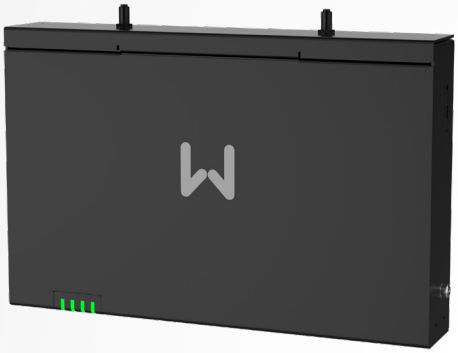
GOODWE



User Manual

Smart DataLogger

EzLogger3000C

V1.0-2024-04-10

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1 About This Manual

This document describes the product information, installation, electrical connection, commissioning, troubleshooting, and maintenance. Read through this document before installing and operating the product. All the installers and users have to be familiar with the product features, functions, and safety precautions. This document is subject to update without notice. For more product details and latest documents, please visit https://en.goodwe.com.

1.1 Applicable Model

This document applies to the Smart DataLogger EzLogger3000C (EzLogger for short).

1.2 Target Audience

This document applies to trained and knowledgeable technical professionals only. The technical personnel has to be familiar with the product, local standards, and electric systems.

1.3 Symbol Definition

Different levels of warning messages in this document are defined as follows:

DANGER
Indicates a high-level hazard that, if not avoided, will result in death or serious injury.
WARNING
Indicates a medium-level hazard that, if not avoided, could result in death or serious injury.
CAUTION
Indicates a low-level hazard that, if not avoided, could result in minor or moderate injury.
NOTICE
Highlights key information and supplements the texts. Or some skills and methods to solve product-related problems to save time.

2 Safety Precaution

NOTICE

The equipment is designed and tested strictly in compliance with related safety rules. Read and follow all the safety instructions and cautions before any operations. Improper operation might cause personal injury or property damage as the equipments are electrical equipment.

2.1 General Safety

NOTICE

- The information in this document is subject to change due to product updates or other reasons. This document cannot replace the product labels or the safety precautions unless otherwise specified. All descriptions in the document are for guidance only.
- Before installations, read through this document to learn about the product and the precautions.
- All installations should be performed by trained and knowledgeable technicians who are familiar with local standards and safety regulations.
- Strictly follow the installation, operation, and configuration instructions in this document. The manufacturer shall not be liable for equipment damage or personal injury if you do not follow the instructions. For more warranty details, please visit https://en.goodwe.com/warranty.

2.3 Grounding Safety

DANGER

Make sure the equipment is installed at a solid and reliable place.

WARNING

Before operation, make sure the device is reliably grounded.

2.4 Personal Safety

DANGER

- Use insulating tools and wear personal protective equipment (PPE) when operating the equipment to ensure personal safety.
- Do not touch the equipment when it is short-circuited. Keep away from the equipment, and turn off the power immediately.
- Before electrical connections, disconnect all upstream switches to ensure the device is not energized.

2.5 Equipment Safety

DANGER

Make sure the equipment is installed at a solid and reliable place.

WARNING

- Use appropriate tools for proper installation, maintenance, etc.
- Comply with local standards and safety regulations when operating the equipment.
- Unauthorized disassembly or modification may cause damage to the equipment, which is not covered within the warranty scope.

2.6 Warning Labels

DANGER

- All labels and warning marks should be visible after the installation. Do not cover, scrawl, or damage any label on the equipment.
- Labels on the equipment are as follows.

	HIGH VOLTAGE HAZARD. Disconnect all incoming power and turn off the product before working on it.		Potential risks exist. Wear proper PPE before any operations.
	Read through the user manual before any operations.		Do not dispose of the equipment as household waste.Discard the product in compliance with local laws and regulations, or send it back to the manufacturer.
	CE Mark		RCM Mark
	TELEC Mark		ANATEL Mark

2.7 Personnel Requirements

NOTICE

- Personnel who install or maintain the equipment must be strictly trained, learn about safety precautions and correct operations.
- Only qualified professionals or trained personnel are allowed to install, operate, maintain, and replace the equipment or parts.

2.8 Declaration of Conformity

Europe

GoodWe Technologies Co., Ltd. hereby declares that the equipment with wireless communication modules sold in the European market meets the requirements of the following directives:

- Radio Equipment Directive 2014/53/EU (RED)
- Restrictions of Hazardous Substances Directive 2011/65/EU and (EU) 2015/863 (RoHS)
- Waste Electrical and Electronic Equipment 2012/19/EU
- Registration, Evaluation, Authorization and Restriction of Chemicals (EC) No 1907/2006 (REACH)

GoodWe Technologies Co., Ltd. hereby declares that the inverter without wireless communication modules sold in the European market meets the requirements of the following directives:

- Electromagnetic compatibility Directive 2014/30/EU (EMC)
- Electrical Apparatus Low Voltage Directive 2014/35/EU (LVD)
- Restrictions of Hazardous Substances Directive 2011/65/EU and (EU) 2015/863 (RoHS)
- Waste Electrical and Electronic Equipment 2012/19/EU
- Registration, Evaluation, Authorization and Restriction of Chemicals (EC) No 1907/2006 (REACH)

You can download the EU Declaration of Conformity on https://en.goodwe.com.

FCC

Federal Communications Commission (FCC) Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generate, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

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

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. this device must accept any interference received, including interference that may cause undesired operation.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

RF exposure warning

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled

environment. This equipment must be installed and operated in accordance with provided instructions and the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be collocated or operating in conjunction with any other antenna or transmitter.

ISED Canada RSS-Gen Notice

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

1. This device may not cause interference.
2. This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

1. L'appareil ne doit pas produire de brouillage ;
2. L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

ISED Canada ICES-003 Compliance Label

This is only required if product is within ICES-003 scope and is not exempt: * Insert either "A" or "B", but not both, to identify the applicable Class of the device used for compliance verification. "CAN ICES-3 (B)/NMB-3(B)"

RF Exposure Guidance Statement

For equipment used a specified distance (more than 5mm away from persons

In order to comply with ISED RF Exposure requirements, this device must be installed to provide at least 20 cm separation from the human body at all times.

Afin de se conformer aux exigences d'exposition RF ISED, cet appareil doit être installé pour fournir au moins 20 cm de séparation du corps humain en tout temps.

This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

Lors de l'installation et du fonctionnement de cet équipement, la distance minimale entre le radiateur et le corps doit être de 20 cm

3 Product Introduction

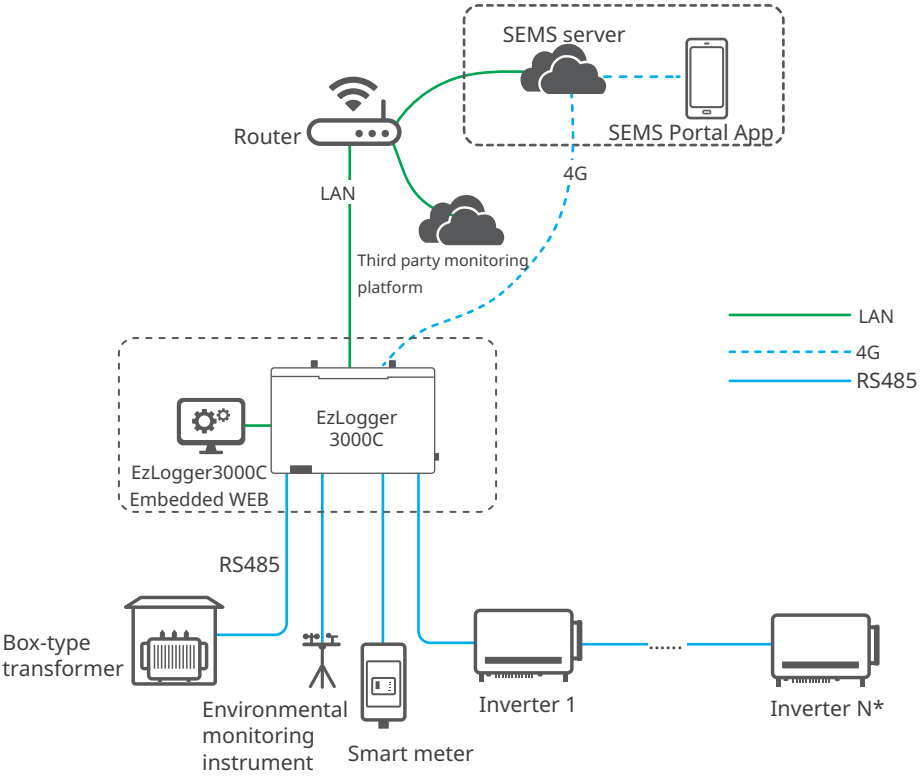
3.1 Functions

The EzLogger is a device for the monitoring and management platform of the PV system. It can be used to collect data or logs of the inverter, environmental monitoring instrument, smart meter, etc.. The collected data will be send to the management platform to monitor, operate and maintain the PV system.

3.2 Networking

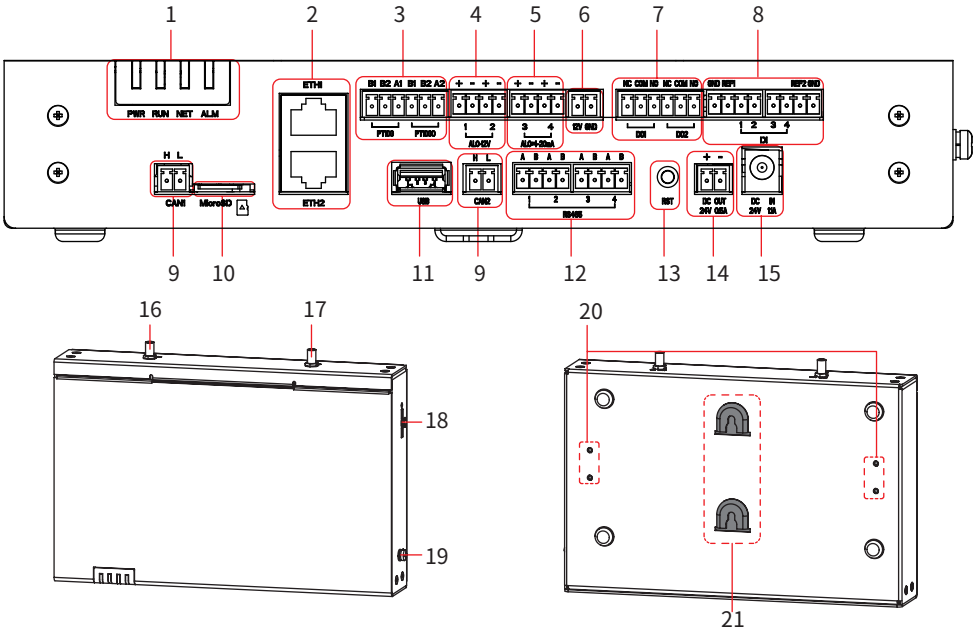
EzLogger is applicable to the PV systems over the following communication methods:

- RS485 communication, which enables communication between the EzLogger and devices like smart meters, inverters, box-type transformers, etc..
- Ethernet communication, which enables communication between the EzLogger and the router, PC and power plant monitoring system.
- 4G communication, which enables communication between the EzLogger and the power plant monitoring system.



* A maximum of 20 inverters can be connected to one RS485 port.

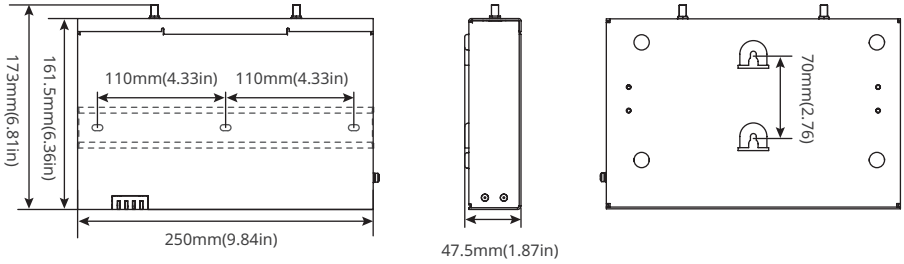
3.3 Appearance



No.	Parts	Description
1	LED indicator	Indicates the equipment's working status.
2	Ethernet ports (ETH1/2)	Communication ports for the Ethernet cable. • ETH1: for network communication. • ETH2: for network communication and embedded web connection.
3	PT ports (PT100 PT1000)	Ports for connecting the temperature sensor.
4	AI ports (AI_0-12V)	Communication ports for 0-12V AI signal input cable.
5	AI ports (AI_0/4-20mA)	Communication ports for 0-20mA or 4-20mA AI signal input cable.
6	12V output power port (12V GND)	Supports 12V DC power input.
7	DO ports (DO1/2)	Communication ports for DO signal cable.
8	DI ports (DI)	Communication ports for DI signal cable. Supports dry contact or wet contact signal.
9	CAN ports (CAN 1/2)	Reserved ports for CAN communication.
10	MicroSD card slot (MicroSD)	Supports installing a MicroSD card to storage running, operation, and maintenance logs.
11	USB port (USB)	Connects to a USB flash drive, which can be used to update firmware version.

No.	Parts	Description
12	RS485 ports (RS485 1-4)	Communication ports for connecting RS485 communication cables. Supported devices: inverters, smart meters, EMIs, etc..
13	Reset button (RST)	Short press 1-3s: restart the EzLogger. Long press 6-20s: restart theEzLogger and restores factory default network settings.
14	DC output power port (DC OUT 24V 0.5A)	24V DC power output port.
15	DC input power port (DC IN 24V 1.1A)	24V DC power input port.
16	WiFi antenna port (WiFi ANT)	• For WiFi hotspot signal. • If the equipment is installed in a metal box or under a metal/concreteroof, an external antenna or RF extension cable is recommended to amplify signal. Recommended specifications of WiFi antenna: 2.4G
17	4G antenna port (4G ANT)	For 4G antenna. 4G is available in some countries and regions. Contact local distributors for more details.
18	SIM card slot (SIM)	Supports installing a SIM card for 4G communication.
19	Grounding point	Connects grounding cables to the grounding points for protection.
20	Rail clamp mounting point	Installs the equipment on the DIN rail.
21	Screw mounting slot	Hangs the equipment on screws.

3.4 Dimensions

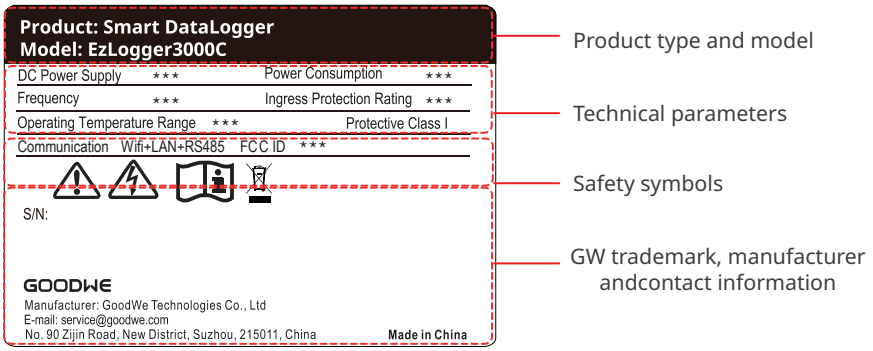


3.5 Indicators

Indicator	Status	Description
PWR		Steady green: The device is powered on.
		Green off: The device power supply is abnormal.
RUN		Steady green/Green off: The device fails to work.
		Slow blinking green: The device is working properly.
NET		Steady green: Communication between the device and the server is normal.
		Fast blinking green: Communication between the device and the router is normal, but communication between the device and the server fails.
		Slow blinking green: Communication between the device and the router fails.
ALM		Steady red: All the connected inverters are in fault status.
		Fast blinking red: the equipment is being upgraded.
		Red off: At least one inverter in the system is working properly.

3.6 Nameplate

The nameplate is for reference only.



4 Check and Storage

4.1 Check before Receiving

Check the following items before receiving the product.

1. Check the outer packing box for damage, such as holes, cracks, deformation, and others signs of equipment damage. Do not unpack the package and contact the supplier as soon as possible if any damage is found.
2. Check the product model. If the product model is not what you requested, do not unpack the product and contact the supplier.
3. Check the deliverables for correct model, complete contents, and intact appearance. Contact the supplier as soon as possible if any damage is found.

