Manuals+ — User Manuals Simplified.

SUNGROW
Logger1000A-EU Data
Logger

SUNGROW Logger1000A-EU Data Logger Installation Guide

Contents

SUNGROW

SUNGROW Logger1000A-EU Data Logger

Product Specifications

- Model: Logger1000A-EU
- Wireless LAN (WLAN) Frequency: 2.4GHz/5GHz
- WLAN Transmission Power: 20 dBm for 2.4 GHz, 20 dBm for 5 GHz (5.1~5.7), 14 dBm for 5GHz (5.7~5.8)
- 4G LTE Bands: LTE(FDD) B1,B3,B7,B8,B20,B28A; LTE(TDD) B38,B40
- 4G LTE Frequency Bands: Various ranges for different LTE bands

Product Usage Instructions

Safety Precautions:
Before installation, ensure the package contents are intact and complete against the packing list. Wear proper personal protective equipment (PPE) during operations.

Installation:
Qualified personnel trained in electrical systems should perform all operations. Refer to the user manual and local regulations for detailed instructions.

Wireless LAN (WLAN) Setup:
Configure WLAN settings by accessing the device interface and selecting the appropriate frequency (2.4GHz or 5GHz) based on your network requirements.
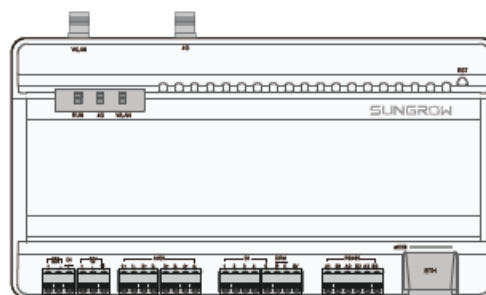
4G LTE Connection:
Connect to the available LTE networks by selecting the correct LTE band corresponding to your region's frequency spectrum.

Validity

This manual is valid for the following data loggers.

Logger1000A-EU
The foregoing Loggers are referred to as the "Logger1000" for short unless otherwise specified.

Logger-1000A-EU

Safety

1. Contents may be periodically updated or revised due to product development. The information in this guide is subject to change without notice. In no case shall this guide substitute for the user manual or related notes on the device.
2. Make sure to read over, fully understand and strictly follow the detailed instructions of the user manual and

other related regulations. Scan the bottom QR Code of the cover to view or obtain the user manual.

3. All operations can be performed only by qualified personnel, that must be trained in the installation and commissioning of the electrical system, as well as the dealing with hazards, have knowledge of the manual and of the local regulations and directives.

4. Before installation, check that the package contents are intact and complete against the packing list. Contact SUNGROW or the distributor in case of any damaged or missing components.

5. The cable must be intact and well insulated. Operation personnel must wear proper personal protective equipment (PPE) all the time.

6. Any violation could result in personal death or injury or device damage, and will void the warranty.

EU Declaration of Conformity within the scope of the EU directives

- Restriction of the use of certain hazardous substances 2011/65/EU and 2015/863/EU (RoHS)
- The radio equipment directive 2014/53/EU (RED)

SUNGROW confirms herewith that the products described in this document are in compliance with the fundamental requirements and other relevant provisions of the abovementioned directives. The entire EU Declaration of Conformity can be found at **support.sungrowpower.com.**
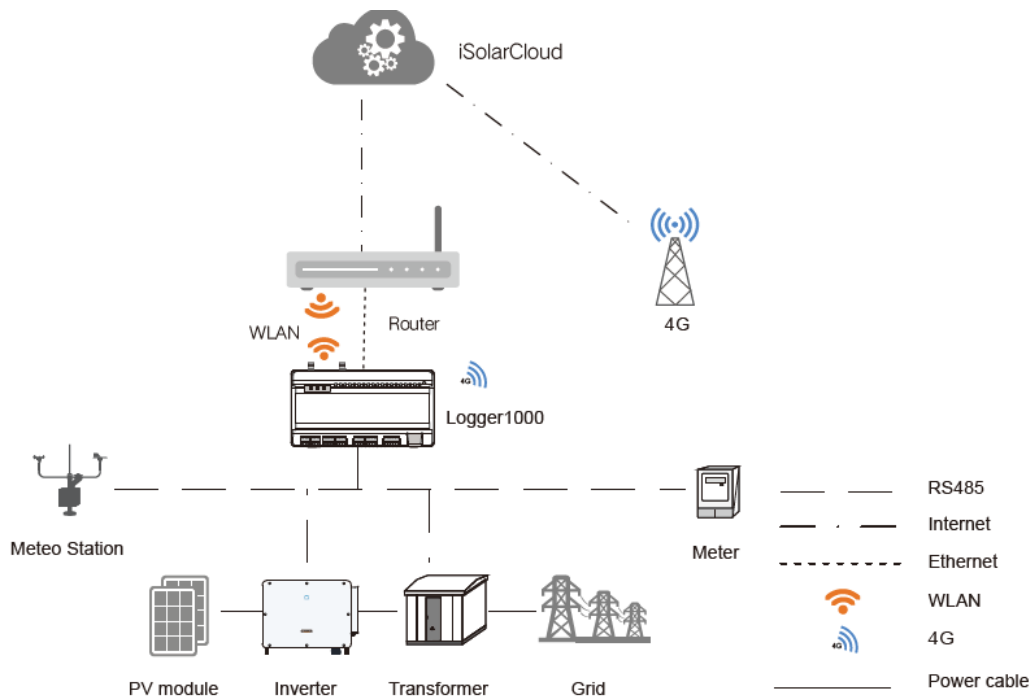
WLAN

