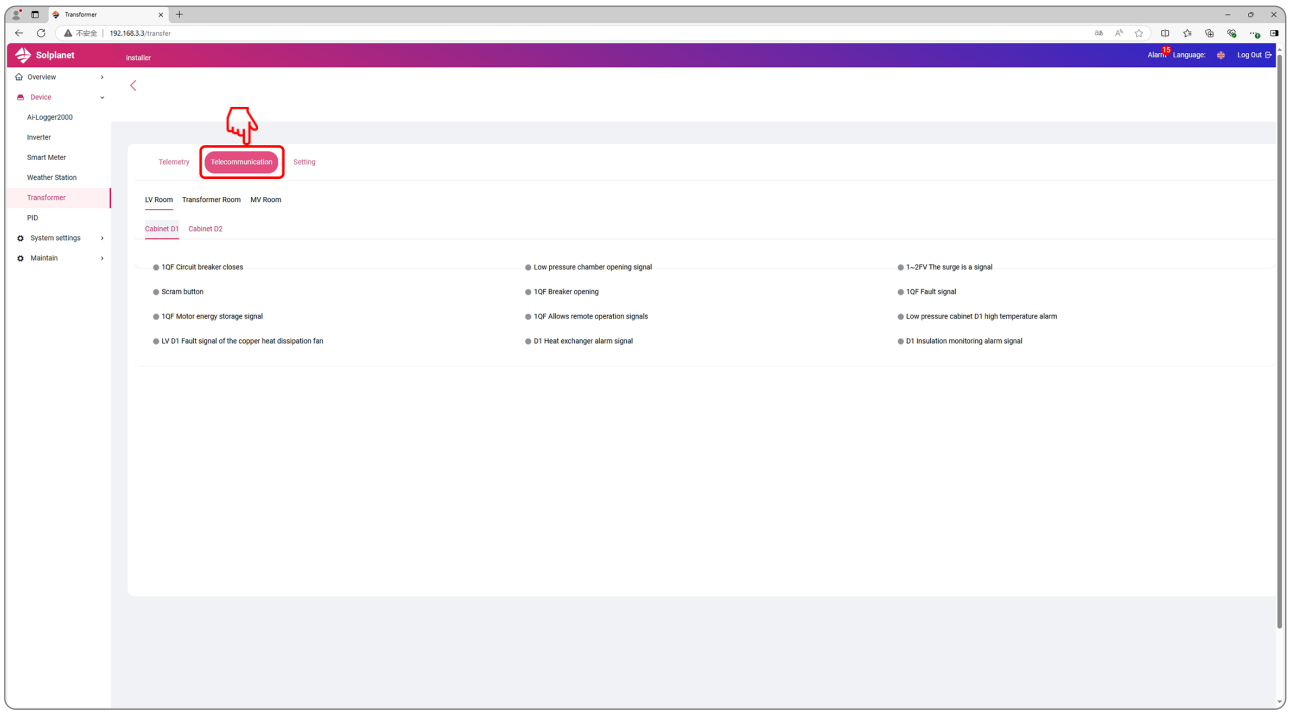
8.4.5.1 Telemetry

Click ‘Device’ > ‘Transformer’, in the transformer menu, then ‘Telemetry’ to display the relevant parameter data for the LV Room, transformer room and MV room.



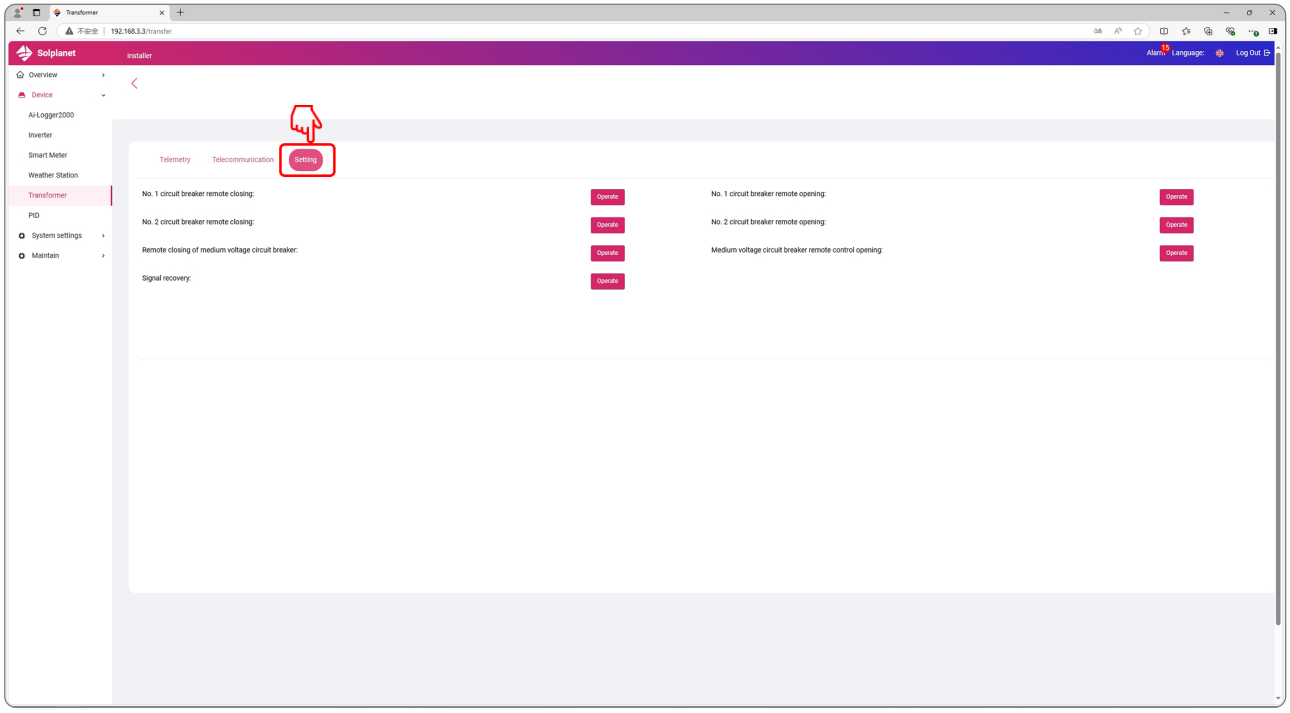
8.4.5.2 Telecommunication

Click ‘Device’ > ‘Transformer’, in the transformer menu, then ‘Telecommunication’ to display the related status for the LV room, transformer room and MV room.