4.2 Storage

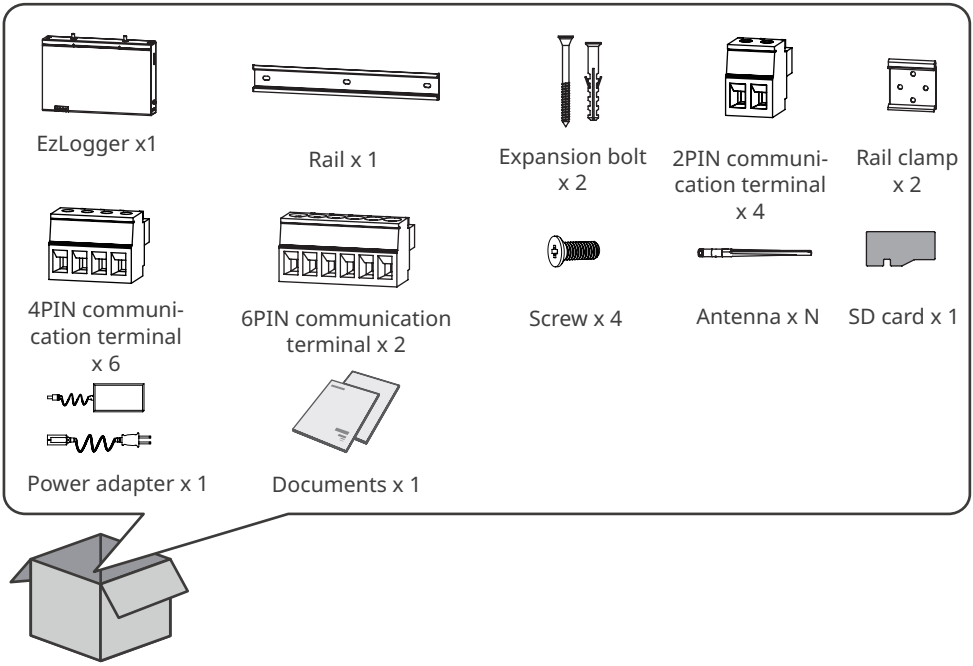
If the equipment is not to be installed or used immediately, please ensure that the storage environment meets the following requirements:

1. Do not unpack the outer package or throw the desiccant away.
2. Store the equipment in a clean place. Make sure the temperature and humidity are appropriate and no condensation.
3. If the equipment has been long term stored, it should be checked by professionals before being put into use.

4.3 Deliverables

NOTICE

- Connect the cables using the included terminals. The manufacturer shall not be liable for the damage if other terminals are used.
- The actual appearance of the power adapter prevails.
- Quantity of the antenna varies depending on the product configuration.
- Number of the WiFi antenna: 1. Number of the 4G antenna (optional): 1.


EzLogger x1
Rail x 1
Expansion bolt x 2
2PIN communication terminal x 4
Rail clamp x 2
4PIN communication terminal x 6
6PIN communication terminal x 2
Screw x 4
Antenna x N
SD card x 1
Power adapter x 1
Documents x 1

5 Installation

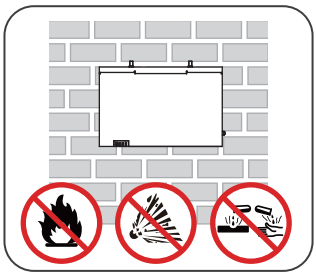
5.1 Installation Requirements

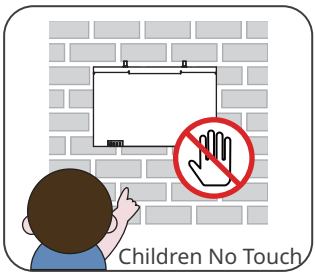
Installation Environment Requirements

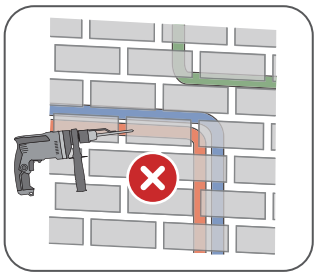
1. Do not install the equipment in a place near flammable, explosive, or corrosive materials.
2. The place to install the equipment shall be well-ventilated for heat radiation and large enough for operations.
3. The equipment can be installed indoors.The temperature and humidity at the installation site should be within the appropriate range.
4. Do not install the equipment in a place that is easy to touch, especially within children's reach.
5. Install the equipment at a height that is convenient for operation and maintenance, electrical connections, and checking indicators and labels.
6. Install the equipment away from electromagnetic interference.

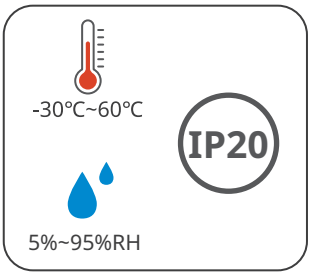
Mounting Support Requirements

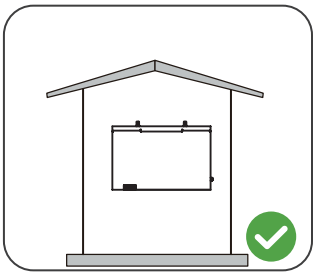
- The mounting support shall be nonflammable and fireproof.
- Install the equipment on a surface that is solid enough to bear its weight.

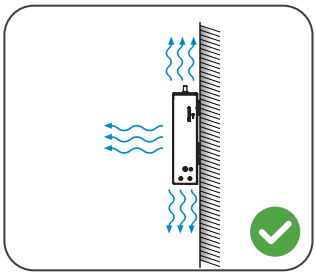


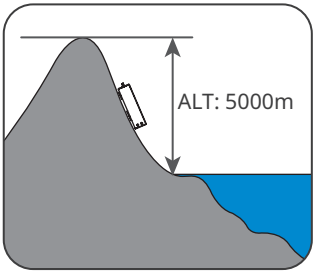












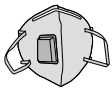
Installation Tool Requirements

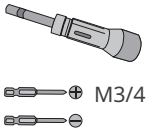
The following tools are recommended when installing the equipment. Use other auxiliary tools on site if necessary.


Goggles


Safety shoes


Safety gloves

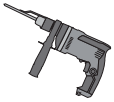

Dust mask



Torque wrench


Diagonal pliers


Wire stripper

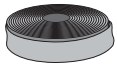

Hammer drill


Cable tie


Vacuum cleaner


Marker


Level


Heat shrink tube


Rubber hammer

5.2 EzLogger Installation

5.2.1 Wall-Mounting

NOTICE

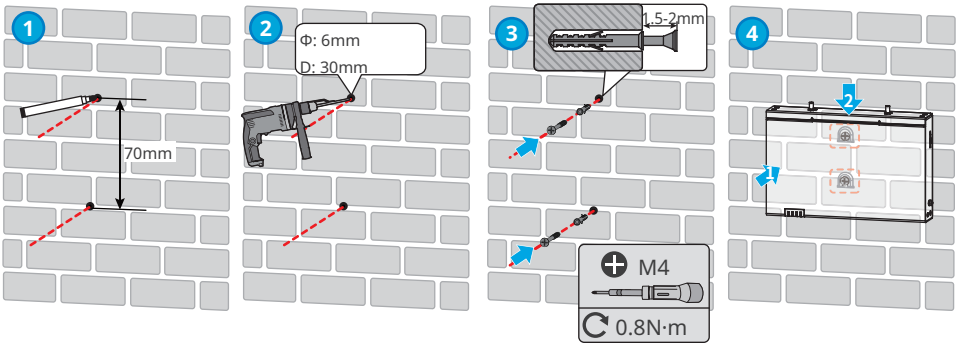
- Avoid the water pipes and cables buried in the wall when drilling holes.
- Wear goggles and a dust mask to prevent the dust from being inhaled or contacting eyes when drilling holes.
- For easy connection and maintenance, ensure that the cable connection area of the EzLogger is accessible.

Step 1 Mark positions for drilling holes. Ensure that the marked holes match the mounting holes on the back of the equipment.

Step 2 Drill holes to a depth of 30mm using the hammer drill. The diameter of the drill bit should be 6mm.

Step 3 Install the expansion screws, leaving a length of 1.5-2mm outside the wall to hang the equipment.

Step 4 Hang the equipment to the expansion screws and pull it down to ensure that equipment is mounted securely.

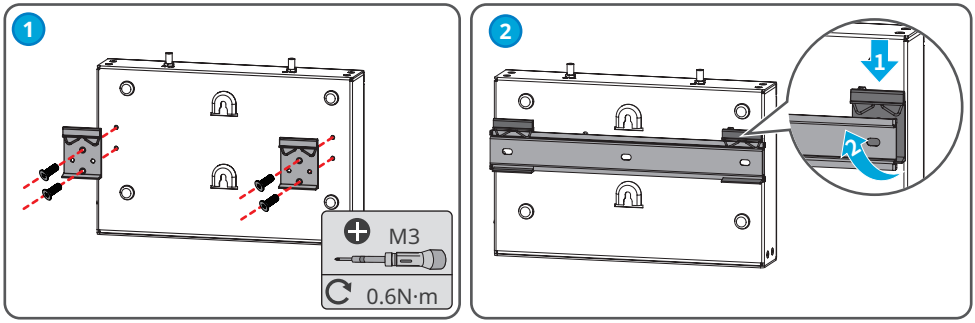


5.2.2 Rail-Mounting

NOTICE
• Screw the rail clamp to the EzLogger for rail-mounting. • Prepare M4 screws and fix the rail on a solid and stable surface like a wall or a support.

Step 1 Screw the rail clamp to the EzLogger using M3 screws.

Step 2 Install the EzLogger to the rail.



5.2.3 Table-Mounting

The EzLogger supports table installation, which means place the equipment on a desktop.

NOTICE
• Put the EzLogger on a horizontal table. Place it properly to avoid the equipment slipping and causing damage. • Do not put the EzLogger in a place where it can be easily touched to avoid signal interruption caused by accidental touching.

6 Electrical Connection

6.1 Safety Precaution

DANGER

- Before electrical connections, disconnect all upstream switches to ensure the device is not energized. Do not work with power on. Otherwise, an electric shock may occur.
- Perform electrical connections in compliance with local laws and regulations. Including operations, cables, and component specifications.
- If the cable bears too much tension, the connection may be poor. Reserve a certain length of the cable before connecting it to the equipment.

NOTICE

- Wear personal protective equipment like safety shoes, safety gloves, and insulating gloves during electrical connections.
- All electrical connections should be performed by qualified professionals.
- Cable colors in this document are for reference only. The cable specifications shall meet local laws and regulations.

No.	Cable	Silkscreen	Specification
1	PE cable	⏚	• Outdoor copper cable • Conductor cross-sectional area: 2.5mm² - 4mm² (14AWG - 12AWG)
2	DC output cable (12V/24V)	DC OUT / 12V GND	• Outdoor copper cable • Conductor cross-sectional area: 0.2mm² - 1.5mm² (24AWG - 16AWG)
3	DO signal cable	DO 1-2	
4	RS485 communication cable	RS485 1-4	• Shielded twisted pair cable that meets local standards • Conductor cross-sectional area: 0.2mm² - 1.5mm² (24AWG - 16AWG)
5	DI signal cable	DI 1-4	• Outdoor copper cable • Conductor cross-sectional area: 0.2mm² - 1.5mm² (24AWG - 16AWG)
6	AI signal cable	AI_0-12V AI_0/4-20mA	
7	PT signal cable	PT100/ PT1000	
8	Ethernet cable	ETH 1-2	• CAT 5E or higher specifications • Shielded RJ45 connectors

6.2 Connecting the PE Cable

⚠ WARNING

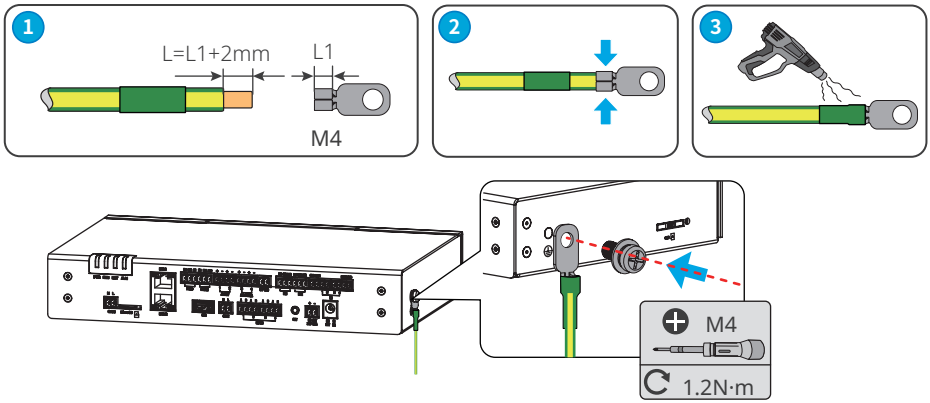
- Make sure the equipment is reliably grounded before any operations.
- To improve the corrosion resistance of the terminal, it is recommended to apply silica gel or paint on the grounding terminal after installing the PE cable.
- The PE cable, grounding OT terminal, and screw should be prepared by the customer. Recommended specifications:
  - PE cable: outdoor copper cable with conductor cross-sectional area of 2.5-4mm²(14AWG-12AWG).
  - OT terminal: M4
  - Screw: M4

Step 1 Strip the cable to an appropriate length for insulation.

Step 2 Crimp the cable to the grounding OT terminal.

Step 3 Wrap the crimping area with insulation tube.

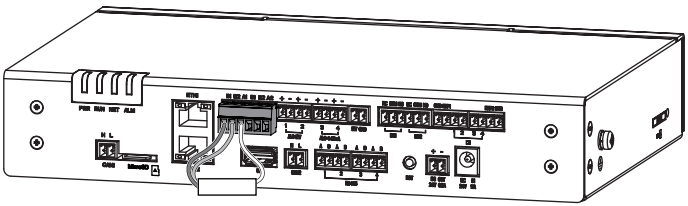
Step 4 Secure the PE cable to the grounding point of the EzLogger with the M4 screw.



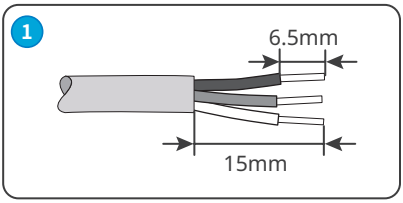
6.3 Connecting the PT Signal Cable

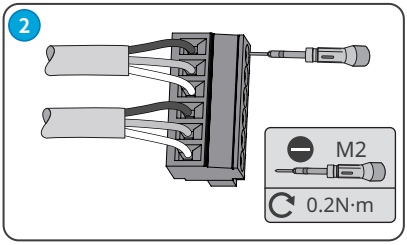
NOTICE

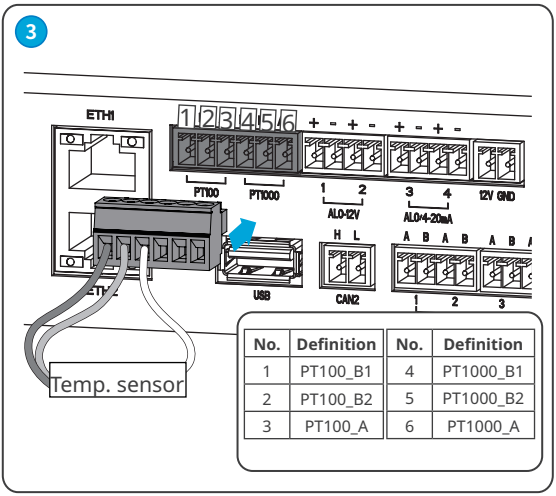
- The PT ports can be used to connect to two-wire or three-wire PT100/PT1000 temperature sensors.
- Short circuit B1 port and B2 port when connecting the EzLogger to a two-wire temp. sensor.



Three wire PT100/PT1000

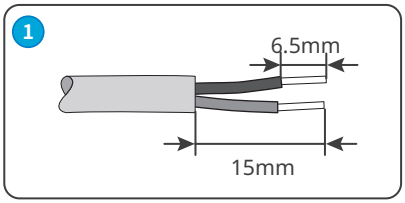


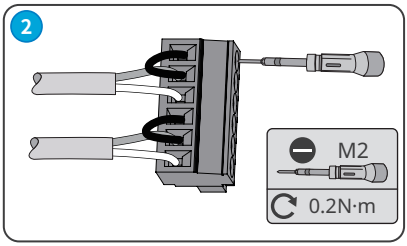


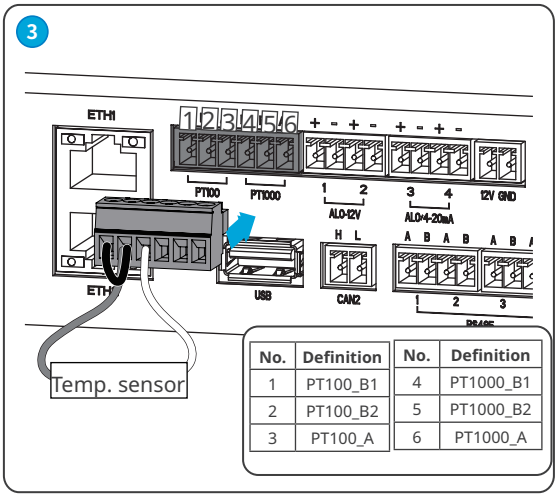


No.	Definition	No.	Definition
1	PT100_B1	4	PT1000_B1
2	PT100_B2	5	PT1000_B2
3	PT100_A	6	PT1000_A

Two wire PT100/PT1000





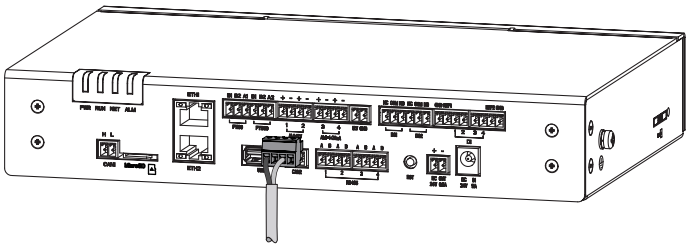


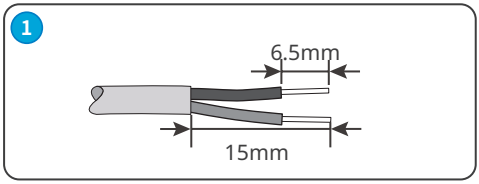
No.	Definition	No.	Definition
1	PT100_B1	4	PT1000_B1
2	PT100_B2	5	PT1000_B2
3	PT100_A	6	PT1000_A

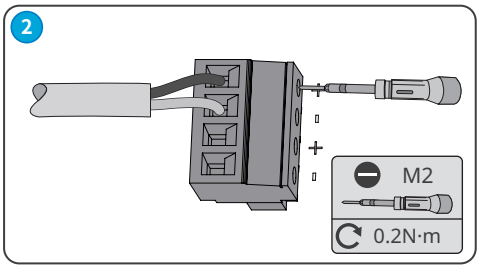
6.4 Connecting the AI Signal Cable

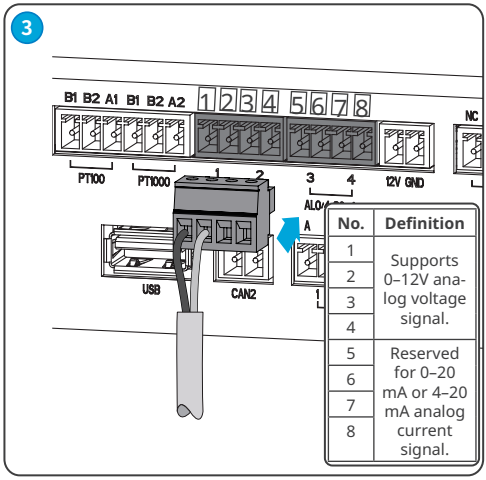
NOTICE

- The EzLogger provides AI ports, which can be used to receive voltage or current analog input signals.
- Connect the remote shutdown device to **AI1+** or **AI2+** port and **12V Output** port of the EzLogger to realize remote shutdown.