Radio technology	WLAN 2.4GHz/5GHz
Radio spectrum	2.4GHz 2402 MHz ~ 2484 MHz 5GHz 4900 MHz ~ 5925 MHz
Maximum transmission power	2.4GHz ≤ 20 dBm 5GHz(5.1~5.7) ≤ 20 dBm 5GHz(5.7~5.8) ≤ 14 dBm

4G

Radio technology	LTE(FDD): B1,B3,B7,B8,B20,B28A LTE(TDD): B38,B40
Radio spectrum	LTE Band 1: 1920 ~ 1980 MHz LTE Band 3: 1710 ~ 1785 MHz LTE Band 7: 2500 ~ 2570 MHz LTE Band 8: 880 ~ 915 MHz LTE Band 20: 832 ~ 862 MHz LTE Band 28A: 703 ~ 733 MHz LTE Band 38: 2570 ~ 2620 MHz LTE Band 40: 2300 ~ 2400 MHz
Maximum transmission power	23±2 dBm

The technical parameters listed above apply to EU countries only.
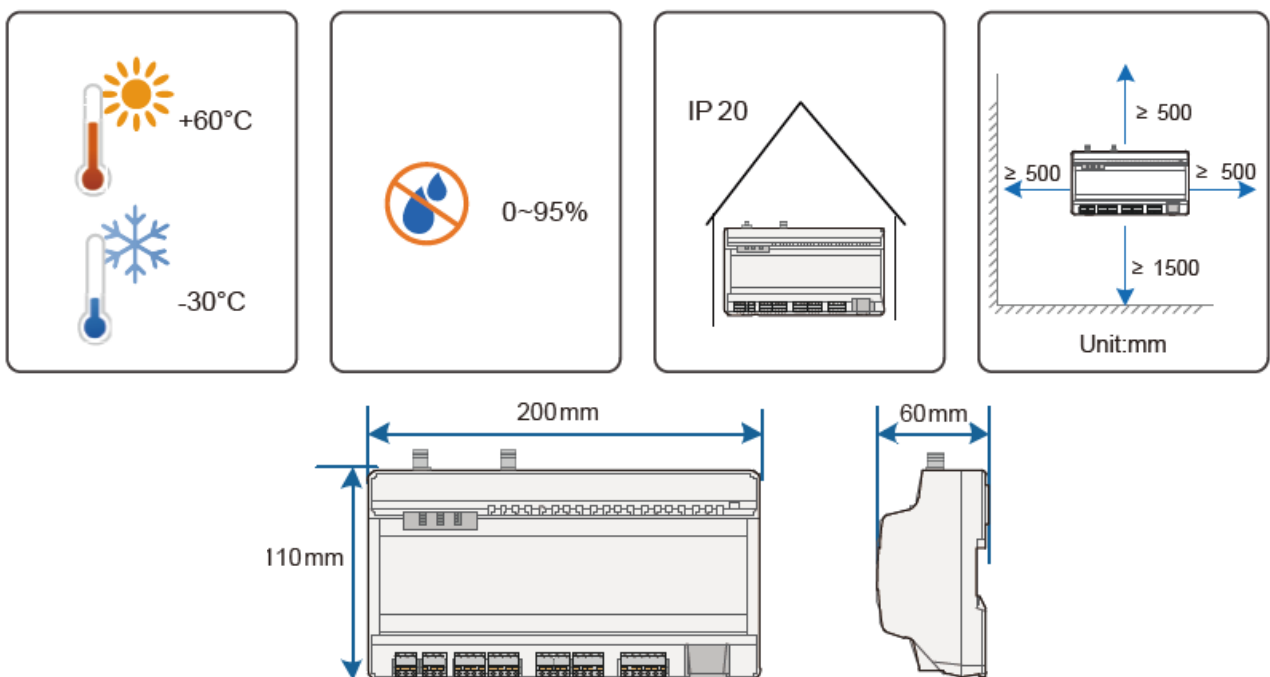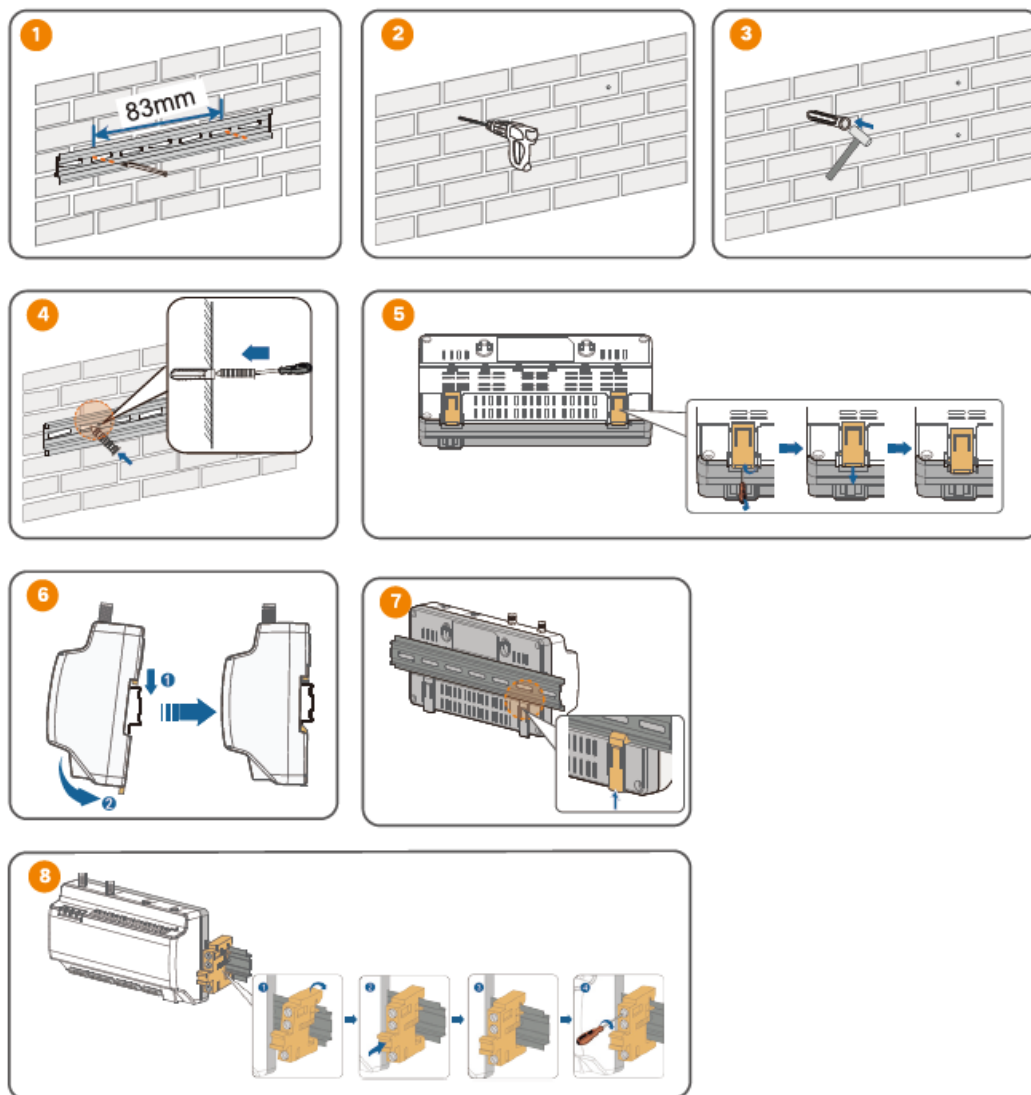
Typical Application