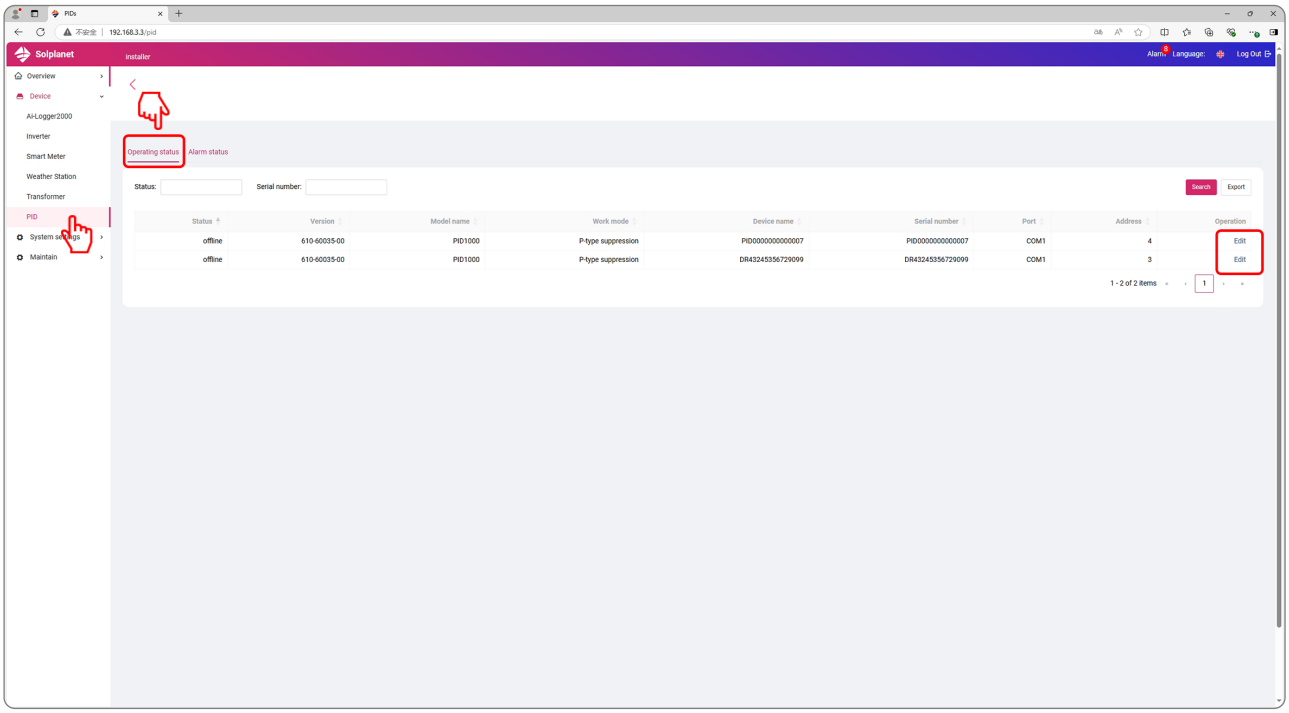
8.4.5.3 Setting

Click ‘Device’ > ‘Transformer’, in the transformer menu, then ‘Setting’ to issue remote control parameters.

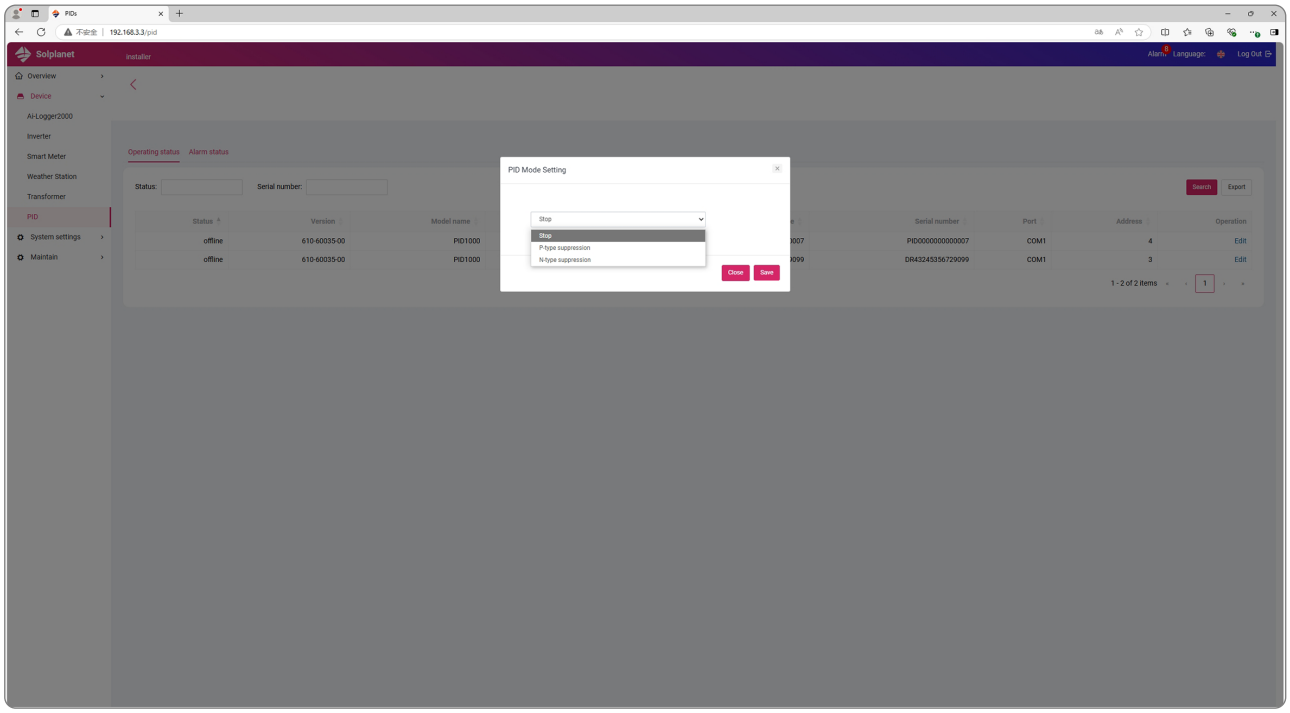


8.4.6 PID

Click ‘Device’ > ‘PID’ to view the operating status, working mode and other information.



In the operation status interface, click ‘Edit’ to set the PID working mode.



PID mode	Description
Stop	No active bias limitation aplied to the grid-to-earth potential; no PID suppression effect is achieved.
P-type Suppression	Increases grid-to-earth potential with an active bias of +750 V DC; after inverter grid connection, all PV-to-earth potential are > 0 V; suitable for P-type PV panel PID effect suppression.
N-type Suppression	Increases grid-to-earth potential with an active bias of -750 V DC; after inverter grid connection, all PV-to-earth potential are < 0 V, suitable for N-type PV panels PID effect suppression.

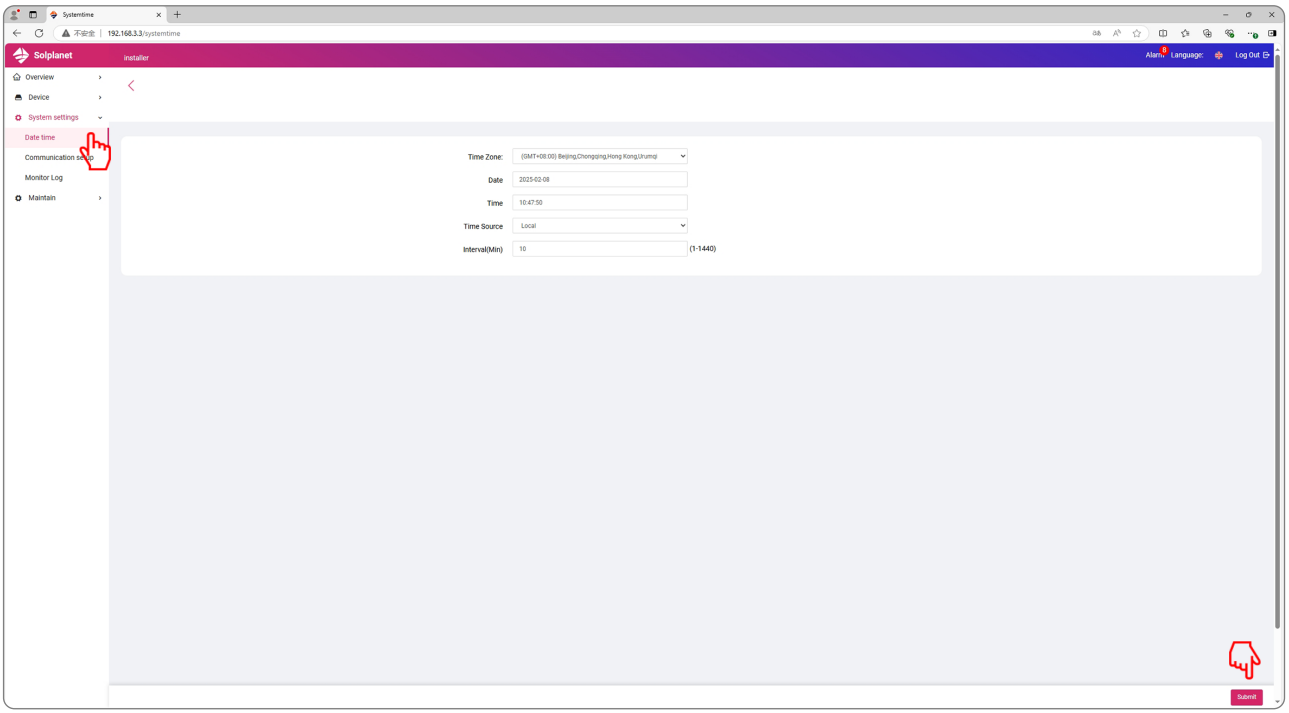
8.5 System Settings

‘System Settings’ menu is only displayed when the administrator is logged in. All parameters in this section can be set exclusively by the Administrator.