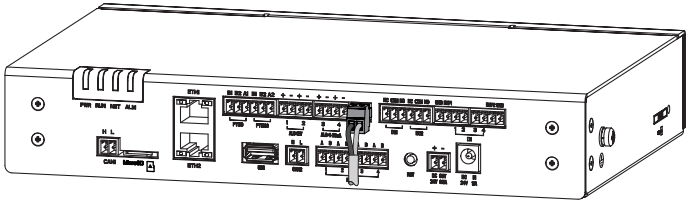


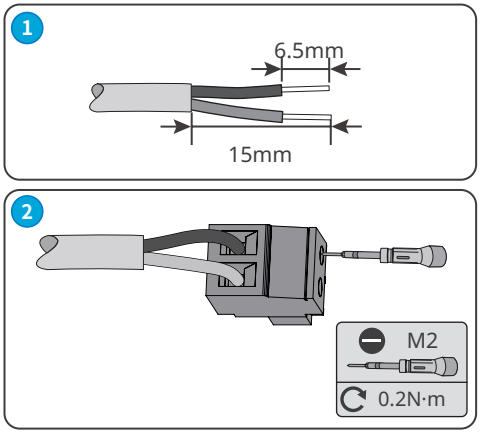
No.	Definition
1	Supports 0–12V analog voltage signal.
2	
3	
4	
5	Reserved for 0–20 mA or 4–20 mA analog current signal.
6	
7	
8	

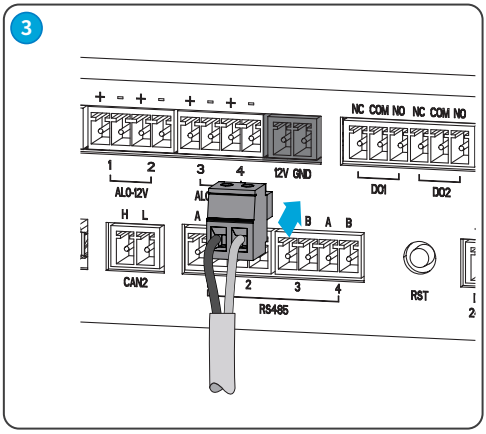
6.5 Connecting the 12V DC Output Cable

NOTICE

Only for remote shutdown.



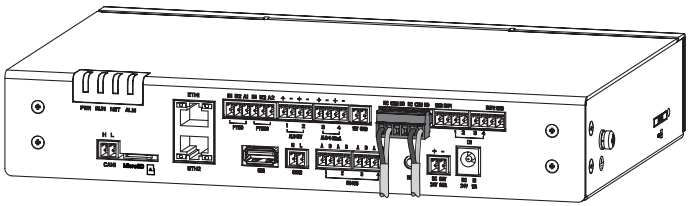


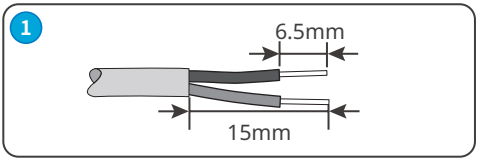


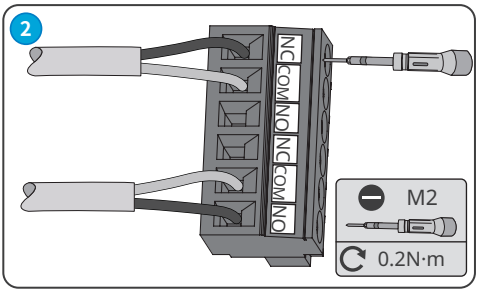
6.6 Connecting the DO Communication Cable

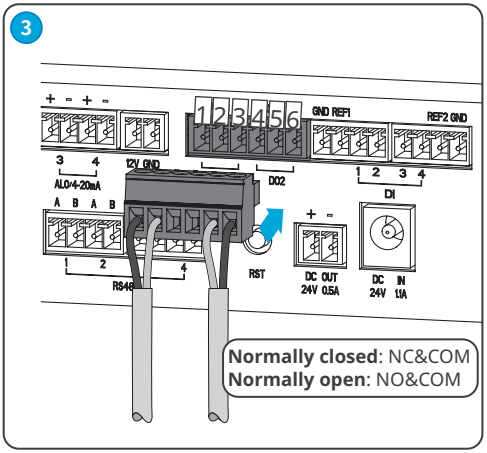
NOTICE

- The EzLogger can output passive dry contact signal.
- The DO port supports a maximum of 30V/1A signal voltage. The NC/COM means normally closed contact, and NO/COM means normally open contact.
- It is recommended to keep the signal transmission distance within 10 meters.









6.7 Connecting the DI Communication Cable

NOTICE

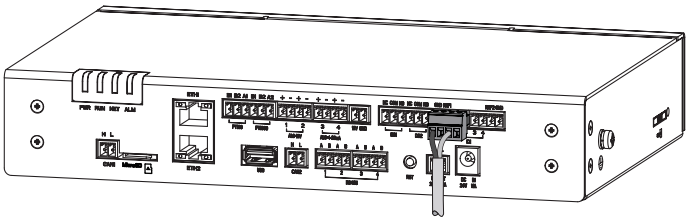
- The EzLogger offers Demand Response Enabling Device(DERD) signal control port, meeting DRED certification requirements in Australian and other regions.
- The EzLogger offers Ripple Control Receiver (RCR) signal control port, meeting requirements in German and other regions.
- The EzLogger offers Over Voltage Ground Relay(OVGR)/Reverse Power Relay(RPR) signal control port, meeting the requirements of different application scenarios in Japan and other regions.
- The EzLogger can receive passive dry contact signal or active wet contact signal. Supported voltage range of active contact: 0-12V, and 8-12V means high level.
- It is recommended to keep the signal transmission distance within 10 meters.

Passive dry contact

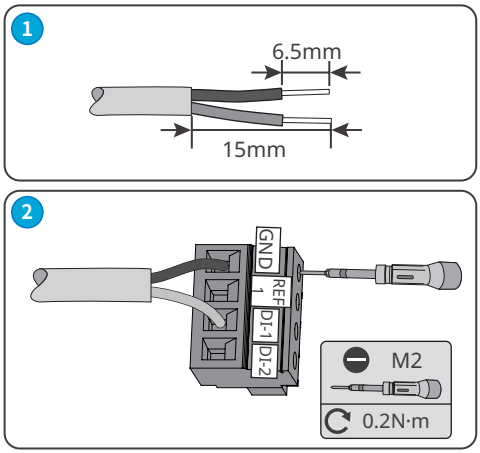
Function	Silkscreen		Definition
DI1	-	REF1	REF1
	DI	1	DI1
DI2	-	REF1	REF1
	DI	2	DI2
DI3	-	REF2	REF2
	DI	3	DI3
DI4	-	REF2	REF2
	DI	4	DI4

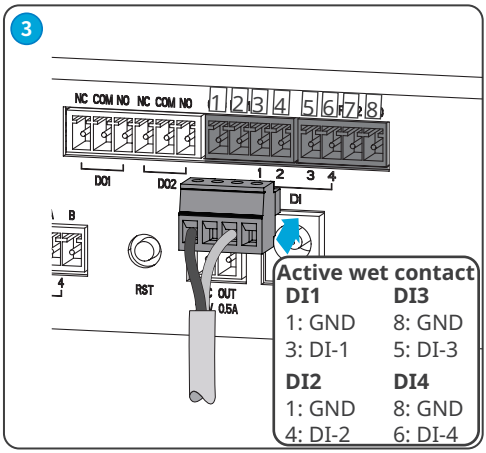
Active wet contact

Function	Silkscreen		Definition
DI1	-	GND	GND
	DI	1	DI1
DI2	-	GND	GND
	DI	2	DI2
DI3	-	GND	GND
	DI	3	DI3
DI4	-	GND	GND
	DI	4	DI4

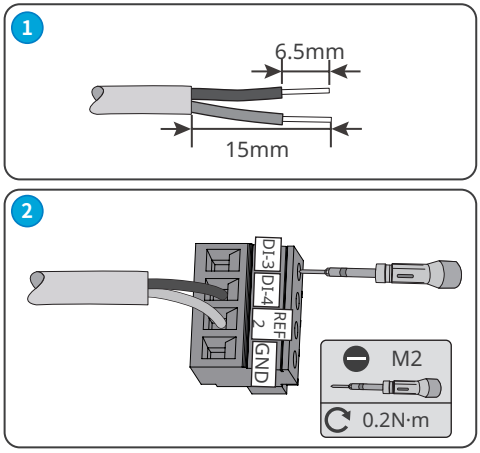


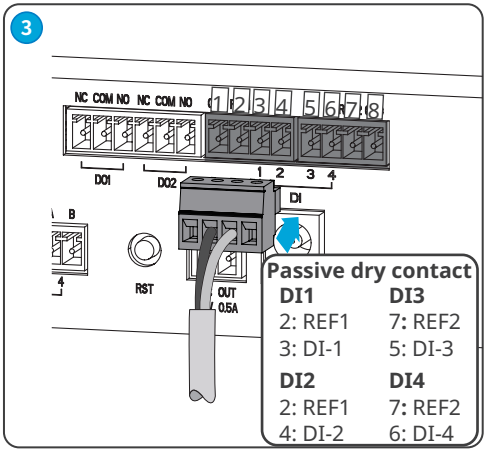
Active wet contact





Passive dry contact

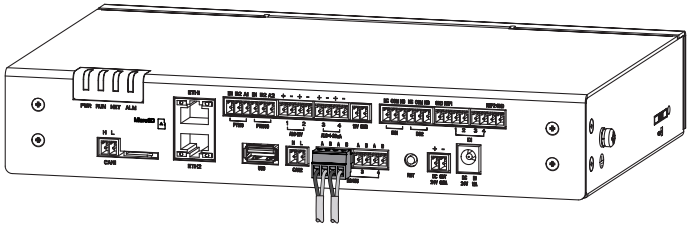




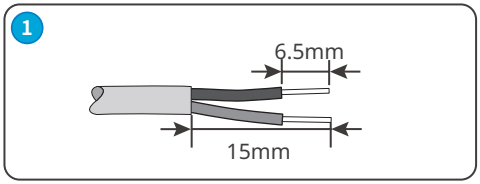
6.8 Connecting the RS485 Signal Cable

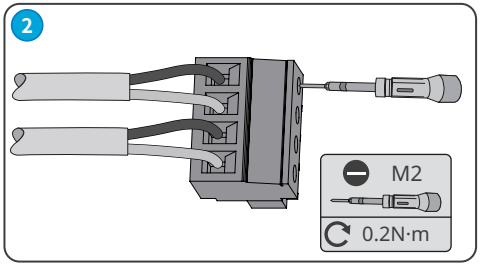
NOTICE

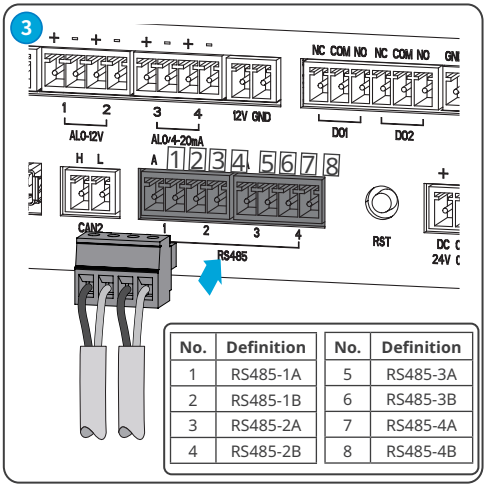
- The EzLogger offers RS485 communication ports for connecting RS485 communication devices, such as inverters, smart meters, or environmental monitoring instruments.
- The EzLogger offers DER_AVM signal control port, meeting requirements in Korea and other regions.
- Connect RS485A of the device to RS485A of the EzLogger, and RS485B to RS485B of the EzLogger.
- Ensure that the shielded layer of the shielded twisted pair cable is properly grounded.



No.	Function	Silkscreen			Definition
1	Connect to RS485 communication devices, such as inverters, smart meters, environmental monitoring instruments.	RS485	1	A	RS485-1A
2				B	RS485-1B
3			2	A	RS485-2A
4				B	RS485-2B
5			3	A	RS485-3A
6				B	RS485-3B
7			4	A	RS485-4A
8				B	RS485-4B





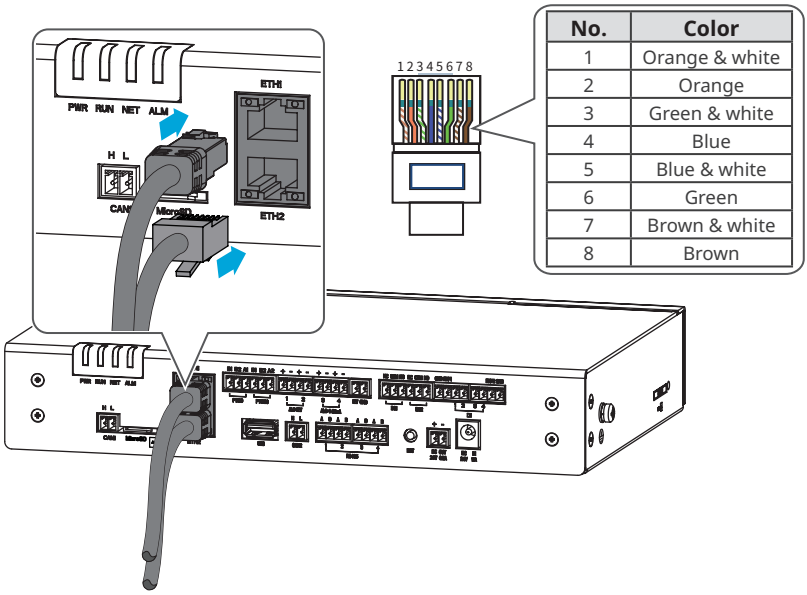


No.	Definition	No.	Definition
1	RS485-1A	5	RS485-3A
2	RS485-1B	6	RS485-3B
3	RS485-2A	7	RS485-4A
4	RS485-2B	8	RS485-4B

6.9 Connecting the Ethernet Cable

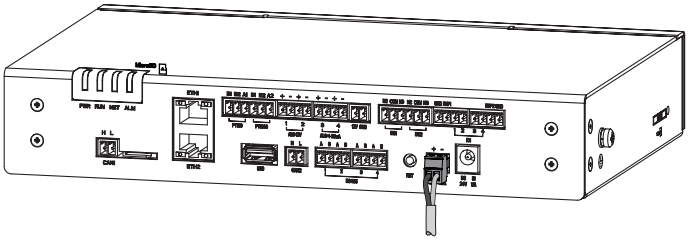
NOTICE

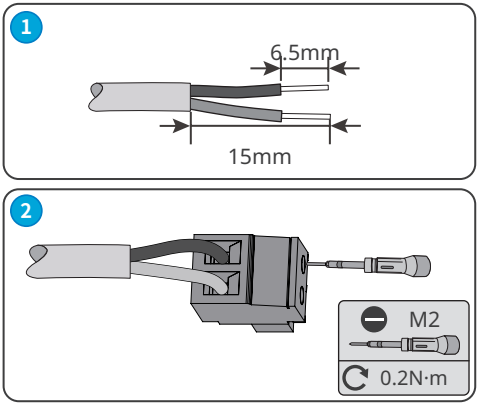
- Recommended cable specification: CAT 5E or higher outdoor shielded network cable and shielded RJ45 connector.
- ETH1 is designed for network communication. The default IP mode of EHT1 is dynamic IP mode, which allows access of router, switch, and so on.
- ETH2 is designed for network communication or embedded web connection. The default IP mode of EHT2 is dynamic IP mode, with a virtual IP: 172.18.0.12. The Ethernet cable is used for connecting a router or a Ethernet switch, or connecting a PC for embedded web configuration.
- Refer to section **8.4.1 Setting the Port Parameter** for more details about modifying IP parameters of ETH port.
- If the PC provides USB or Type-C port only, prepare a network port adapter to connect the EzLogger and the PC.