NOTICE The Logger1000 can be connected to iSolarCloud via any or a combination of Ethernet, WLAN, and 4 G.
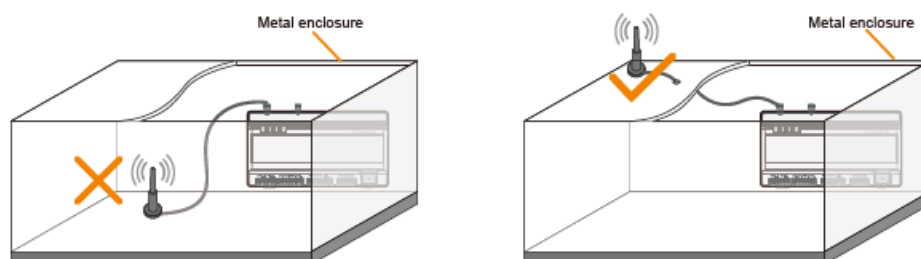
Mechanical Installation

Installation Location

Guide Rail-Mounting

Installing Antenna

Installing Power Box

Electrical Connection

Port Introduction

Tab. 3-1 Port description

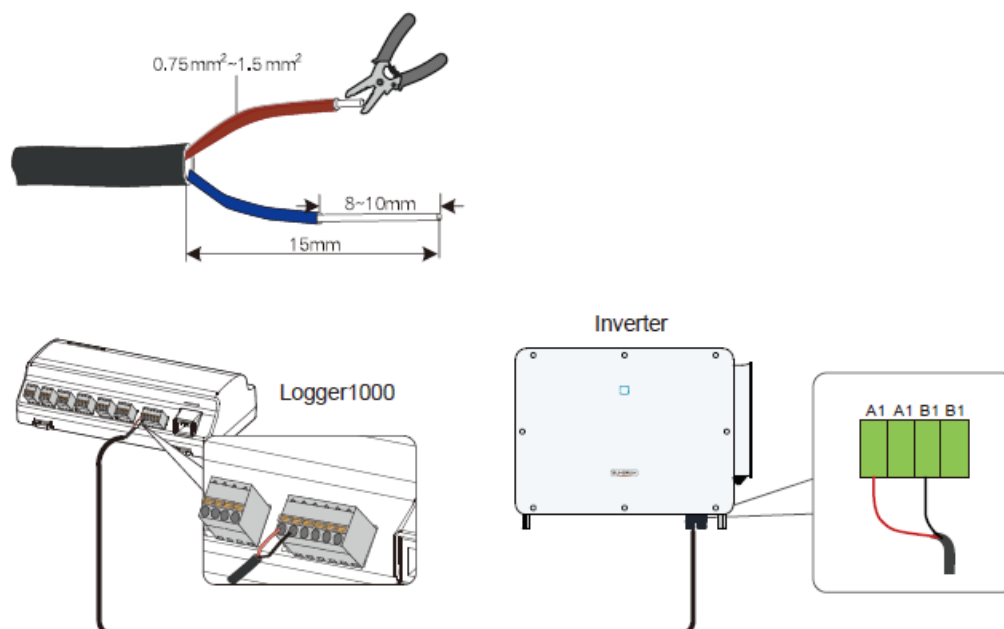| Port (print)	Function	Description
24V OUT	24V power output	24V±5%, the max. output current: 0.5A
DI	Converters AI into DI	Switch for enabling the AI/DI function
24V IN	24V power input	24V±3%
⏚	Grounding	Connecting protective grounding cable
AI/DI	Analog input	Default AI input sampling: 0-10V or 4-20mA
DI	Digital input	Digital signal input
DRM	Demand Response Modes function	
0V	Digital reference point	
RS485	RS485 communication port	Support of 3 inputs of RS485
⬭	SIM card slot	Support of Micro-SIM card
ETH	Ethernet port	Can be connected to background master via devices such as Ethernet switch and router
WLAN	WLAN antenna	
4G	4G antenna	
RST	Reset	Press and hold it for > 3s to restart. Press and hold it for > 60s to restore the default settings.