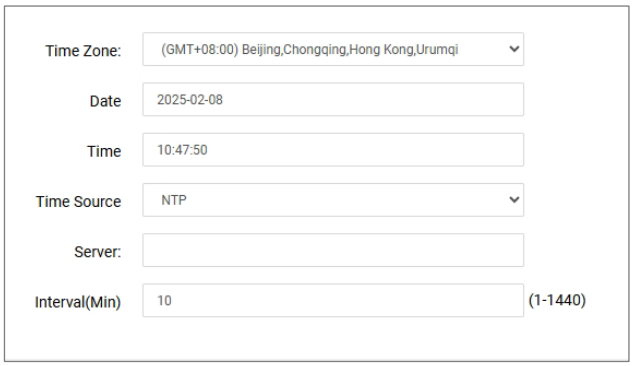
8.5.1 Date and Time Settings

Click ‘System Settings’ > ‘Date and Time’, click ‘Time Zone’ and select the time zone according to your local area, then fill in the correct date and time information. Click ‘Submit’ to apply the settings..

When the device is offline, you can manually modify the date, time and time zone. When the device is online, it can synchronise the time remotely; the default time source is the Solplanet cloud, you can also choose an NTP server, and set the remote synchronization time interval.



When setting the time source as NTP as in the following figure, you need to set the NTP server address manually.

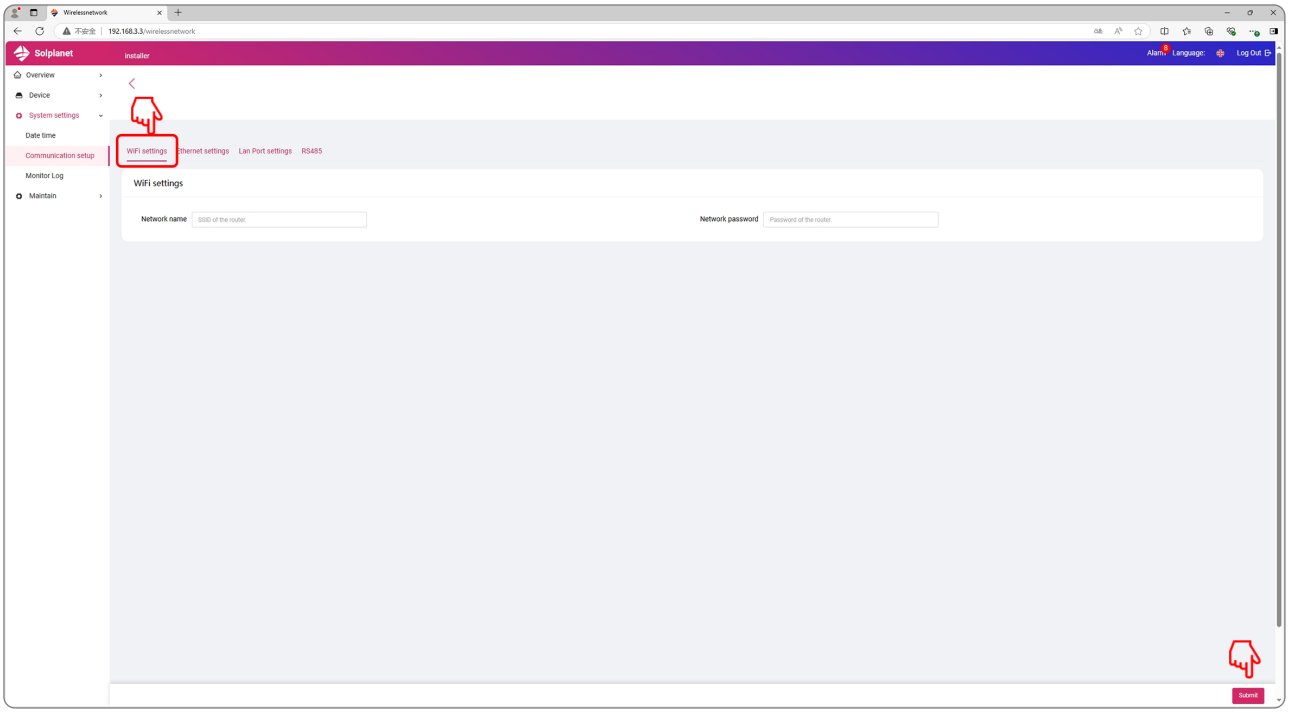


- Ensure to set the correct ‘Date and Time’ to the appropriate zone for your location during the first commissioning
- Changing the ‘Date and Time’ may affect the integrity of the system's power generation and performance records..
- If the Ai-Logger 2000 is connected to the Internet, it will automatically synchronize automatically with the cloud server and there is no need to set the date and time.

8.5.2 Communication Setup

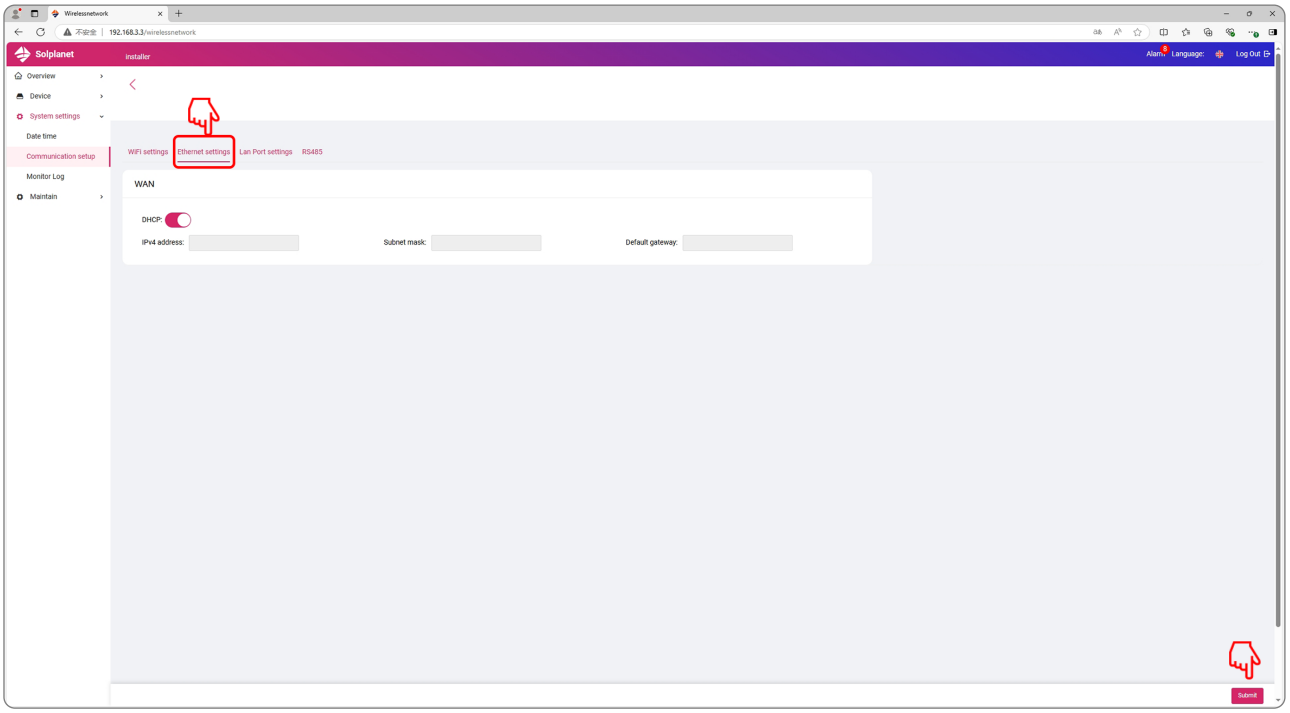
8.5.2.1 Wi-Fi Settings

Click ‘System Settings’ > ‘Communication Setup’ to enter the built-in Wi-Fi hotspot settings interface, enter the network name and password, then click submit. Mobile phones or computers can connect to this hotspot.