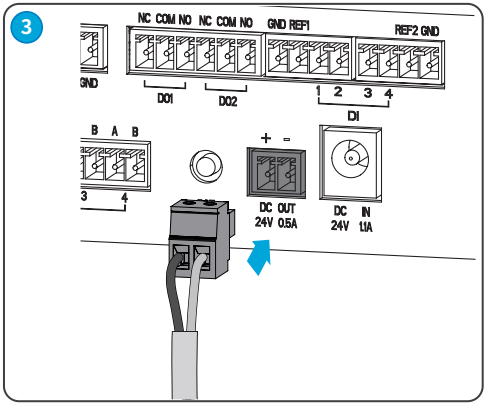


No.	Color
1	Orange & white
2	Orange
3	Green & white
4	Blue
5	Blue & white
6	Green
7	Brown & white
8	Brown

6.10 Connecting the 24V DC Output Cable



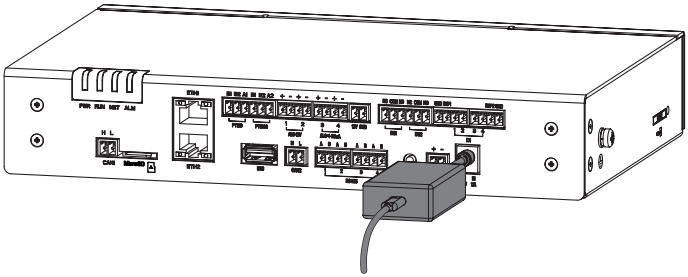


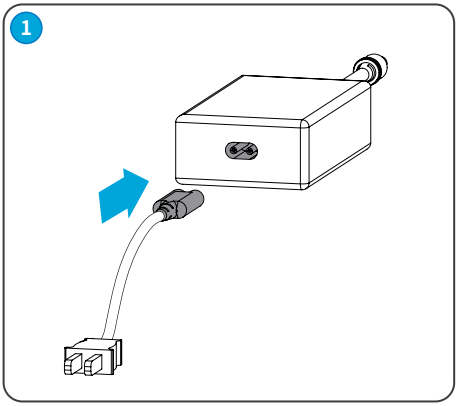


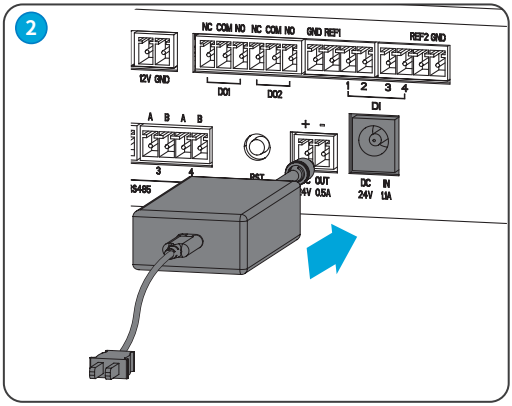
6.11 Connecting the Power Cable

NOTICE

- Connect the delivered power adapter to the DC input port to supply power to the EzLogger.
- Refer to actual appearance of the power adapter.
- Specification of the power adapter: Input: AC 100V~240V, 50Hz/60Hz; Output: DC 24V, 1.5A.

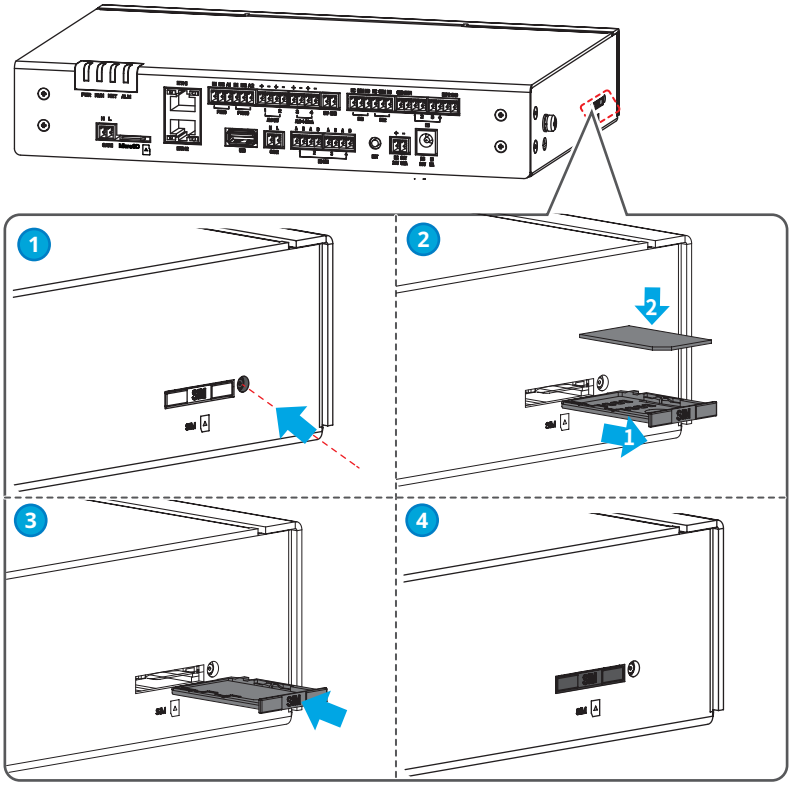






6.12 Installing SIM Card(optional)

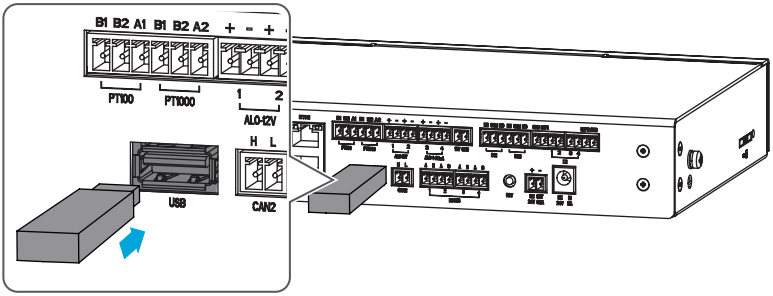
NOTICE
• Insert the SIM card for 4G functions. 4G is available in some countries and regions. Contact local distributors for more details. • The SIM card should be prepared by customers. Standard SIM card, size 25*15mm and capacity≥64KB, is recommended. • Data for single inverter should be at least 200M/month. Data for multi inverters should be 200M+30M*n/month, n is the quantity of inverters..



6.13 Installing the USB Flash Drive

NOTICE

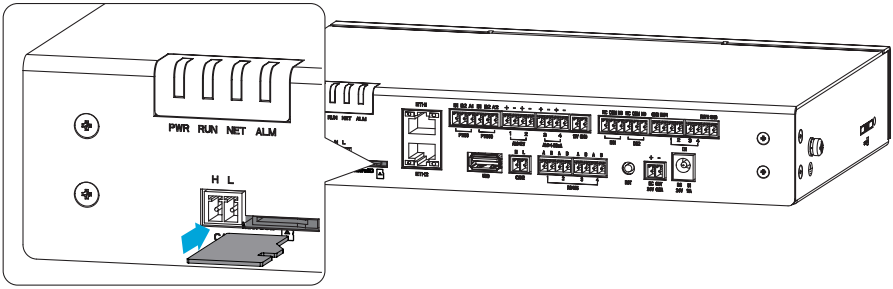
- Install the USB flash drive into the USB port to upgrade the firmware of the EzLogger. Contact the after-sales service for upgrading package.
- Prepare a FAT30 USB flash drive by yourself. The capacity of it does not exceed 32G.



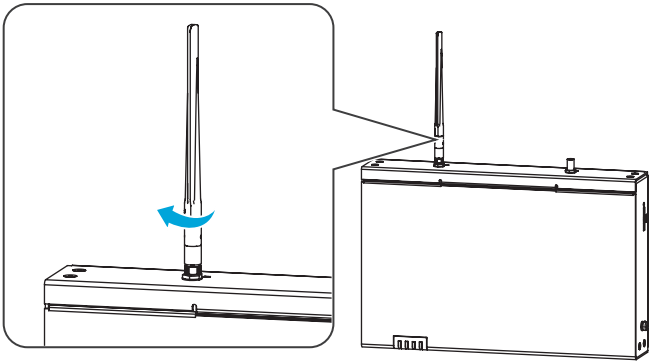
6.14 Installing the MicroSD Card

NOTICE

Install a MicroSD card to store the breakpoint data, so that the breakpoint data can be uploaded properly.



6.15 Installing the Antenna

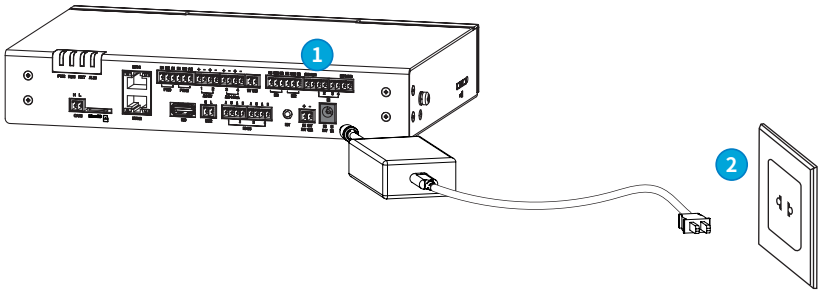


7 Equipment Commissioning

7.1 Check before Power On

No.	Check Item
1	The product is firmly installed at a clean place that is well-ventilated and easy-to-operate.
2	The power cable, net cable and communication cables are connected correctly and securely.
3	Cable ties are intact, routed properly and evenly.
4	The input signal status are correct and the input power parameters are within the operating scope of the equipment.

7.2 Power On



Step 1 Connect the power adapter to the EzLogger.
Step 2 Plug the power adapter to the AC socket and turn on the switch of the socket.

8 System Commissioning

8.1 Indicators and Buttons

LED Indicators

Indicator	Indicator status	Description
PWR		Steady green: The device is powered on.
		Green off: The device power supply is abnormal.
RUN		Steady green/Green off: The device fails to work.
		Slow blinking green: The device is working properly.
NET		Steady green: Communication between the device and the server is normal.
		Fast blinking green: Communication between the device and the router is normal, but communication between the device and the server fails.
		Slow blinking green: Communication between the device and the router fails.
ALM		Steady red: All the connected inverters are in fault status.
		Fast blinking red: the equipment is being upgraded.
		Red off: At least one inverter in the system is working properly.

Button

RST Button	Definition
Short press 1-3S	Restart theEzLogger.
Long press 6-20S	Restart theEzLogger and restores factory default network settings.

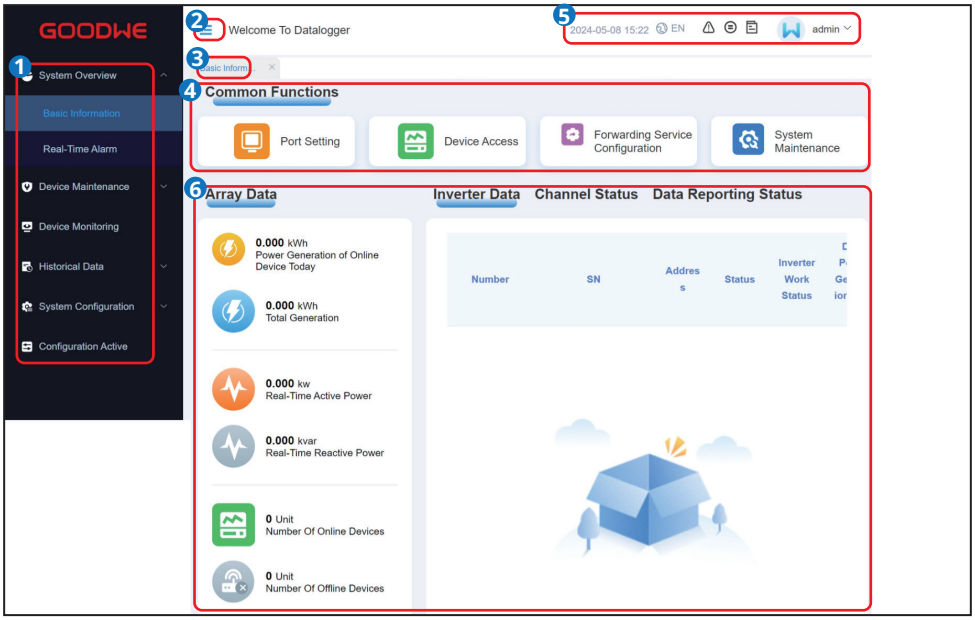
8.2 Introduction to Web UI

Log into the embedded web to set parameters of the EzLogger, check running information and alarms to get the system status information in time.

⚠ WARNING

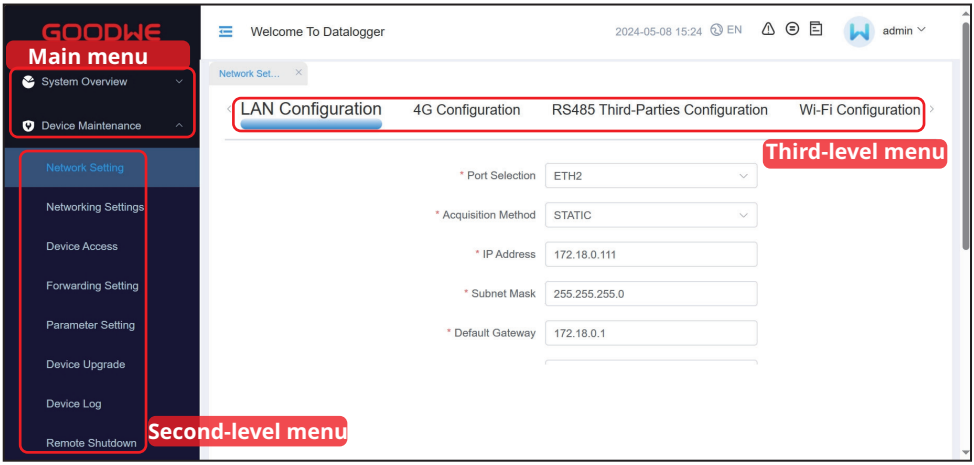
- The web firmware version shown in this document is V3.0.2.85. The screenshots are for reference only. The actual display may differ.
- The name, range, and default value of the parameters are subject to change.The actual display prevails.
- When issuing reset, shutdown and upgrade commands to the inverter, the inverter may fail to connect to the utility grid, which will affect the power generation.
- The grid parameters, protection parameters, feature parameters and power regulation parameters of the inverter shall be set by professionals. Improper settings may cause the inverter fail to connect to the grid. Wrong settings of power regulation parameters may cause the inverter connected to the grid improperly, thus affecting the power generation.
- To prevent the generating capacity from being influenced by wrong settings, the grid scheduling parameters shall be set by professionals

Layout



No.	Function	Description
1	Menu list	Area for the menus. Choose the main menu, then the second-level menu will be displayed. Under some main menus, there are no second-level menu.
2	Menu list button	Click to hide or show the menu list.
3	Tag list	Displays the opened menu tags.
4	Common Functions	Displays the often used functions for easy operation. The common functions can be set in the menu list.
5	System status	• Displays the system time. • Switches the system language. • Displays the alarming information. Click it to check the real-time alarms. • Displays the version of the product. • Check the start guide. • Displays the log in status. Click it to log out.
6	Power plant data	Displays the corresponding functional items or parameter setting under each menu.

Menu on the Interface



Main menu	Second-level menu	Third-level menu	Description
System Overview	Basic Information	-	• Common functions such as **Port Setting**, **Device Access**, **Forwarding Service Configuration**, **System Maintenance**. • Basic information such as **Power Generation of Online Device Today**, **Total Generation**, **Real-Time Active Power**, **Real-Time Reactive Power**, **Number Of Online Devices**, **Number Of Offline Devices.**
	Real-Time Alarm	-	Displays **Total Number Of Alarms**, **Fault Alarm Name**, **Device SN**, **and Generation Time**. Click **Manually Refresh** to display the latest alarms.