Tab. 3-2 Indicator description

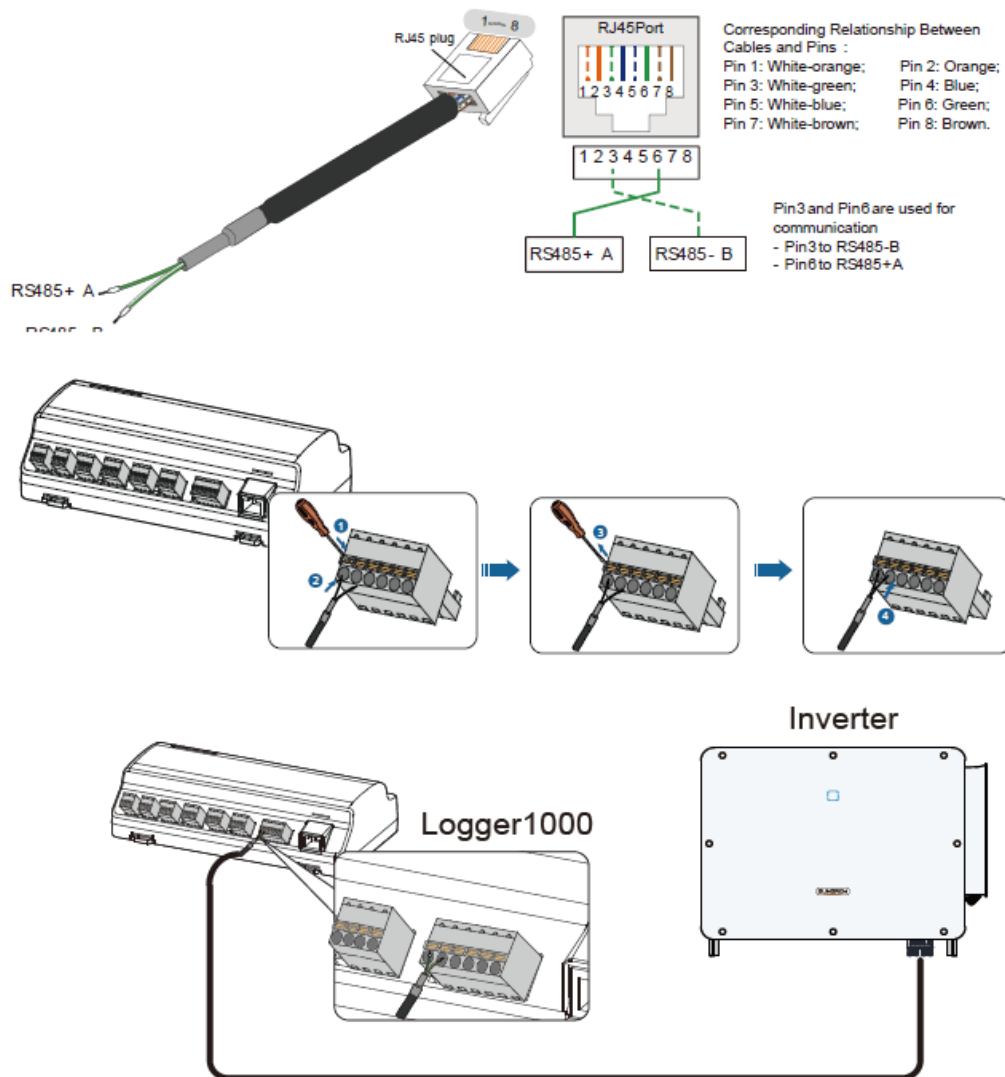| Indicator (print)	LED color	LED status	Description
Running indicator (RUN)	Red/green	Off	No external power supply connected
		Slow flash (Green)	Normal running
		Slow flash (Red)	Device alarm
		Steady on (Red)	Logger1000 running fault
4G indicator (4G)	Blue	Off	No data communication
		Steady on	4G connected successfully
		Slow flash	Data communication in process
WLAN indicator (WLAN)	Blue	Off	No data communication
		Steady on	WiFi connected successfully
		Slow flash	Data communication in process