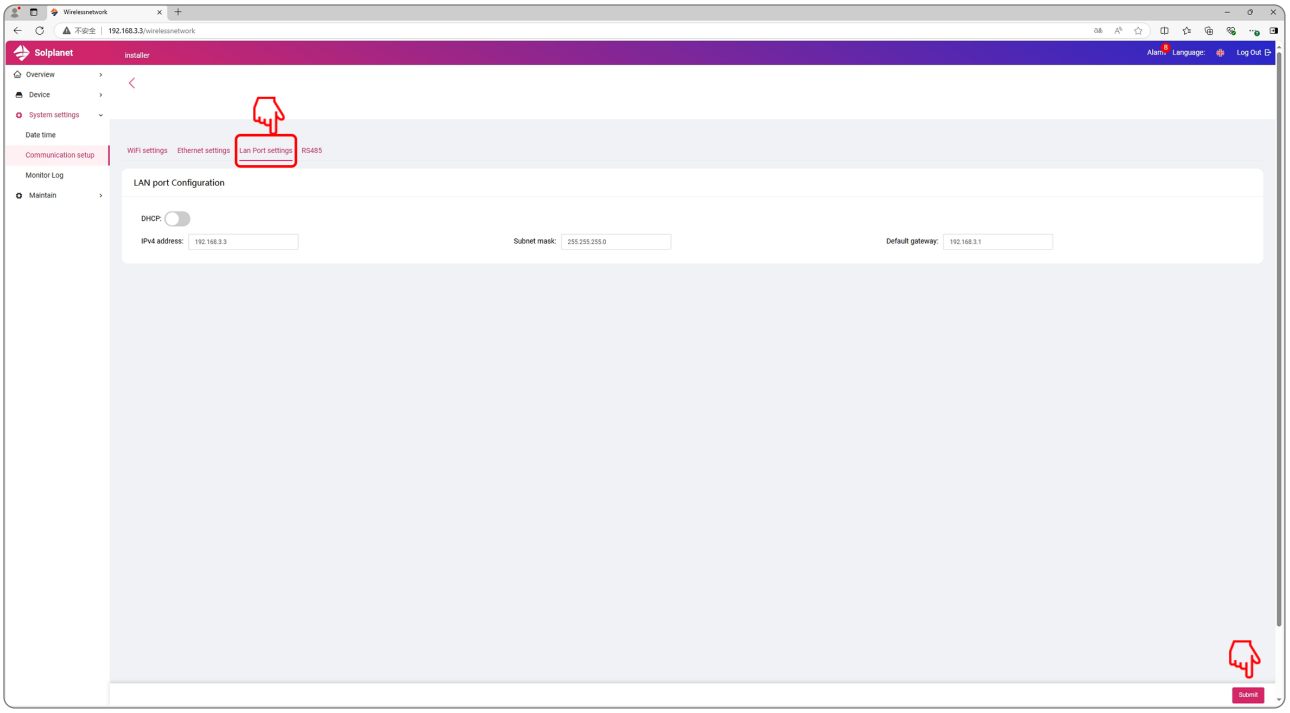
8.5.2.2 Ethernet Settings

Click ‘System Settings’ > ‘Communication Setup’ to enter the network settings interface. DHCP is enabled by default for dynamic IP configuration. DHCP can be disabled to configure a static IP.



8.5.2.3 Lan Port Settings

Click ‘System Settings’ > ‘Communication Setup’ to enter the LAN port settings interface. The default static IP is 192.168.3.3.

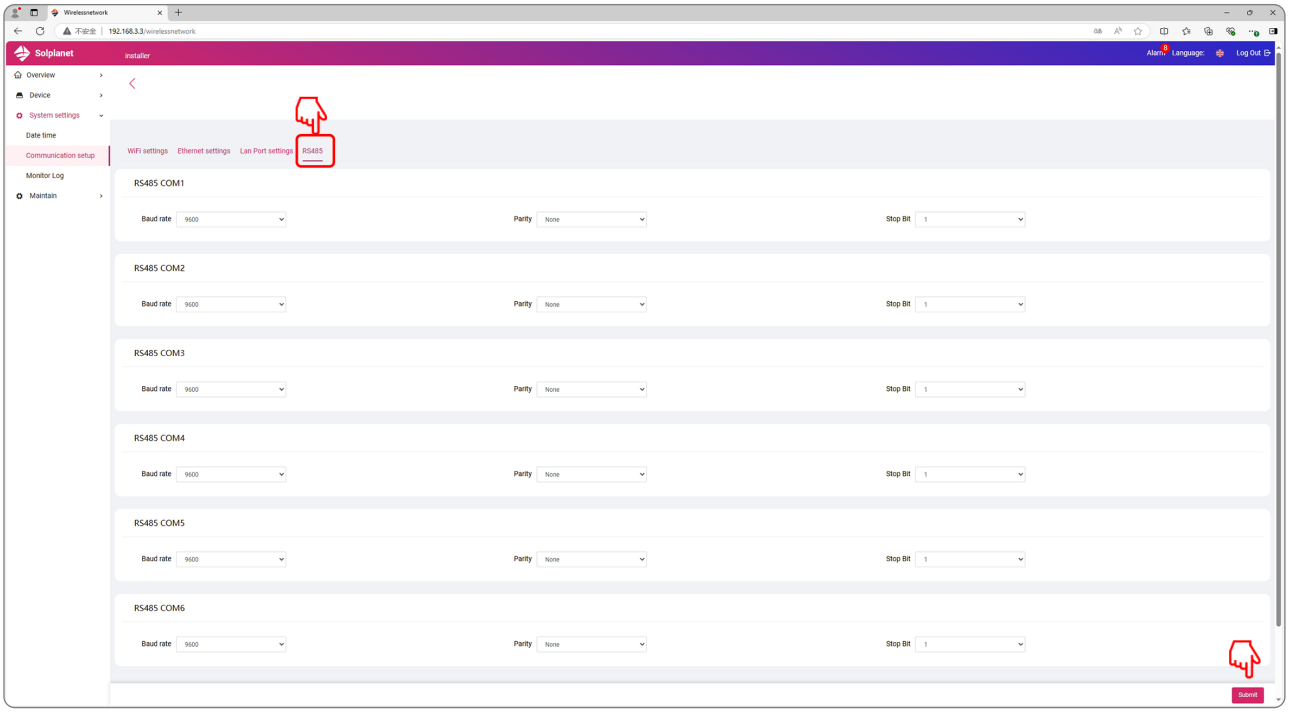


If the Ai-Logger 2000 is connected to the Internet through a router, please note the following information:

- The IP address of the Ai-Logger 2000 must be on the same network segment as the gateway.