Main menu	Second-level menu	Third-level menu	Description
Device Maintenance	Network Setting	LAN Configuration	Set parameters for LAN communication.
		4G Configuration	Set parameters for 4G communication.
		RS485 Third-Parties Configuration	Set RS485 parameters. Support to connect with third party equipment over RS485. The baud rate of the RS485 includes 300, 1200, 2400, 9600, 19200.
		WiFi Configuratin (Local)	Set the WiFi name and password of the EzLogger.
	Networking Settings	-	Set the networking of the system.
	Device Access	-	Add devices such as inverter and smart meter.
	Forwarding Setting	IEC104	Set IEC104 parameters.
		Modbus-TCP	Set Modbus-TCP parameters.
		IEEE2030.5	Set IEEE2030.5 parameters.
		Output Power Control	Set output power control parameters.
		Email	Set Email parameters.
		FTP	Set FTP parameters.
	Parameter Setting	EzLogger	Set port parameter, log parameters and array parameters of the EzLogger.
		Inverter	Set grid parameter, protection parameters, characteristic parameters, and power adjustment parameters of the inverter.
		MV Station	Configure remote control settings.
		Smart meter	Set CT ratio, mode and other parameters of the smart meter.
	Device Upgrade	EzLogger	Upgrade firmware of the EzLogger.
		Inverter	Upgrade firmware of the inverter.
Device Maintenance	Device Log	-	Check running log, operation log and maintenance log of the equipment.
	Remote Shutdown	OVGR&RPR	Set OVGR&RPR parameters.
		Remote Shutdown	Set remote shutdown parameters.
	Power Adjustment	Power-Limited Grid-Connected	Set power limit parameters.
		DRED	Set DRM parameters.
		RCR	Set RCR parameters.
		Communication Configuration	Set power limit parameters.
		DER_AVM	Set DER_AVM parameters.

Device Monitoring	-	Inverter	Check parameters of the EzLogger.
	-	Weather Station	Check the information of the weather station.
	-	Smart meter	Check the information of the smart meter.
	-	MV Station	Check the information of the MV station.
	-	IEC104	Check IEC104 parameters.
Historical Data	Historical Faults And Alarms	-	Check the historical faults and alarms.
System Configuration	System Maintenance	-	• Reset Logger • Restore Factory Settings • Import All Configuration Files • Export All Configuration Files
	System Time	-	Set the way to calibrate the time: by system or manually.
	Safety Setting	-	Set security parameters like password.
	Version	-	Checks the version of the EzLogger, like SN, Main Program Version, Firmware Version, Web Version, etc
Configuration Active	-	-	Click to save the parameters. Click the **Configuration Active** to save the settings after configuration adjustments.

8.3 Log In

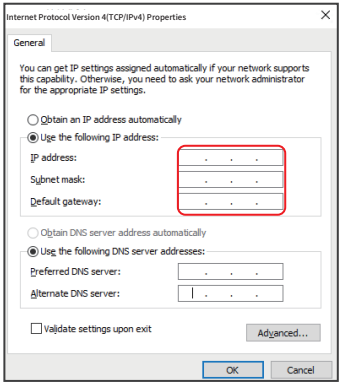
NOTICE

- All the equipment in the system are installed properly and powered on.
- Contact the after-sales service for the initial login username and password.
- Before login, ensure that the equipment meets the following requirements:
  - Supports Windows 7 or above version.
  - Browser: Chrome 52, Firefox 58, or above version is recommended.
  - The computer's network port is connected to EzLogger's ETH port with a network cable.
- Remove the network cable after configuration.

Log into the web using the default IP

Step 1 Connect a PC to the ETH2 port of the EzLogger using a network cable.

Step 2 Set the IP address of the EzLogger and the PC on the same network segment.



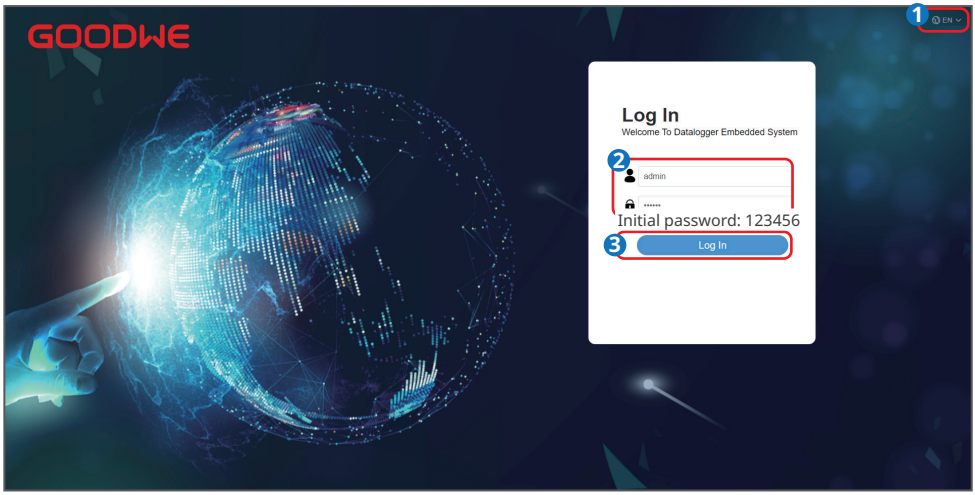
No.	IP Parameter	Default value of the EzLogger	Example value of the Computer
1	IP address	172.18.0.12	172.18.0.22
2	Subnet mask	255.255.255.0	255.255.255.0
3	Default gateway	172.18.0.1	172.18.0.1

Step 3 Enter **http://XX.XX.XX.XX** or **https://XX.XX.XX.XX:443** in the address bar of the web browser and press Enter. **XX.XX.XX.XX** is the default IP address of the EzLogger and 443 is the default port of https.

Step 4 Select the language according to the actual demanding. Log in with the initial account and password.

NOTICE

Use the initial password to log in. Change the password as soon as possible and keep it in mind. To ensure the security of the account, it is recommended to change the password regularly.



Log into the web using a dynamic IP address

Step 1 Connect the PC and the EzLogger to a router at the same time.

Step 2 Check the IP address assigned to the EzLogger on the router management page.

Step 3 Enter **http://XX.XX.XX.XX** or **https://XX.XX.XX.XX:443** in the address bar of the web browser and press Enter. XX.XX.XX.XX is the default IP address of the EzLogger and 443 is the default port of https.

Log into the web with WiFi

Step 1 Connect to the default WiFi name of the EzLogger. Default WiFi: Log-***,*** means serial number of the EzLogger. Initial password: 12345678.

Step 2 Enter **http://XX.XX.XX.XX** or **https://XX.XX.XX.XX:443** in the address bar of the web browser and press Enter. XX.XX.XX.XX is the default IP address of the EzLogger and 443 is the default port of https.

Step 3 Select the language according to the actual demanding. Log in with the initial account and password.

8.4 Setting Parameters

8.4.1 Setting the Network Parameters

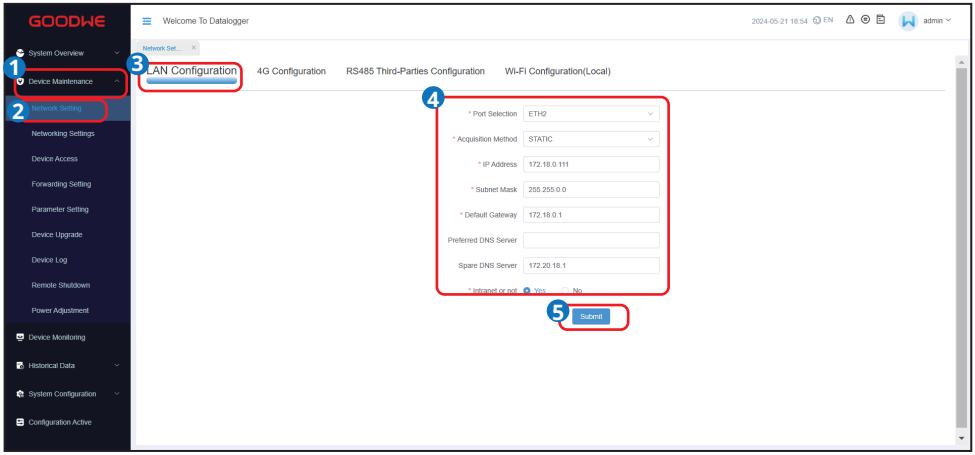
NOTICE

The default network parameters will be displayed based on actual settings. Configure the parameters according to actual needs if necessary.

LAN Configuration

NOTICE

- Make sure that the network cable is properly connected to ETH1/ETH2 port of the EzLogger before LAN configuration.
- The default Acquisition Method of LAN Configuration is DHCP. If you need to connect the EzLogger to a router and upload data to the monitoring platform over a LAN, keep the default settings.
- If you need to connect the EzLogger to a switch and upload data to the monitoring platform or configure forwarding settings, configure the LAN to static IP before uploading or forwarding setting.

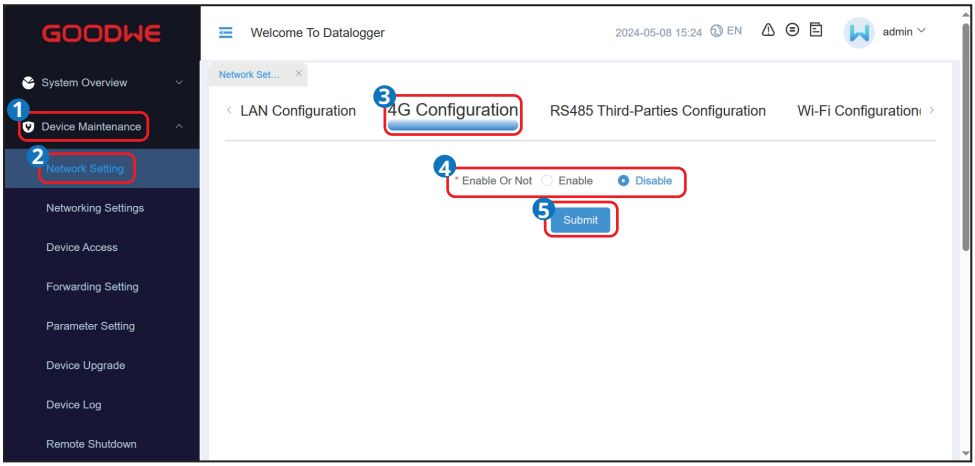


Parameter	Description
Port Selection	Select the connected network port of the EzLogger. Supported: ETH1 or ETH2.
Acquisition Method	• Manually set the fixed network parameters based on actual situation when selecting STATIC mode. • The IP address can be obtained automatically when selecting DHCP mode.
IP Address	Set the IP address of the EzLogger. Set the IP address on the same network segment as the router IP address, and based on the power plant planning. If the IP address is modified, log in with the new IP address.
Subnet Mask	Set the subnet mask of the EzLogger. Set the parameter based on the actual subnet mask of the router connected to the EzLogger.
Default Gateway	Set the default gateway of the EzLogger. Set the parameter based on the actual gateway of the router connected to the EzLogger.
Preferred DNS Server	Set the parameter as the IP address of the LAN's router when connecting to a public network, for example, connecting to GoodWe server, using a domain name for the server address.
Spare DNS Server	Ignore this parameter in common situations. When the preferred DNS server fails to resolve a domain name, use the alternate DNS server.
Intranet or not	The default setting is NO. Set **Intranet or not** to **Yes** before setting the forwarding parameters.

4G Configuration

NOTICE

- 4G is available in some countries and regions. Contact local distributors for more details.
- Disconnect the network cable between the EzLogger and the router after enabling WiFi communication. Otherwise, the communication may fail.

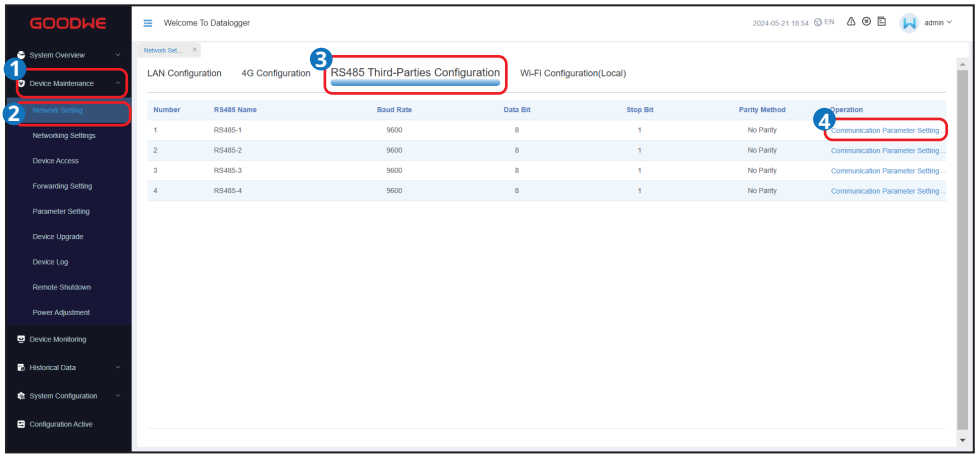


Parameter	Description
Enable Or Not	Enable or disable 4G function. Applicable only when the EzLogger accesses the system over the 4G network.
APN	Select the operator based on actual situation.

RS485 Third-Parties Configuration

NOTICE

Set the RS485 parameters when the EzLogger connects to a third-party device, such as a transformer or a environmental monitoring instrument.



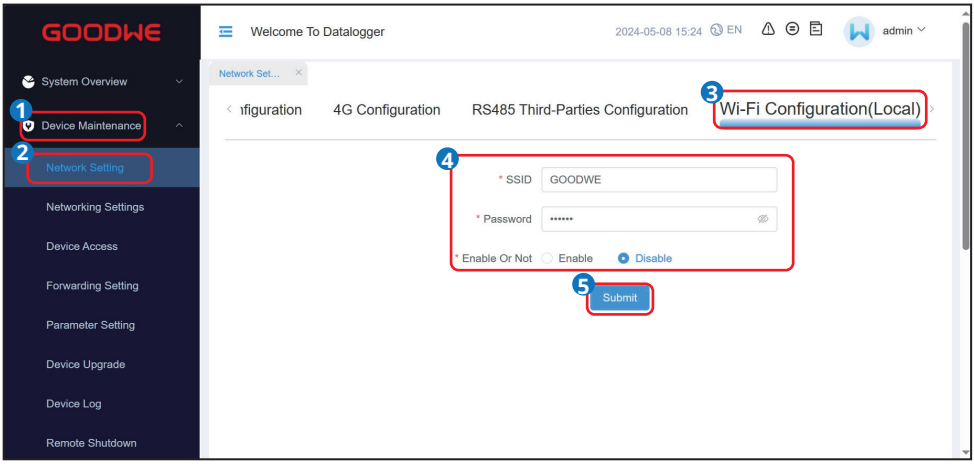


Parameter	Description
Name	Select the actual connected RS485 port of the device.
Baud Rate	Set according to the baud rate of the connected equipment. Supported baud rate: 300, 1200, 2400, 4800, 9600, 19200.
Data Bit	Supported value: 7 bits or 8 bits.
Parity Method	Set according to the parity check method of the connected equipment. Supported values: No Parity, Odd Parity, Even Parity, 1 Parity, or 0 Parity.
Stop Bit	Set according to the stop bit of the connected equipment. Supported values: 1, 1.5, and 2.

WiFi Configuratin (Local)

NOTICE

- The EzLogger provides a WiFi hotspot signal for local configuration. After connecting to the WiFi hotspot signal, you can commission the device through the web page.
- The SSID and password of the WiFi signal can be changed. After the change, log in to the web again using the new SSID and password.



Parameter	Description
SSID	WiFi signal name of the EzLogger. Default name: Log-***.
Password	WiFi password of the EzLogger. Default password: 12345678.
Enable Or Not	Turn on or off the WiFi signal.

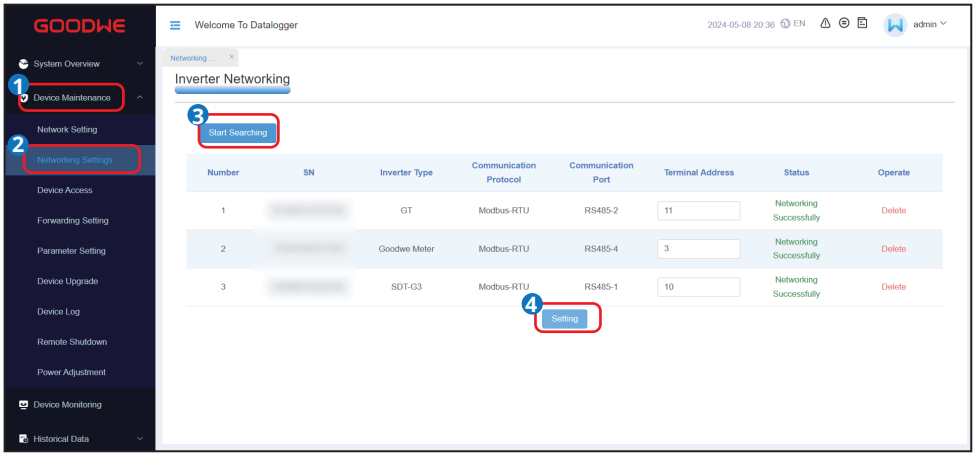
8.4.2 Setting Network

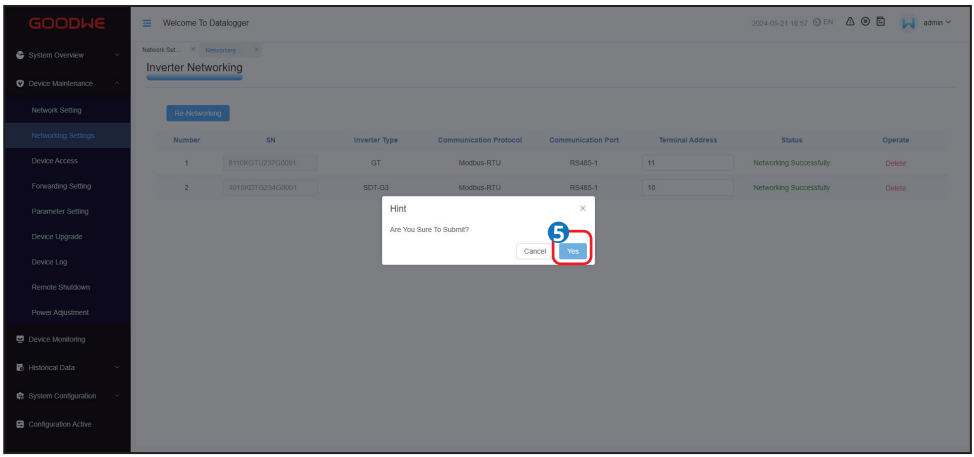
NOTICE

- For inverters like GT, UT, HT, SDT-G2, etc. and smart meter like GM330, click **Set** after device searching, the networking will be set successfully. Click **Device Access** to add more devices after the networking is complete.
- For other inverters, you can only check the device SN and device connection port in the system after the search is complete. Set the Modbus address of each device on the SolarGo app, and then add the device manually through the web by click **Device Access**.