Connection to PV Devices

- Connection to a single inverter

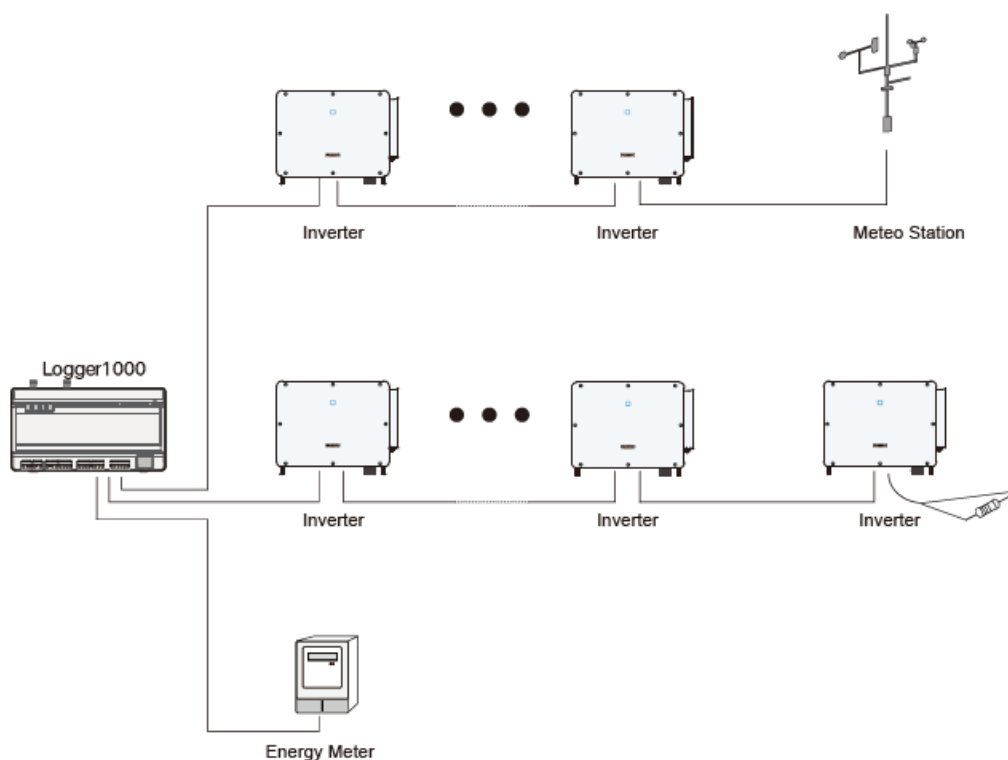 The RS485 port of the SUNGROW inverter is an RS485 terminal block or an RJ45 port.
- RRS-485terminal block connection
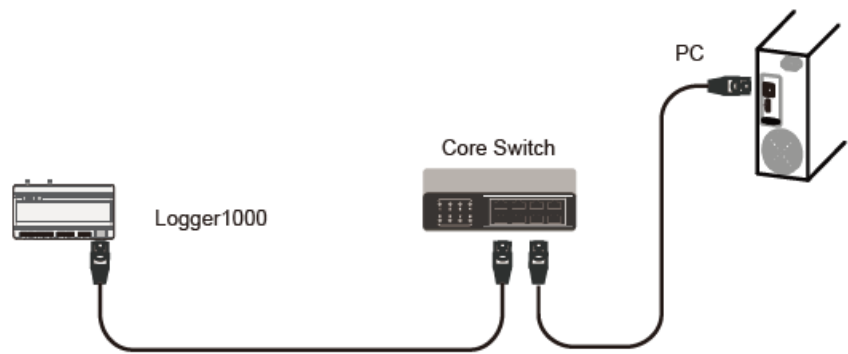
- **RJ45 port connection**

RJ45 plug

RJ45Port

Corresponding Relationship Between Cables and Pins :
Pin 1: White-orange; Pin 2: Orange;
Pin 3: White-green; Pin 4: Blue;
Pin 5: White-blue; Pin 6: Green;
Pin 7: White-brown; Pin 8: Brown.

1 2 3 4 5 6 7 8

RS485+ A RS485- B

Pin 3 and Pin 6 are used for communication
- Pin 3 to RS485-B
- Pin 6 to RS485+A

RS485+ A

RS485- B

Inverter

Logger1000

- **Connection to multiple devices**

Inverter

Inverter

Meteo Station

Logger1000

Inverter

Inverter

Inverter

Energy Meter

NOTICE

- Multiple inverters are connected to the Logger1000 in the RS-485 daisy chain manner.
- If more than 15 inverters are connected on the RS485 bus, it is recommended to connect a 120Ω terminal resistor in parallel on the RS485A and RS485B lines at the head or tail end of the bus.
- When the number of device types is less than or equal to the number of RS-485 ports of Logger1000, it is recommended to connect different types of devices to different RS-485 ports separately.

Connection to Background

NOTICE
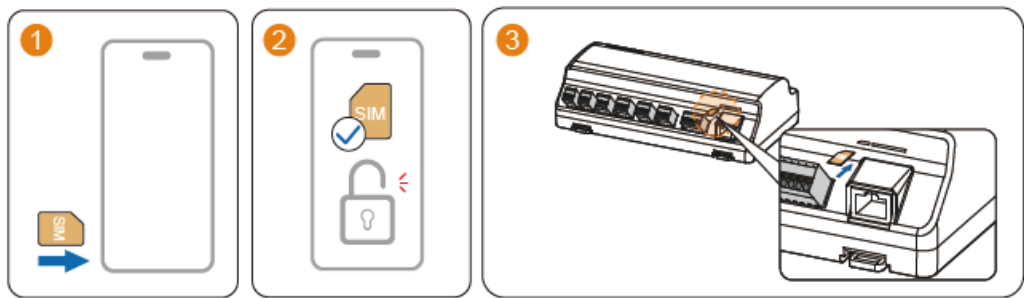The default IP of the "ETH":12.12.12.12.