8.5.2.4 RS485 Settings

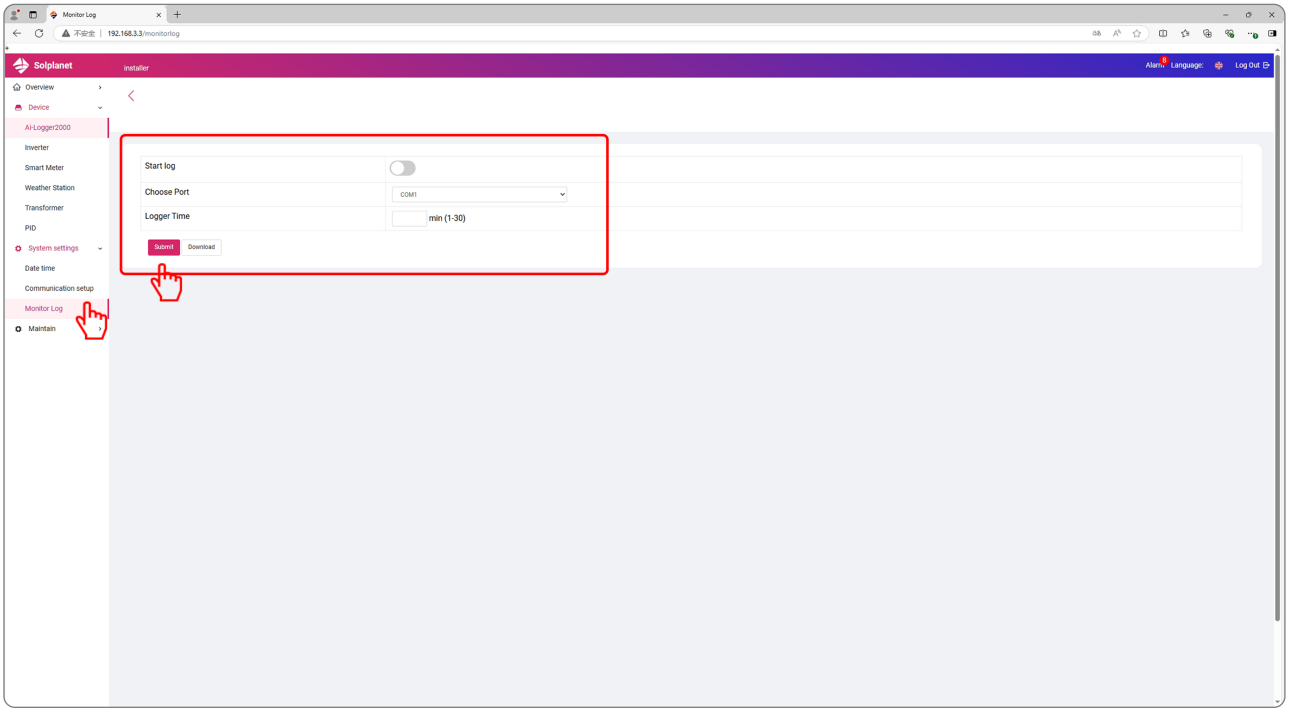
Click ‘System Settings’ > ‘Communication Setup’ to enter RS485 settings interface. Select the desired port, baud rate, parity bit and stop bit from the drop-down menu. Click ‘Submit’ to confirm the settings.



- COM1, COM2, COM3, COM4, COM5 and COM6 correspond to the six RS485 interfaces. Devices connected to the same RS485 interface must have the same baud rate.
- Only devices approved by Aiswei. can be connected to the RS485 interfaces.

8.5.3 Monitor Log

Click ‘System Settings’ > ‘Monitor Log’ to view the real-time log information for the corresponding port. Activate the Start Log slider button, then click ‘Submit’ to save the settings.

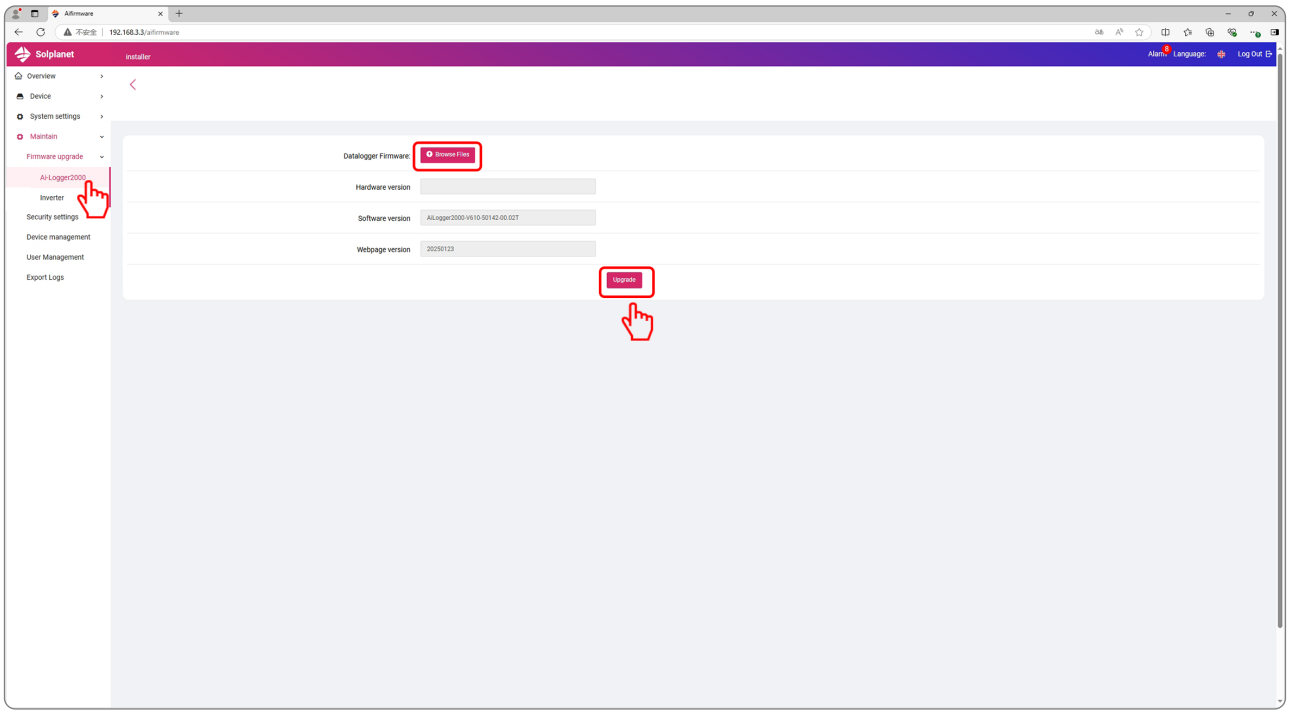


8.6 Maintain

8.6.1 Firmware Upgrade

8.6.1.1 Ai-Logger2000 Upgrade

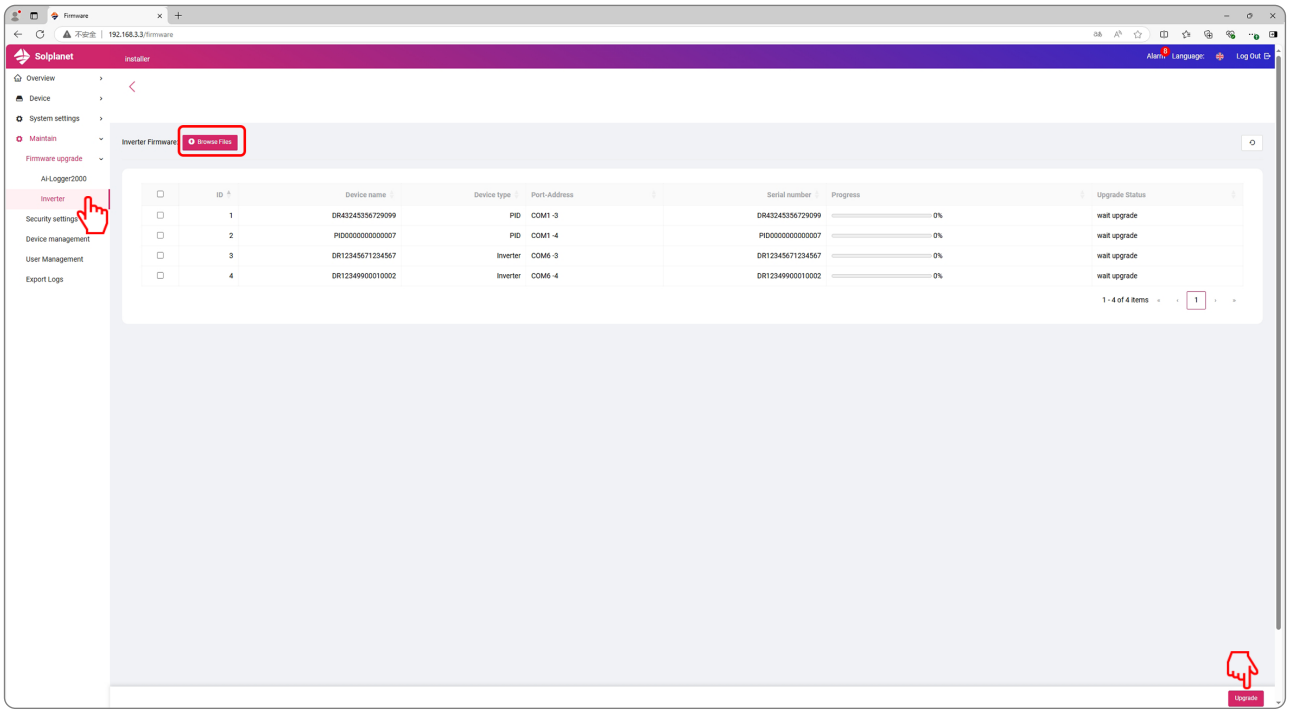
Click ‘Maintain’ > ‘Firmware Upgrade’ > ‘Ai-Logger 2000’. Click ‘Browse Files’, then select the local upgrade package, and click ‘Upgrade’. After the upgrade process completes, the Ai-Logger 2000 will reboot; please log in again to confirm that the version number has been updated.