SolarGo App SolarGo App User Manual

Step 1 Follow the steps bellow to set the networking.



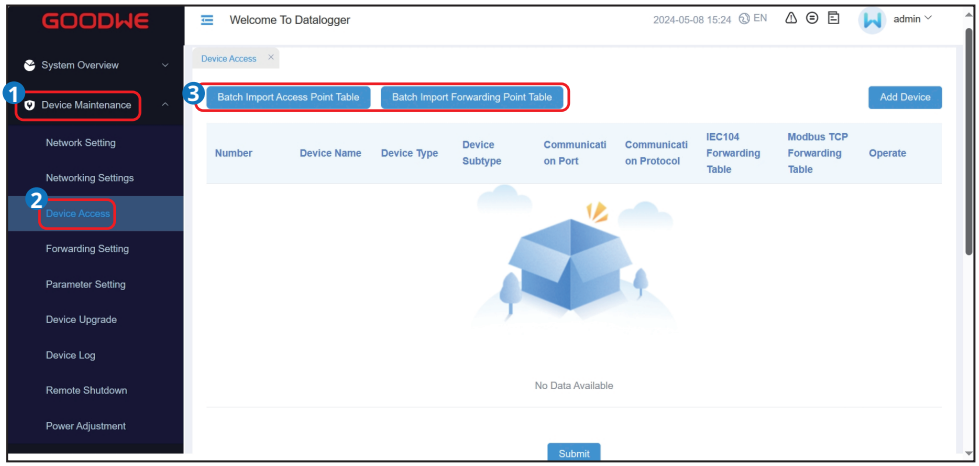


8.4.3 Adding Devices

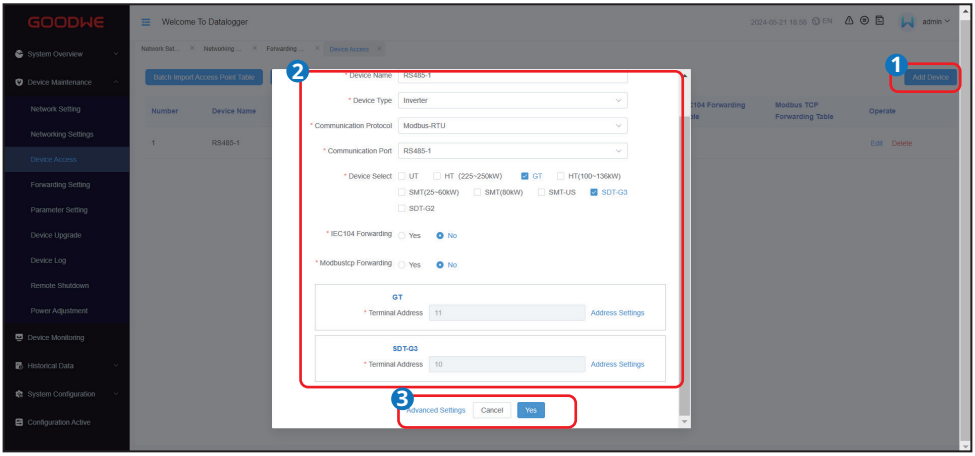
Step 1 (optional) Import the access point table and forwarding point table of the connected devices.

NOTICE

Support batch import of access point tables and forwarding point tables of the connected devices. It is recommended to import all the point tables of inverters, meters, and other devices connected to the EzLogger before adding third party devices.



Step 2 Add devices.



Add an inverter

Parameter	Description
Device Name	Define the device name based on actual needs.
Device Type	Select **Inverter**.
Communication Protocol	Set the parameter based on the communication protocol of the inverter. Support Modbus-RTU.
Communication Port	Select based on the actual port on the EzLogger which the inverter connected to. Supported port: RS485-1, RS485-2, RS485-3, RS485-4.
Select Device	Select the actual connected inverter model. Connect inverters of different models to one port is supported. UT and HT(225~250kW) can be connected to one RS485 communication port at the same time. GT, HT(100~136kW), SMT(25~60kW), SMT(80kW), SMT-US, SDT-G3 and SDT-G2 can be connected to one RS485 communication port at the same time.
Terminal Address	Device address. Set the parameter based on the actual power plant planning. Select Auto-Generate when there is no need to set the parameters based on the actual settings. Make sure that the terminal address is consistent with the communication address of the inverter on the SolarGo app.
IEC104 Forwarding	Set **IEC104 Forwarding Table** after enabling **IEC104 Forwarding**.
IEC104 Forwarding Table	Select the table based on the imported forwarding table.

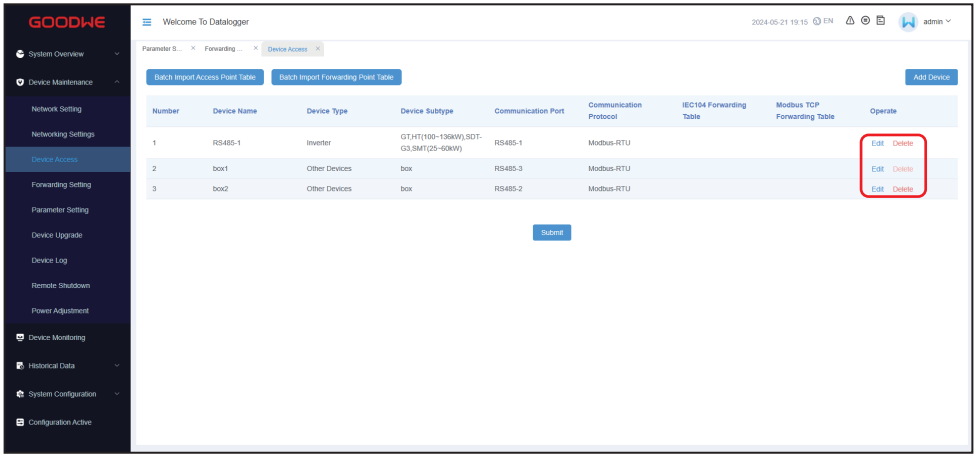
Add a smart meter

Parameter	Description
Device Name	Define the device name based on actual needs.
Device Type	Select Smart Meter.
Communication Protocol	Set the parameter based on the communication protocol of the smart meter. Supported: Modbus-RTU.
Communication Port	Select the actual connected port on the EzLogger. Supported port: RS485-1, RS485-2, RS485-3, RS485-4.
Device Subtype	This option is displayed when the communication protocol is Modbus-RTU. Set this parameter based on the actual meter model. Supported: Goodwe Meter(GM330), UMG604PRO, Acrel-DTSD1352, Schneider-IEM3255, and Others.
Meter Purpose	• Select based on the actual purpose. Supported: Grid Side Meter or Point Of Interconnection Meter • Grid Side Meter: for power limiting, supports Goodwe Meter(GM330), UMG604PRO and Acrel-DTSD1352. • Point Of Interconnection Meter: for metering, supports Schneider-IEM3255.
Terminal Address	Device address. Set the parameter based on the actual power plant planning. Select Auto Generate when there is no need to set the parameters based on the actual settings.
Access Point Table	Select the point table based on actual situation.
IEC104 Forwarding Table	Select the IEC104 forwarding table based on actual situation.

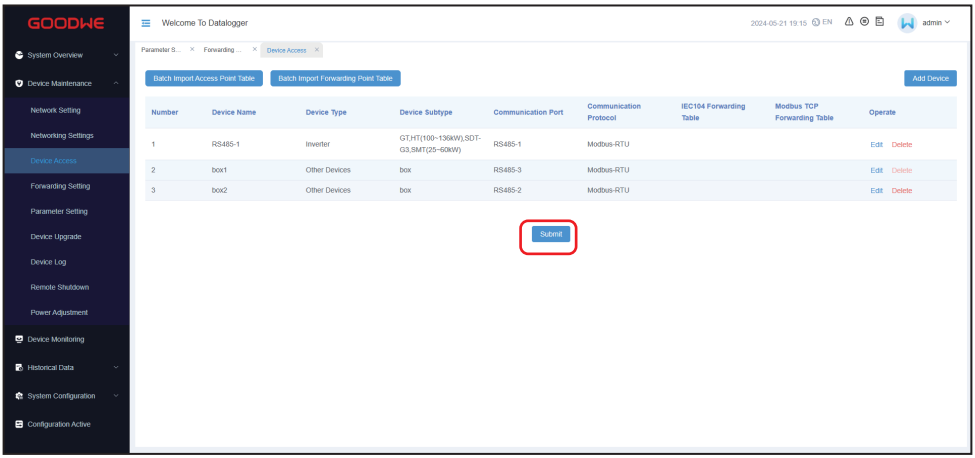
Add other devices

Parameter	Description
Device Name	Define the device name based on actual needs.
Device Type	Select Other Devices.
Communication Protocol	Select based on the communication protocol of the device. Support Modbus-RTU, Modbus-TCP and GW-XPH.
When the Communication Protocol is Modbus-RTU, set the following parameters based on actual situation:	
Communication Port	Select the actual connected port on the EzLogger. Supported port: RS485-1, RS485-2, RS485-3, RS485-4.
Device Subtype	Select the device type based on the actual situation. Supported: Weather Station, MV Station or Other.
MV Station Sub-Type	If the Device Subtype is MV Station, set the MV Station Sub-Type to General or Distributed.
Terminal Address	Device address. Set the parameter based on the actual power plant planning.
Protocol Type	Set the protocol type based on the actual situation.
Access Point Table	Import the access point table of the connected device.
IEC104 Forwarding	Select the forwarding table based on actual situation.
Modbus-TCP Forwarding	Select the forwarding table based on actual situation.
When the Communication Protocol is Modbus-TCP, set the following parameters based on actual situation:	
Associated Device	When the communication protocol is Modbus-TCP, set the Associated Device to General.
Communication Mode	Set the communication mode based on actual situation. Supported: UDP, TCPClient and TCPServer.
Local IP Address	Set the IP address of the net port of the EzLogger.
Local Port	Set the port number of the EzLogger. Default value: 502.
Remote IP Address	Set the IP address of the added device.
Remote Port	Set the port number of the added device. If the number is no fixed, set it to be 0.
Terminal Address	Device address. Set the parameter based on the actual power plant planning. Select **Auto Generate** when there is no need to set the parameters based on the actual settings.
When the Communication Protocol is GW-XPH, set the following parameters based on actual situation:	
Communication Port	Select the actual connected port on the EzLogger. Supported port: RS485-1, RS485-2, RS485-3, RS485-4.
Terminal Address	Device address. Set the parameter based on the actual power plant planning.

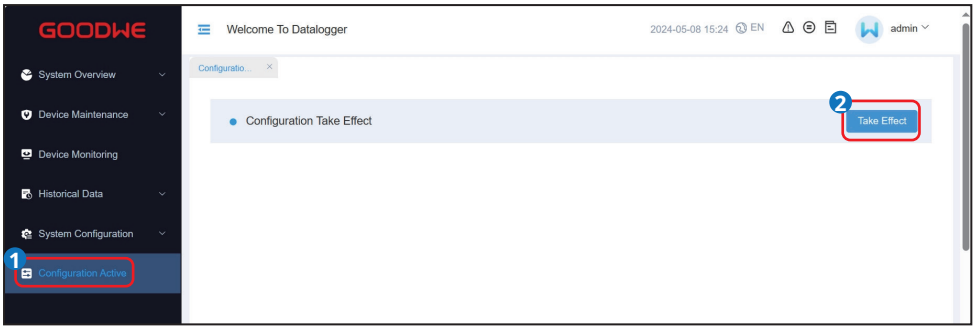
Step 3 (Optional) After completing the parameter settings, click **Edit** or **Delete** to modify parameters or delete devices.



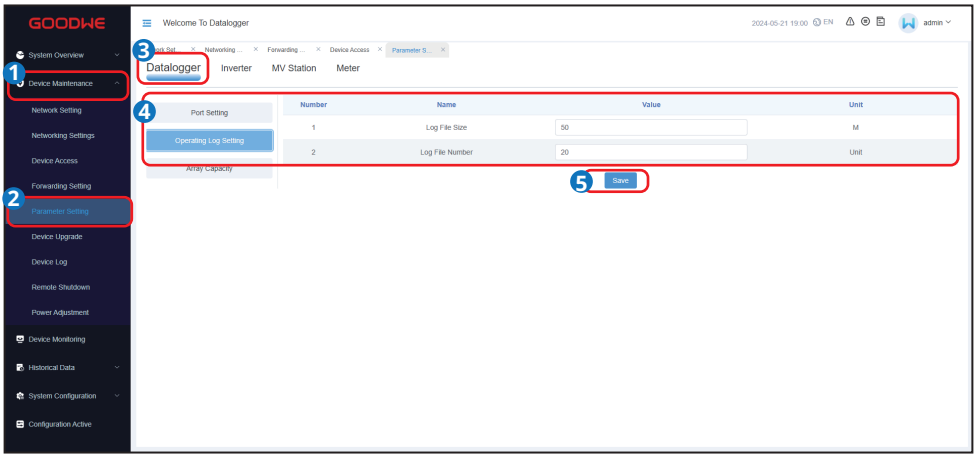
Step 4 Submit to complete the configurations.



Step 5 Click Configuration Take Effect to complete the configurations.



8.4.4 Setting EzLogger Parameters

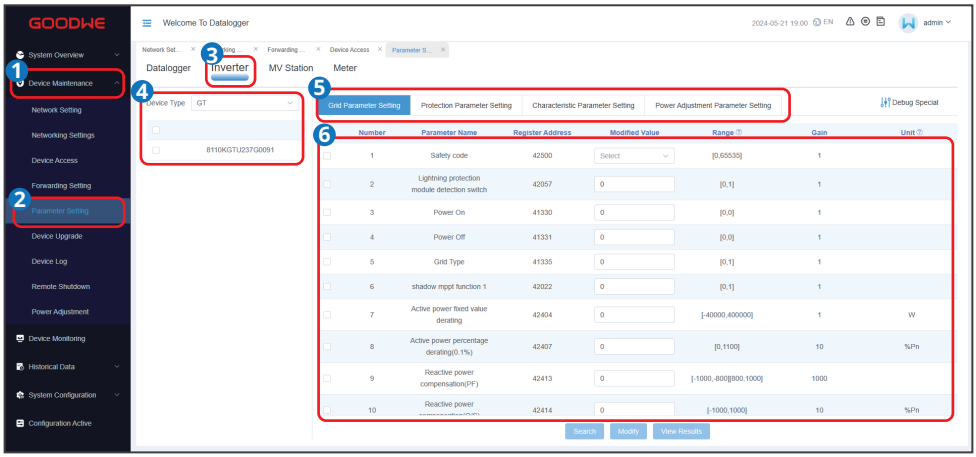


Parameter	Description
Port Setting	
HTTP	Set the parameter based on the EzLogger port number.
HTTPS	
Operating Log Setting	
Log File Size	Set the size and quantity of log files to be stored according to the actual demanding.
Log File Number	
Array Capacity	
Array Capacity	Set according to the actual array capacity.

8.4.5 Setting Inverter Parameters

NOTICE

- The parameters to be set vary with the inverter type. The actual setting interface prevails.
- Enter 0 or 1 to enable or disable a function. 0 indicates disable the function, and 1 indicates enable the function.



Grid Parameter Setting

Parameter	Description
Safety Code	Select based on the grid standards of the country/region where the inverter is located and its application scenario.
SPD Detection Switch	Enable or disable SPD detection function.
Power On (Allowing Grid-connection Self-test)	Issue power on instructions to allow grid connection self-test.
Shutdown (Not Allowing Grid-connection Self-test)	Issue power off instructions to stop grid connection self-test.
Output Method	• Set whether the inverter's output includes the neutral (N) cable based on its application scenario. • 0: three-phase four wire (3W/PE); 1: three phase five wire (3W/N/PE).
Shadow Scan Function Switch 1	PV strings may exist significant shading in PV systems where the inverter is applied. Enabling this feature, allows the inverter to perform a global MPPT scan at regular intervals to find the maximum power point.
Active Power Fixed Value Derating	Adjust the active power output of the inverter by fixed value.
Active Power Percentage Derating (0.1%)	Adjust the active power output of the inverter by percentage of rated power.
Reactive Power Compensation (PF)	Set the power factor of the inverter.