Connection to Micro-SIM

- Micro-SIM card size: 12mm × 15mm.
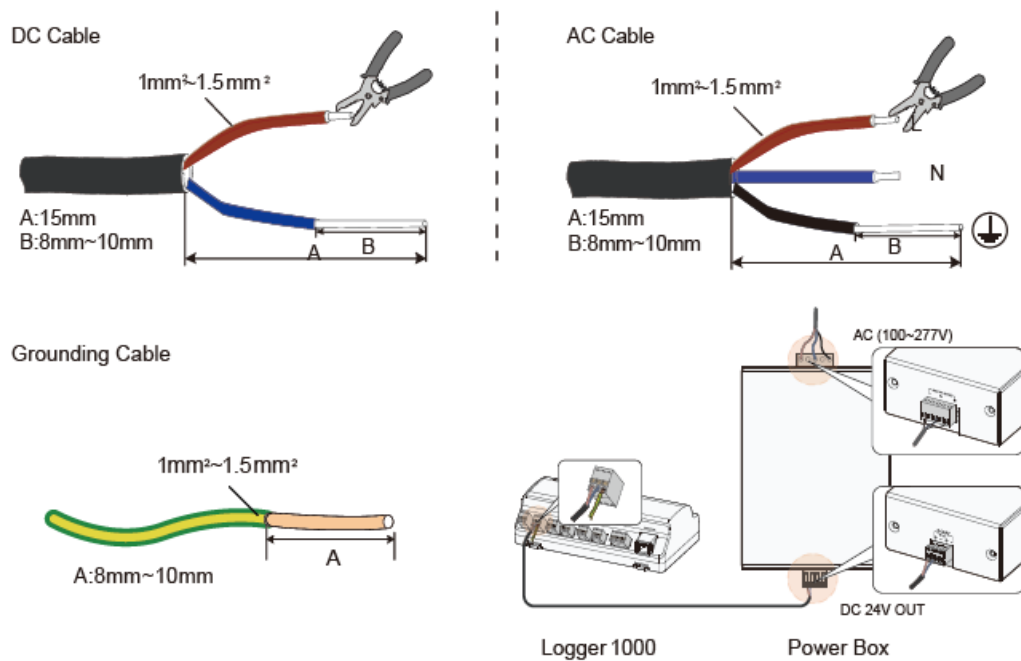- Recommended SIM card provider: Telekom, Vodafone, T-Mobile, or O2.

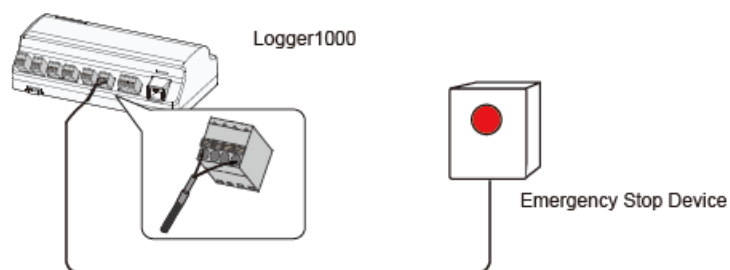| Device Connected	Monthly Data Required
Inverter	Number of inverters × 25 MB + 25 MB
Optimizer	Number of optimizers × 0.52 MB + 130 MB
Meter and meteo station	Number of meters and meteo stations × 12.5 MB + 12.5 MB