8.6.1.2 Inverter Upgrade

Click ‘Maintain’ > ‘Firmware Upgrade’ > ‘Inverter’. Click ‘Browse Files’ and select the upgrade package, then tick the boxes for the inverters that need to be upgraded, and click ‘Broadcast’. Once the progress bar reaches 100 %, the upgrade is complete.

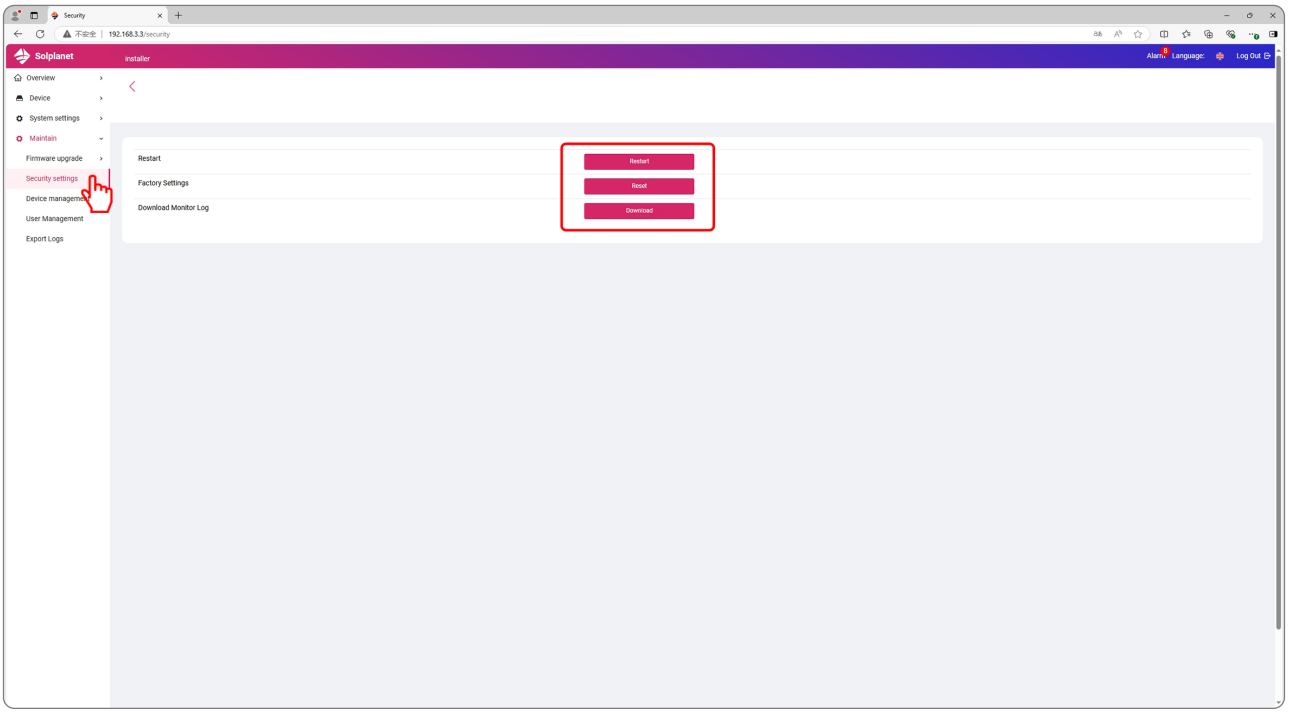
When the progress bar reaches 100 % and the status is upgrade success, it means that the inverter has been upgraded. Wait for the inverter to reboot and confirm that the version number has been updated.



8.6.2 Security Settings

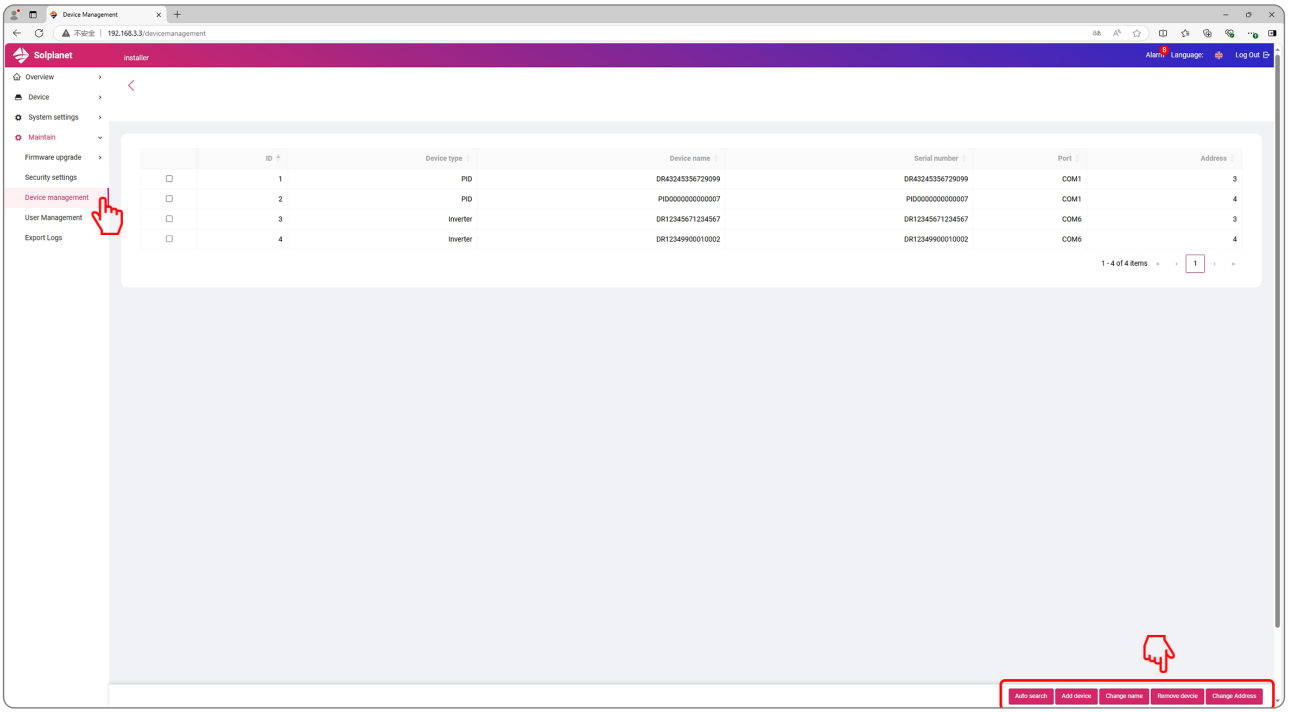
Click ‘Maintain’ > ‘Security Settings’

- To restart the device, click ‘Restart’.
- To restore factory settings, click ‘Reset’. Be aware that all data will be erased.
- To download the collector log records to your local system, click ‘Download’.