Parameter	Description
Reactive Power Compensation (Q/S)	Set the reactive power output from the inverter.
Reactive Power Compensation Fixed Value	Adjust the reactive power output of the inverter by fixed value.
Night Reactive Power Function Switch	Enable or disable night reactive power function. In some specific application scenarios, the power grid company requires that the inverter can perform reactive power compensation at night to ensure that the power factor of the local power grid meets requirements.
Night Reactive Power Parameters Taking Effect	Enable this function, the inverter outputs reactive power based on **Fixed Value of Night Reactive Power Scheduling**. Otherwise, the inverter executes the remote scheduling command.
Percentage of Night Reactive Power Scheduling (0.1%)	Schedule the reactive power by percentage during night reactive scheduling period.
Fixed Value of Night Reactive Power Scheduling	Schedule the reactive power by fixed value during night reactive scheduling period.

Protection Parameter Setting

Parameter	Description
Overvoltage Trigger n-order Value (0.1%)	Set the Level n overvoltage protection threshold, n=1, 2, 3, 4.
Overvoltage Trigger n-order Trip Time	Set the Level n overvoltage protection duration, n=1, 2, 3, 4.
Undervoltage Trigger n-order Value (0.1%)	Set the Level n undervoltage protection threshold, n=1, 2, 3, 4.
Undervoltage Trigger n-order Trip Time	Set the Level n undervoltage protection duration, n=1, 2, 3, 4.
10min Overvoltage Trigger Value (0.1%)	Set the 10-min overvoltage protection threshold.
10min Overvoltage Trip Time	Set the 10-min overvoltage protection duration.
Overfrequency Trigger n-order Value	Set the Level n overfrequency protection threshold, n=1, 2, 3, 4.
Overfrequency Trigger n-order Trip Time	Set the Level n overvfrequency protection duration, n=1, 2, 3, 4.
Underfrequency Trigger n-order Value	Set the Level n underfrequency protection threshold, n=1, 2, 3, 4.
Underfrequency Trigger n-order Trip Time	Set the Level n underfrequency protection duration, n=1, 2, 3, 4.
Start-up Grid Connection Voltage Upper Limit	The inverter cannot connect to the grid if it is powered on for the first connection and the grid voltage is higher than the **Start-up Grid Connection Voltage Upper Limit**.
Start-up Grid Connection Voltage Lower Limit	The inverter cannot connect to the grid if it is powered on for the first connection and the grid voltage is lower than the **Start-up Grid Connection Voltage Lower Limit**.

Parameter	Description
Start-up Grid Connection Frequency Upper Limit	The inverter cannot connect to the grid if it is powered on for the first connection and the grid frequency is higher than the **Start-up Grid Connection Frequency Upper Limit**.
Start-up Grid Connection Frequency Lower Limit	The inverter cannot connect to the grid if it is powered on for the first connection and the grid frequency is lower than the **Start-up Grid Connection Frequency Lower Limit**.
Start-up Grid Connection Waiting Time	The waiting time for connecting the inverter to the grid when the inverter is powered on for the first connection.
Start-up Grid Connection Power Loading Rate (0.1%Pn/min)	Set the percentage of incremental output power per minute when the inverter is powered on for the first connection.
Reconnection Voltage Upper Limit	In some countries/regions, when the inverter is shut down due to a fault protection, it is not allowed to reconnect to the grid if the grid voltage is higher than the set value of the **Reconnection Voltage Upper Limit**.
Reconnection Voltage Lower Limit	In some countries/regions, when the inverter is shut down due to a fault protection, it is not allowed to reconnect to the grid if the grid voltage is lower than the set value of the **Reconnection Voltage Lower Limit**.
Reconnection Frequency Upper Limit	In some countries/regions, when the inverter is shut down due to a fault protection, it is not allowed to reconnect to the grid if the grid frequency is higher than the set value of the **Reconnection Frequency Upper Limit**.
Reconnection Frequency Lower Limit	In some countries/regions, when the inverter is shut down due to a fault protection, it is not allowed to reconnect to the grid if the grid frequency is lower than the set value of the **Reconnection Frequency Lower Limit**.
Reconnection Waiting Time	Set the waiting time for the inverter to restart after a grid failure is restored.
Reconnection Power Loading Rate (0.1%Pn/min)	Set the percentage of incremental output power per minute when the inverter is not powered on for the first connection. For example, setting Reconnection Power Loading Rate to 10 means the reconnection slope is 10%Prated/min.
LVRT Enable	Low voltage ride-through (LVRT) refers to the situation, when the grid experiences a short-term low voltage abnormality, the inverter cannot immediately disconnect from the grid and has to work for a period of time. Enable this function, the inverter's LVRT is being activated.
LVRT Depth n	The ratio of the ride through voltage to the rated voltage at a feature point during LVRT, n= 1, 2, 3, 4, 5, 6, 7.
Hold Time n	The ride through time at a feature point during LVRT, n= 1, 2, 3, 4, 5, 6, 7.
Judgment Threshold of Entering LVRT	Set the threshold for triggering LVRT. The threshold settings should meet the local grid standard.
Judgment Threshold of Exiting LVRT	Set the threshold for exiting LVRT. The threshold settings should meet the local grid standard.

Parameter	Description
LVRT Positive Sequence Reactive Power K Value	During LVRT, the inverter needs to generate positive sequence reactive power to support the grid. This parameter is used to set the positive-sequence reactive power generated by the inverter.
LVRT Zero Current Mode Enable	The standards of some countries/regions require that the output current during LVRT should be limited. Enable this function, the output current is less than 10% of the rated current during LVRT.
Threshold of Entering Voltage	After enabling **LVRT Zero Current Mode Enable**, the zero current mode starts if the power grid voltage is less than **Threshold of Entering Voltage** during LVRT.
HVRT Enable	High voltage ride-through (HVRT) refers to the situation, when the grid experiences a short-term high voltage abnormality, the inverter cannot immediately disconnect from the grid and has to work for a period of time. Enable this function, the inverter's HVRT is being activated.
HVRT Depth n	The ratio of the ride through voltage to the rated voltage at a feature point during HVRT, n= 1, 2, 3, 4, 5, 6, 7.
Hold Time n	The ride through time at a feature point during HVRT, n= 1, 2, 3, 4, 5, 6, 7.
Judgment Threshold of Entering HVRT	Set the threshold for triggering HVRT. The threshold settings should meet the local grid standard.
Judgment Threshold of Exiting HVRT	Set the threshold for exiting HVRT. The threshold settings should meet the local grid standard.
HVRT Positive Sequence Reactive Power K Value	During HVRT, the inverter needs to generate positive sequence reactive power to support the grid. This parameter is used to set the positive-sequence reactive power generated by the inverter.
HVRT Zero Current Mode Enable	The standards of some countries/regions require that the output current during HVRT should be limited. Enable this function to set the output current less than 10% of the rated current during HVRT.
Threshold of Entering Voltage	After enabling **HVRT Zero Current Mode Enable**, the zero current mode starts if the power grid voltage is higher than **Threshold of Entering Voltage** during HVRT.
Current Sharing Mode	• Set the sharing mode of reactive current and active current. • 0: reactive power priority; 1: active power priority; 2: constant current mode.
Active Power Recovery Mode After Riding Through	• Active current recovery mode during ride-through recovery, supported mode: slope recovery, first-order LPF recovery, and no requirement. • 0: disable; 1: slope response; 2: time constant; 3: respond time
Active Power Recovery Rate After Riding Through	The rate at which the active current recovers during the ride through recovery process.
Active Power Recovery First-order LPF After Riding Through	The active current recovers at the characteristic of first order LPF after the ride through recovery.

Parameter	Description
Reactive Power Recovery Mode After Riding Through	• Reactive current recovery mode during ride-through recovery, supported mode: slope recovery, first-order LPF recovery, and no requirement. • 0: disable; 1: slope response; 2: time constant; 3: respond time
Reactive Power Recovery Rate After Riding Through	The reactive current recovers at the slope after the ride through recovery.
Reactive Power Recovery First-order LPF After Riding Through	The reactive current recovers at the characteristic of first order LPF after the ride through recovery.
Frequency Riding Through Enable	After enabling Frequency Riding Through Enable, the inverter continues to generate power during required time even the grid frequency is abnormal.
n-order Under Frequency Riding Through Point_UFn	Set the level n underfrequency protection threshold value, n=first, second, third.
n-order Under Frequency Riding Through Time_UTn	Set the level n underfrequency protection tripping time, n=first, second, third.
n-order Over Frequency Riding Through Point_OFn	Set the level n overfrequency protection threshold value, n=first, second, third.
n-order Over Frequency Riding Through Time_OTn	Set the level n overfrequency protection tripping time, n=first, second, third

Characteristic Parameter Setting

Parameter	Description
EU Remote Shutdown Enable	Enable or disable remote shutdown function.
Anti-PID Function Switch	Enable or disable anti-PID.
PID Recovery Function Switch	Enable or disable PID recovery.
Power Limit Switch	Enable or disable power limit.
Back Flow Power Percentage Setting	Set the back flow power by percentage.
Three-phase Power Limit Method Selection	• Set the power limit mode. • 0: the total power of the three phases cannot exceed the power limit. 1: power of any phase cannot exceed the power limit.
External Meter CT Ratio	Set the CT ratio of the smart meter.

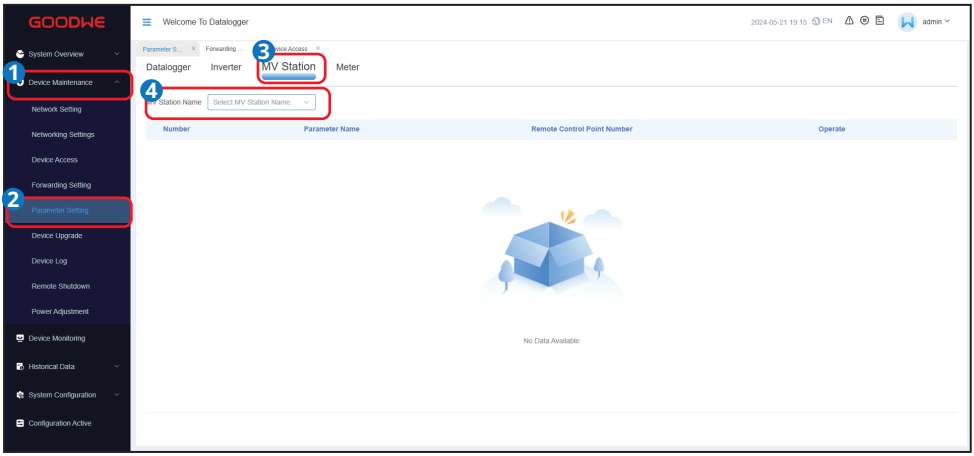
Parameter	Description
ISO Threshold Setting	To protect the equipment, the inverter performs an insulation impedance check on the input side during self-check at startup. If the measured value is lower than the set value, the inverter will not connect to the grid.
NPE Overvoltage Detection Switch	Enable or disable N-PE overvoltage detection.
N-PE Error Threshold	Set the N-PE overvoltage alarm threshold.
Active Power Scheduling Response Method	• Set the active power scheduling response method. Supported method: gradient control or PT-1 behavior. • 0: disable; 1: gradient control; 2: PT-1 behavior tau; 3: PT-1 behavior respond time.
Gradient of Active Power	Set the active power change slope.
Active Power Scheduling LPF Time	Set the low pass filtering time for active power scheduling.
Reactive Scheduling Response Method	• Set the reactive power scheduling response method. Supported method: gradient control or PT-1 behavior. • 0: disable; 1: gradient control; 2: PT-1 behavior tau; 3: PT-1 behavior respond time.
Gradient of Reactive Power	Reactive Power Scheduling LPF Time
Set the low pass filtering time for reactive power scheduling	Set the low pass filtering time for reactive power scheduling.

Power Adjustment Parameter Setting

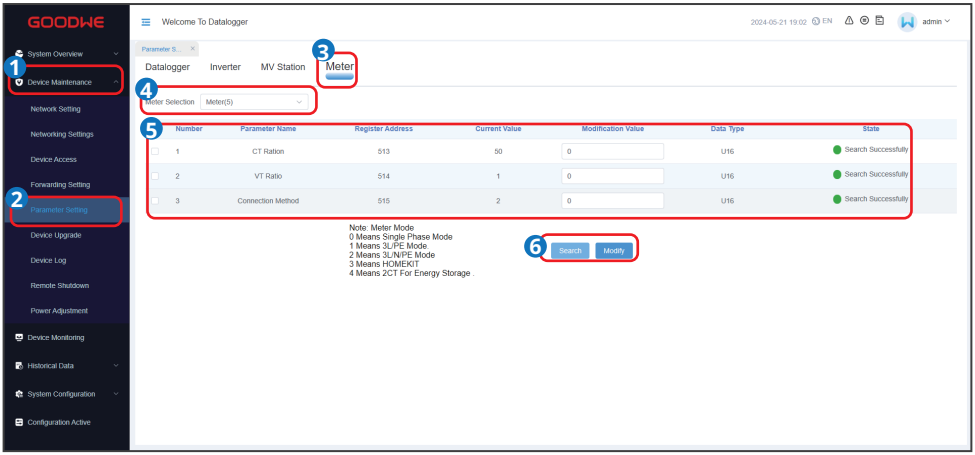
Parameter	Description
Power Baseline of Over Frequency Derating	The active power of the device will be derated according to a certain slope when the grid frequency exceeds overfrequency derating limit.
Under Frequency Loading Reference Mode	The active power of the device will be derated according to a certain slope when the grid frequency is lower than underfrequency derating limit.
Underfrequency Power Slope	The inverter output active power will change when the utility grid frequency is lower than the underfrequency limit. Indicates the slope when the inverter output power decreases.
PU Curve Enable	Enable or disable PU curve.
Vn Voltage Value (0.1%)	The percentage of actual voltage to the rated voltage at Vn point, n=1, 2, 3, 4.
Vn Active Power Value (0.1%)	The percentage of the output active power to the apparent power at Vn point, n=1, 2, 3, 4.

Parameter	Description
PU Curve Output Response Mode	The output response mode of the PU curve. Supported mode: gradient control or PT-1 behavior.
PU Curve Output Power Changing Rate	The power change slope when the PU Curve Output Response Mode is gradient control.
PU Curve Response Time Parameter	The response time when the PU Curve Output Response Mode is PT-1 behavior.
QU Curve Enable	Enable or disable PU Curve.
Vn Voltage Value (0.1%)	The percentage of actual voltage to the rated voltage at Vn point, n=1, 2, 3, 4.
Vn Active Power Value (0.1%)	The percentage of the reactive output power to the apparent power at Vn point, n=1, 2, 3, 4.
QU Curve Response Time Parameter	The response time when the QU curve output response Mode is PT-1 behavior.
Enter Curve Power (0.1%)	When the inverter output reactive power to the rated power ratio is between the **Enter Curve Power** and **Exit Curve Power**, the ratio meets QU curve requirements.
Exit Curve Power (0.1%)	
cosφ(P) Curve Enable Bit	Enable or disable cosφ(P) curve.
Point n Power (0.1%)	The percentage of the inverter output active power to the rated power at point A/B/C/ D/E.
point n cosφ Value (pf,0.001)	The power factor at point A/B/C/ D/E.
cosφ(P) Curve Response Time	The response time when the cosφ(P) curve response Mode is PT-1 behavior.
Enter Curve Voltage (0.1%)	When the grid voltage is between Enter Curve Voltage and Exit Curve Voltage, the voltage meets Cosφ curve requirements.
Exit Curve Voltage (0.1%)	When the grid voltage is between Enter Curve Voltage and Exit Curve Voltage, the voltage meets Cosφ curve requirements.
QP Curve Post Enable	Enable or disable QP purve.
QP Curve Pn	The percentage of the output active power to the rated power at Pn point, n=1, 2, 3, 4, 5, 6.
QP Curve Qn	The percentage of the output active power to the rated power at Pn point, n=1, 2, 3, 4, 5, 6.
QP Curve Output Response Time	The response time when the QP curve output response Mode is PT-1 behavior.

8.4.5 Setting MV Station Parameters



8.4.6 Setting Smart Meter Parameters

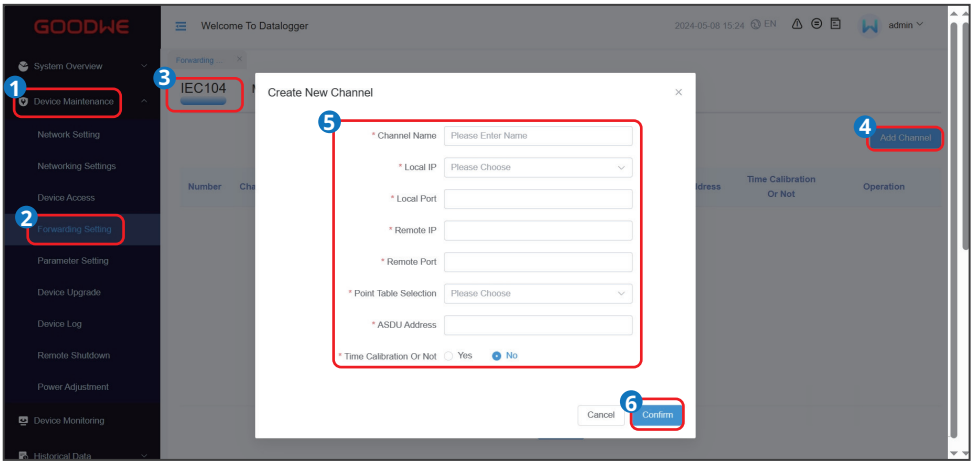


8.4.7 Setting Forwarding Parameters

Set the forwarding parameters to forward the data collected by the EzLogger to a third party management platform.