NOTICE

- Ensure that the SIM card has been properly configured for the monthly data plan.
- If using a nano-SIM card with an adapter, ensure that the nano-SIM is properly seated, and is correctly oriented to avoid improper insertion, difficulty in removing the SIM, or potential damage to the device.
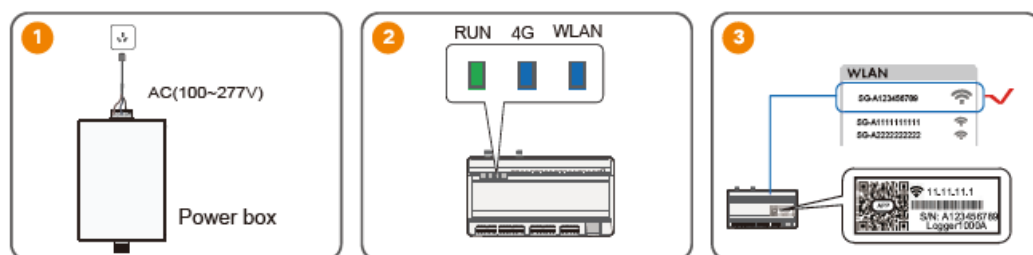- Micro-SIM card hot-plugging is supported.
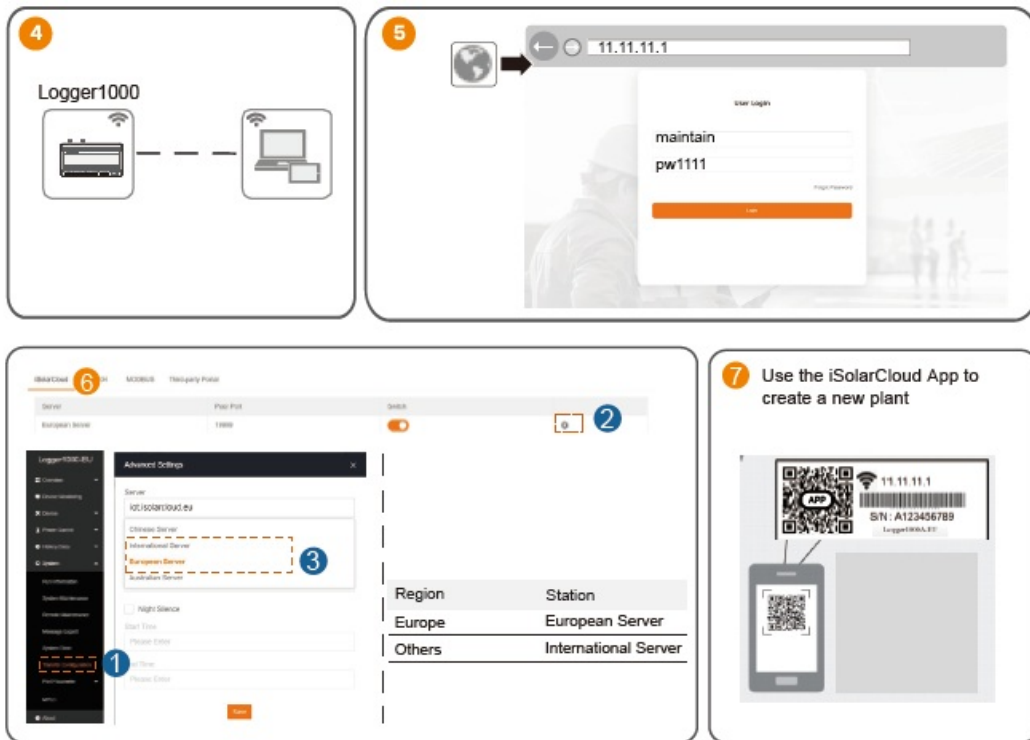
Connection to Power Box

DC Cable
1mm²~1.5mm²
A:15mm
B:8mm~10mm

AC Cable
1mm²~1.5mm²
A:15mm
B:8mm~10mm
N

Grounding Cable
1mm²~1.5mm²
A:8mm~10mm

AC (100~277V)
DC 24V OUT
Logger 1000
Power Box

Connection to Emergency Stop Device

Logger1000
Emergency Stop Device

Commissioning

① AC(100~277V) Power box

② RUN 4G WLAN

③ WLAN
SG-A123456789
SG-A1111111111
SG-A2222222222
1L11L11.1
S/N: A123456789
Logger1000A

Safety Declaration

- Support for software updates: 2 years
- For details on the product's network security vulnerability response process and vulnerability disclosure, please scan the QR code on the right or visit the following website:

   https://en.sungrowpower.com/security-vulnerability-management

Related documents

- User Manual of the iSolarCloud App

- More information in the QR code or at **http://support.sungrowpower.com**

Sungrow Power Supply Co., Ltd.
www.sungrowpower.com

Frequently Asked Questions

- **Q: Can the Logger1000A-EU be used in non-EU countries?**

  A: The technical parameters listed are specified for EU countries only. Usage in non-EU countries may require different frequency bands and compliance certifications.

- **Q: How do I access the user manual for the Logger1000A-EU?**

  A: Scan the QR Code at the bottom of the device to view or obtain the user manual for detailed instructions on installation and operation.

Documents / Resources

Quick Installation Guide Data Logger Logger1000A-EU	**[SUNGROW Logger1000A-EU Data Logger](#)** [pdf] Installation Guide 203747055, Logger1000A-EU-QIMUL-Ver15-202407, Logger1000A-EU Data Logger, Logger1000A-EU, Data Logger, Logger

References

- **[Leading Solar Inverter and Energy Storage Solutions Provider - Sungrow US](#)**
- **[Vulnerability Management | SUNGROW](#)**
- **[User Manual](#)**