8.6.3 Device Management

Click ‘Maintain’ > ‘Device Management’ to manage the devices connected to Ai-Logger 2000. This interface allows to search for connected devices, modify device names, change the device's communication address, and remove the device. Automatic search is supported only for inverters and PID devices, other device types need to be added manually.

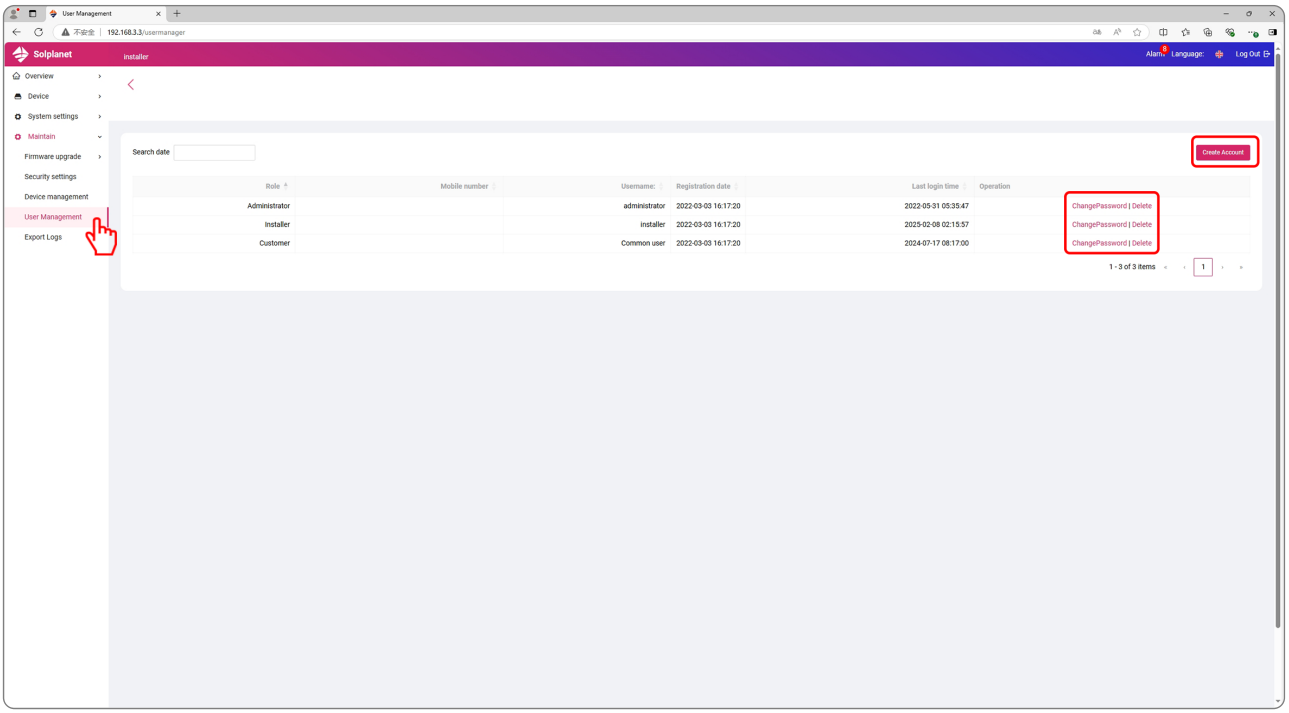


- Devices manufactured by AISWEI Technology Co., Ltd. can be accessed through automatic search or added manually; however, weather stations and smart meters do not support automatic recognition and need to be added manually.
- Connected devices can be deleted manually, and the deleted devices can be re-added later.
- The device address can be adjusted according to the serial number via 'Auto Address Assignment'. For example, when a device cannot be accessed due to an address conflict, use this feature to reassign its address and access the device.
- After scanning/adding a device, the Ai-Logger 2000 automatically remembers the address and does not need to rescan after startup.

- Only device types recognized by AISWEI Technology Co., Ltd. can be connected to the Ai-Logger 2000 and can be selected from the device type drop down menu.
- The RS485 parameters need to be set correctly on the Ai-Logger 2000 before a Modbus or DL/T645 device can be added manually.

8.6.4 User Management

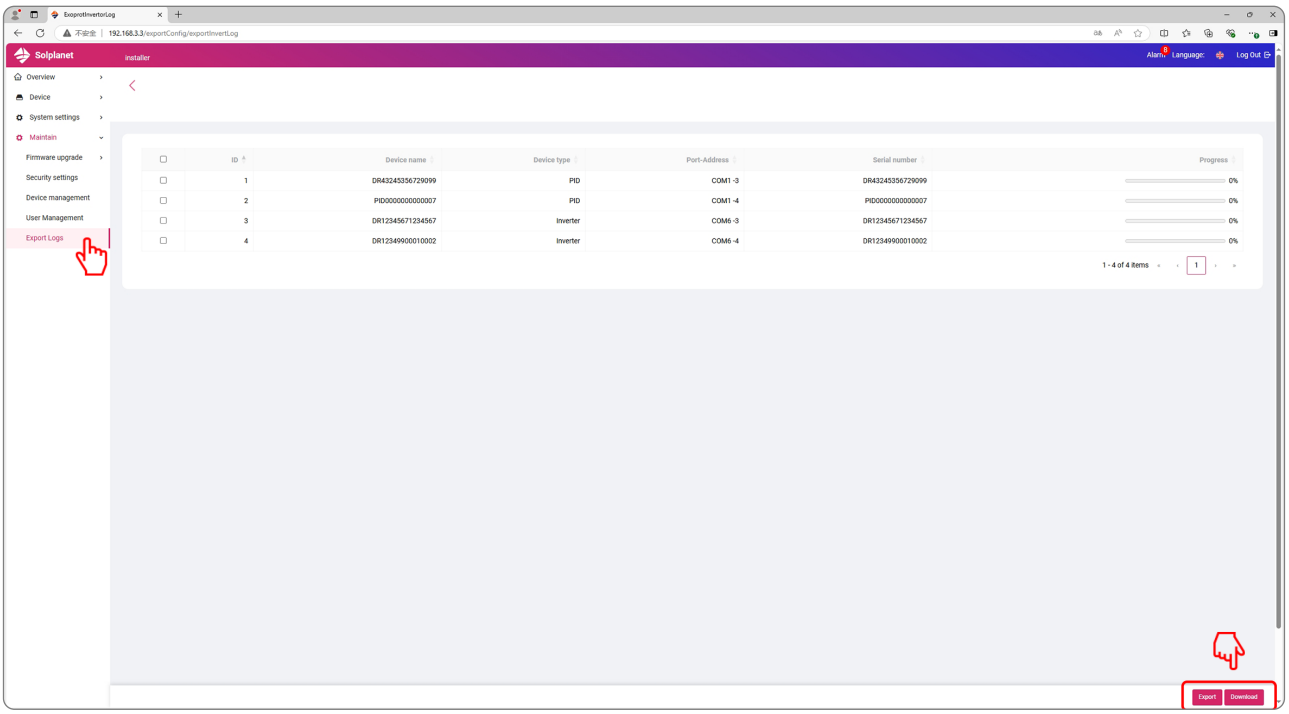
Click 'Maintain' > 'User Management', to display the registered users. In the user list, you can create new user accounts, delete users or change their passwords..



8.6.5 Export Logs

Click 'Maintain' > 'Export Logs'. Inverter log packages under the same port can be selected simultaneously, but can only be exported one by one; however, inverters under different ports can be exported at the same time.

After all the logs have been exported, click the 'Download' button.


ExoprotInvertorLog
192.168.3.3/exportConfig/exportInvertLog
Solplanet
installer
Alarm
Language:
Log Out
Overview
Device
System settings
Maintain
Firmware upgrade
Security settings
Device management
User Management
Export Logs
ID
Device name
Device type
Port-Address
Serial number
Progress
1 DR43245356729099 PID COM1 -3 DR43245356729099 0%
2 PID0000000000007 PID COM1 -4 PID0000000000007 0%
3 DR12345671234567 Inverter COM6 -3 DR12345671234567 0%
4 DR12349900010002 Inverter COM6 -4 DR12349900010002 0%
1 - 4 of 4 items
1
Export
Download

9 Technical data

Parameter Name	Ai-Logger 2000
Device Management	
Max. number of devices access to RS485 only	180
Max. number of devices access to each port	RS485 : 30
	ABUS : 80
	LAN/FE : 32
Max. Communication Distance	
Ethernet	100 m
RS485	1000 m
ABUS	1000 m
Northbound Interfaces	
WLAN	2×WAN，10/100 Mbps
Optic Fiber	2×SFP，100/1000 Mbps
Southbound Interfaces	
LAN	4×LAN，10/100 Mbps
RS485 Port	6×RS485
AI Port	4×AI（AI1: 0~10 V; AI2~AI4: 0~20 mA or 4~20 mA）
DI Port	4×DI
DO Port	4×DO
	Contact Capacity: 12V/100 mA
PT100/PT1000	2×PT100/PT1000
ABUS	AC ABUS, Max. voltage 800 V (±10 %)
Power	
DC Power Input	24 V / 0.8 A DC，12 V / 2 A DC
Power Consumption	Typical 8 W；MAX. 15 W
DC Power Output	12 V / 100 mA
Human Machine Interface (HMI)	
Indicators	3×LED；RUN、SERV、ALM
Local Commissioning	Via embedded Web
USB	1×USB 2.0
Environmental Parameters	
Operating Temperature	-30 °C ~ 60 °C
Storage Temperature	-40 °C ~ 70 °C
Relative Humidity	5 % ~ 95 % RH, Non-condensing
Max. Altitude	4000 m
Machanical Parameter	
Dimensions (W×H×D)	242 mm × 142 mm × 51.5 mm (without installation accessories)
Weight	1.4 KG
Ingress Protection (IP)	IP 20
Mounting	Wall-mounted, Raid-mounted, Desktop

10 FAQ

FAQ	Instructions
Ai-Logger 2000 won't power up	• Check the power adapter and plug the DC output into the 'Power' port on the Ai-Logger. • Check that the AC plug of the power adapter is correctly connected to an AC outlet. • If issues persist, replace the adapter with a compliant 12 V / 2 A DC power adapter. • For further assistance, please contact the supplier or Solplanet Customer Service Center.
How to connect Ai-Logger 2000 using a PC	• Check that the Ethernet port of the Ai-Logger 2000 is properly connected. • Check that the Ethernet parameters are properly configured. • Ai-Logger 2000 LAN port uses the default IP address: 192.168.3.3, simply enter http://192.168.3.3 in the browser to access the embedded web interface.
Device not found, how to add a device	• Check the connection of the RS485 communication cable. If the cable is loose, dropped or has reversed pin connections, it needs to be reconnected and tightened. • Check the RS485 communication parameter settings to verify that the baud rate and communication address are set correctly. • To add devices manually, please input the correct device address, port number, device type and protocol type. • Try the automatic device search again (only for inverter and PID devices, other devices need to be added manually).
Ai-Logger 2000 dsplays device status as disconnected	• Check the cable connection between the unit and the Ai-Logger 2000. If loose or disconnected, reconnect and tighten. • After checking that the device is connected correctly, switch on the power of the device. • Check that the baud rate and RS485 address of the device are set correctly. • If a device replacement has occurred, perform an automatic search or add the device manually. • If the device has been removed, please perform the 'Remove Device' operation under 'Device Management'.
How to change SSID and password of WLAN	• Log in to the web interface and go to the 'System Settings > Communication Settings > Wi-Fi Hotspot Settings' to view and modify the current settings.
How to View AiLogger 2000 Messages	• Log in to the web interface and go to the menu 'Device > Ai-Logger 2000' to review the basic device information and messages.
How to search for a device, add a device, remove a device, change a device address	• Login to the web interface, and navigate to the menu 'Maintenance > Equipment Management'. Select the device you want to modify, and then click the relevant options in the menu at the bottom right corner to make changes. • Automatic device search is available only for Aiswei inverters and PID devices; other devices can be added manually via the 'Add Device' option.
How to set the time zone and time	• Login to the web interface, enter the menu 'System Settings > Date and Time' to set the time zone, date and time. The default time source is the Solplanet cloud.
How to modify RS485 parameters	• Login to the web interface, enter the menu 'System Settings > Communication

	Settings' to set up RS485 parameters, make sure that the parameters are entered accurately, otherwise it will affect the normal communication of the port.
How to view information about reported faults on the device	• Login to the web interface and go to the menu 'Overview > Warning faults'. • Or navigate to 'Device > Inverter > Alarm status'. Please refer to the manual of the corresponding inverter for specific trouble shooting.

11 Maintenance

To ensure the Ai-Logger 2000 can run well for a long time, it is recommended to perform routine maintenance according to the descriptions in this document.

- Make sure that no strong electromagnetic interference devices are placed around the Ai-Logger 2000.
- Make sure there are no heat sources placed around the Ai-Logger 2000.
- Make sure the cooling holes are not blocked.
- Wipe down dirt regularly.
- Periodically check for signs of loose cable connections.
- Device Maintenance
- Technical data

12 Recycling and Disposal

Dispose of the packaging and replaced parts according to the rules applicable in the country where the device is installed.

Do not dispose of the product together with the household waste but in accordance with the disposal regulations for electronic waste applicable at the installation site.

13 EU Declaration of Conformity

Within the scope of the EU directives

• Radio Equipment Directive 2014/53/EU (L 153/62-106. May 22. 2014) (RED)

• Restriction of the use of certain hazardous substances 2011/65/EU (L 174/88, June 8, 2011) and 2015/863/EU (L 137/10, March 31,2015) (RoHS)

AISWEI Technology Co., Ltd. confirms herewith that the Logger 2000 described in this manual are in compliance with the fundamental requirements and other relevant provisions of the above mentioned directives.

The entire EU Declaration of Conformity can be found at www.solplanet.net.

14 Service and Warranty

If you have any technical problems concerning our products, please contact Solplanet service.

Warranty terms and conditions can be downloaded at www.solplanet.net.

When the customer needs warranty serviceduring the warranty period, the customer must provide a copy of the invoice, factory warranty card, and ensure the electrical label of the inverter is legible. If these conditions are not met, Solplanet has the right to refuse to provide with the relevant warranty service.

15 Contact

EMEA

Service email: service.EMEA@solplanet.net

APAC

Service email: service.APAC@solplanet.net

LATAM

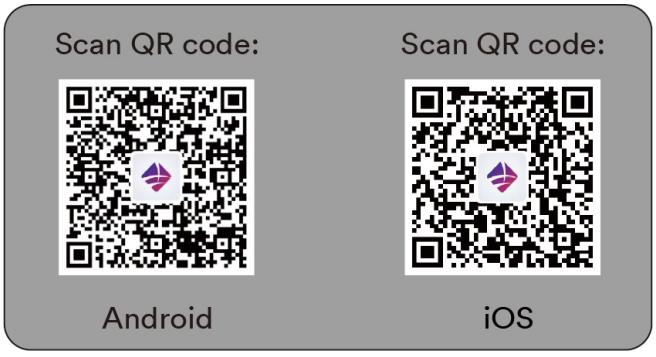
Service email: service.LATAM@solplanet.net

AISWEI Technology Co., Ltd.

Hotline: +86 400 801 9996

Add.: No. 18, Alley 600, Nanchezhan Road, Huangpu District, Shanghai, China

https://solplanet.net/contact-us/



AISWEI Technology Co., Ltd.