IEC104 Parameters

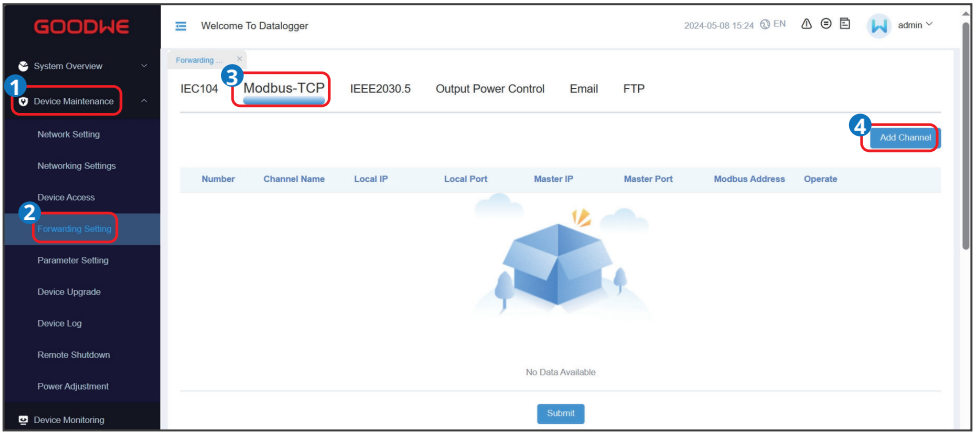
Set IEC104 parameters when the EzLogger is connected to a management system through the IEC104 protocol.

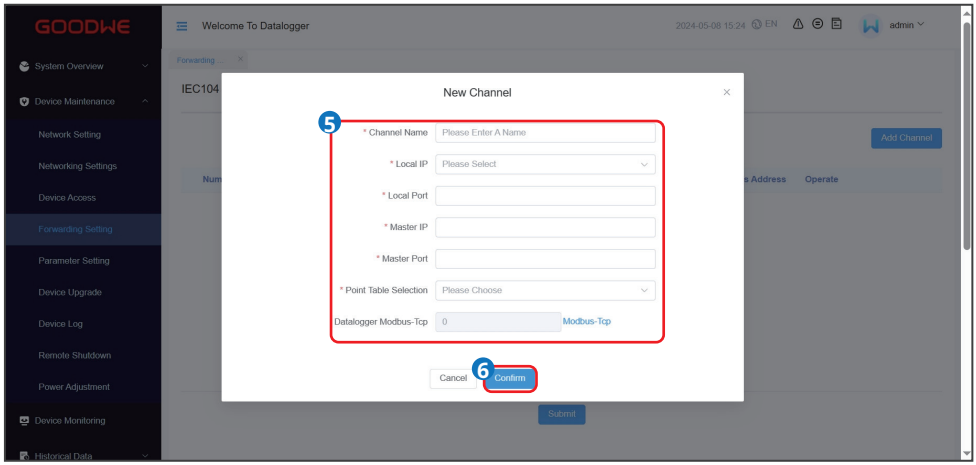


Parameter	Description
Channel Name	Define the device name based on actual needs.
Local IP	Set the IP address of the EzLogger.
Local Port	Set the port number of the EzLogger.
Remote IP	Set the IP address of the IEC104 management system.
Remote Port	Set the port number of the IEC104 management system. Set it to 0 if the remote port number is not fixed.
Select Point Table	Select the access point table.
ASDU Address	After importing the forwarding point table, the forwarding point table of the management system can be mapped when the setting the forwarding configuration. Select the parameter based on the actual situation.
Time calibration or not	Set time calibration with the remote device or not based on actual situation.

Modbus-TCP Parameters

Set Modbus-TCP parameters when EzLogger is connected to a management system through the Modbus-TCP protocol.

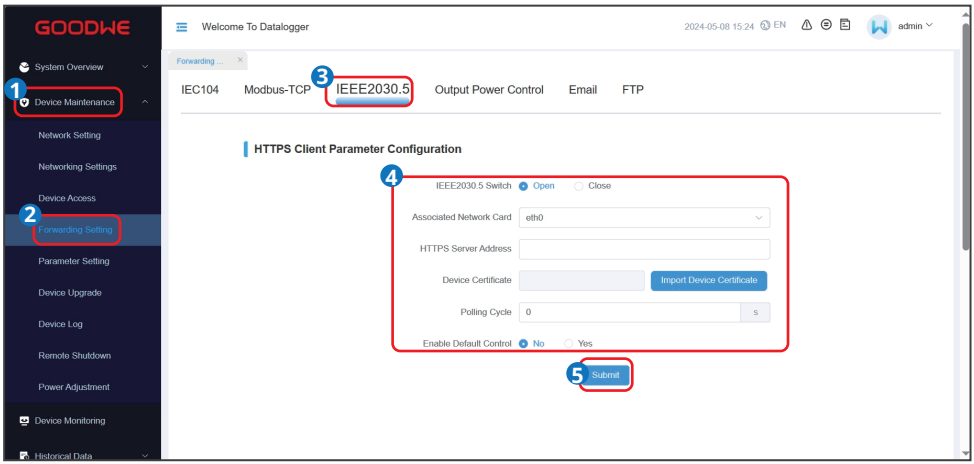




Parameter	Description
Channel Name	Define the device name based on actual needs.
Communication Mode	Set based on the communication mode used between EzLogger and the Modbus-TCP management system. Currently supported: UDP, TCPClient, TCPServer.
Local IP	Set the IP address of the EzLogger.
Local Port	Set the port number of the EzLogger. Default port number: 502.
Master IP	Set the IP address of the Modbus-TCP management system.
Master Port	Set the port number of the Modbus-TCP management system.
Select Point Table	Select the access point table.
Modbus Address	Set the address of the Modbus-TCP management system.

IEEE2030.5

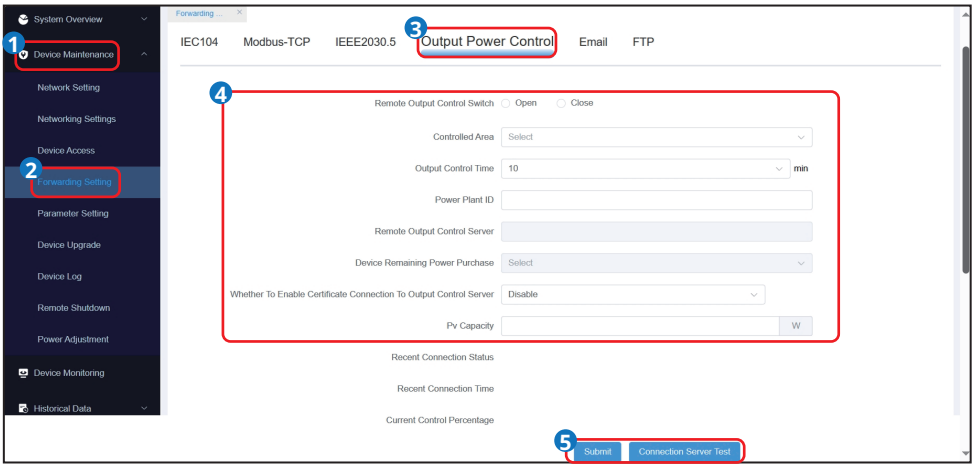
According to laws and regulations in North America and other regions, set the IEEE2030.5 parameters when the devices are communicating through IEEE2030.5 protocol.



Parameter	Description
IEEE2030.5 Switch	Enable or disable IEEE2030.5.
Associated Network Card	Set the forwarding network port for IEEE2030.5 based on actual situation.
HTTPS Server Address	Set the HTTPS server address based on actual situation.
Device Certificate	Import the device certificate.
Polling Cycle	Set the polling cycle.
Enable Default Control	Enable or disable IEEE2030.5 default control.

Output Power Control

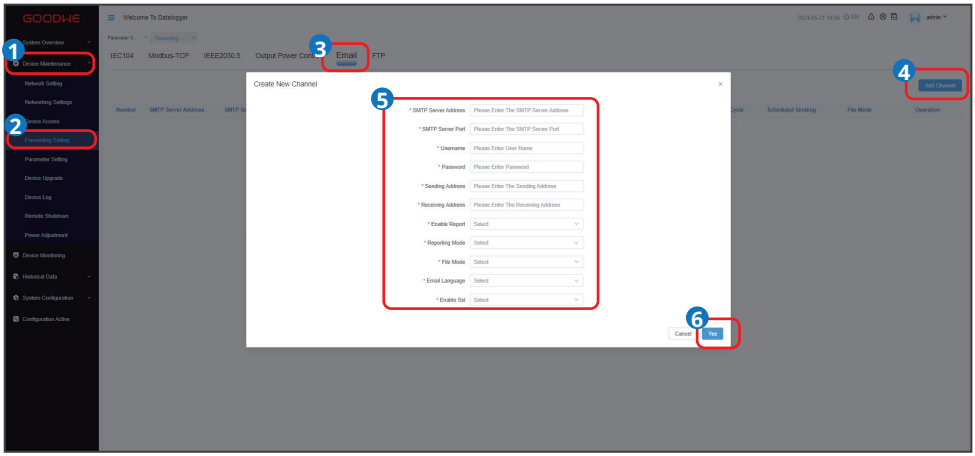
According to the requirements of Japan and other regions, set output control parameters when the device needs to communicate with utility grid company to realize output control function.



Parameter	Description
Remote Output Control Switch	Enable or disable the output control function.
Controlled Area	Set the output control area. Supported: None, Kyushu, Chubu, Kansai, Shikoku, Hokkaido, Tokyo, and Tohoku.
Output Control Time	Set the output control duration.
Power Plant ID	The ID assigned to the plant by the utility grid company after connecting its server.
Remote Output Control Server	The Remote Ouptu Contol Server will be generated automatically after setting the Control Region.
Device Remaining Power Purchase	Enable or disable remaining power purchase function.
PV Capacity	Set the total capacity of the PV panels.

E-mail

- Send emails to update current generated energy, alarms, and device status, so that users can know the working status of the plant in time.
- Only 163 mailboxes are supported currently.

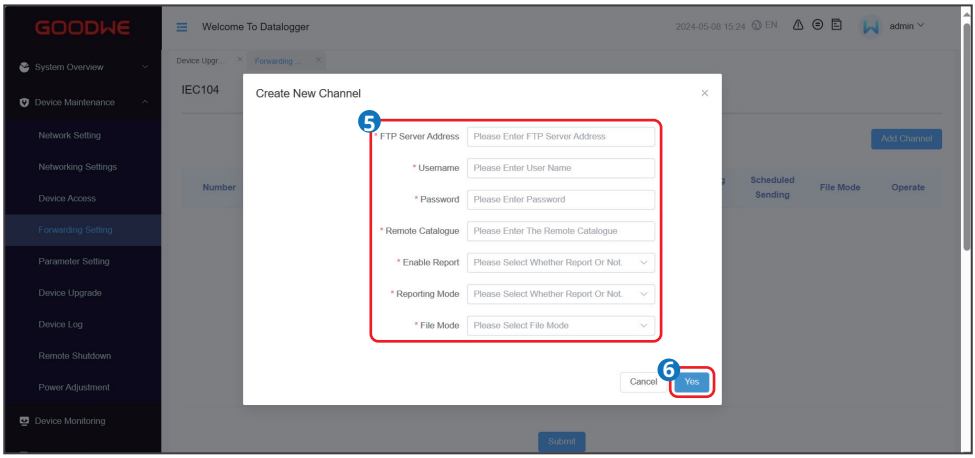


Parameter	Description
SMTP Server Address	Set the domain name or IP address of the SMTP server.
SMTP Server Port	Set the port number of the SMTP server for email sending.
Username	Set the user name to log into the SMTP server.
Password	Set the password to log into the SMTP server.
Send Address	Set the sending email's address.
Receive Address	Set the receiving email's address.
Report or not	Set whether to send the emails.
Report Mode	Set the email sending mode to cycle or scheduled report.. When the report mode is cycle report, set the cycle time to send emails. When the report mode is scheduled report, set the scheduled time to send emails.
File Mode	Select the equipment data to be sent in the emails. Currently supported: Full Data, Inverter Data, Point Table Data, or Relay Data.
Email Language	Set the email language.
Enable SSL or not	Set whether to enable the SSL encryption.

FTP

FTP can be used to connect to the third-party management system. EzLogger can report the configuration information and running data of the managed power plant system through FTP. The EzLogger can be connected to the third-party network management after it is configured correspondingly.



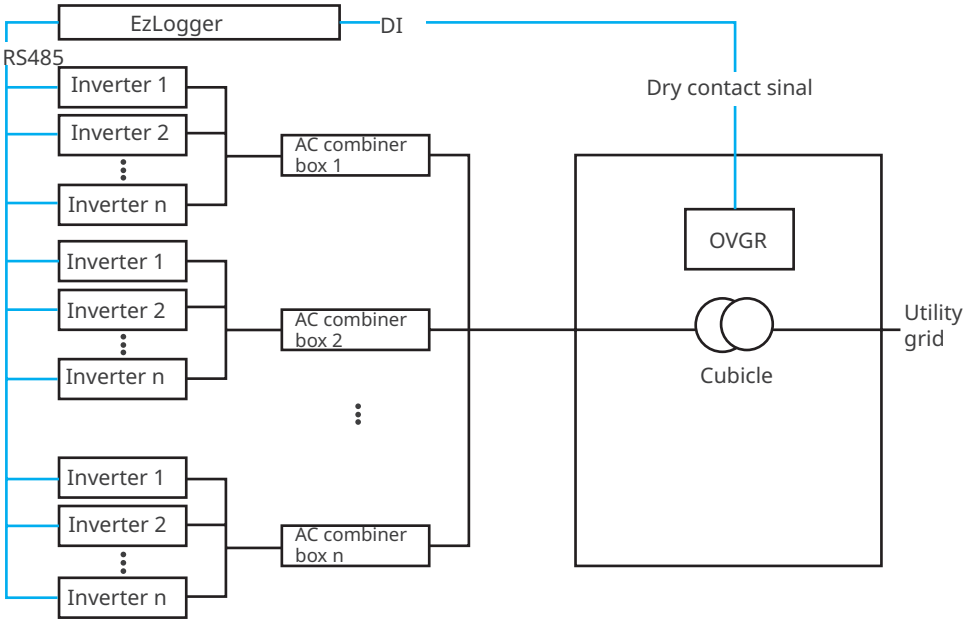


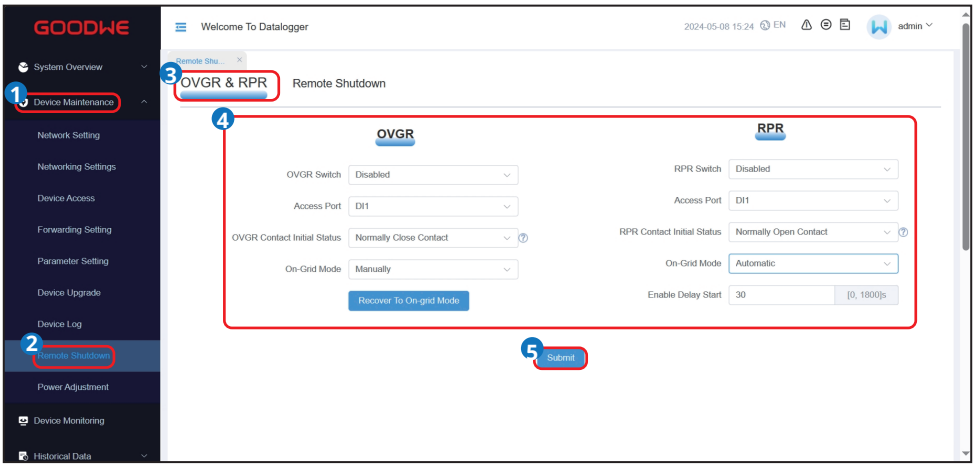
Parameter	Description
FTP Server Address	Set the domain name or IP address of the FTP server.
Username	Set the user name to log into the FTP server.
Password	Set the password to log into the FTP server.
Remote Directory	Create a subdirectory with the same name under the default directory specified by the FTP server, where the data will be uploaded.
Report or not	Set whether allows data reporting.
Report Mode	Set the mode for data uploading to cycle or scheduled report.. When the report mode is cycle report, set the cycle time to send emails. When the report mode is scheduled report, set the scheduled time to send emails.
File Mode	Select the type of data to be reported. Currently supported: Full Data, Inverter Data, Point Table Data, or Relay Data.

8.4.8 Setting Remote Shutdown

OVGR&RPR

The standards of Japan and some other regions require that the OVGR can connect to any DI port of the EzLogger to shut down the inverter over OVGR signals.

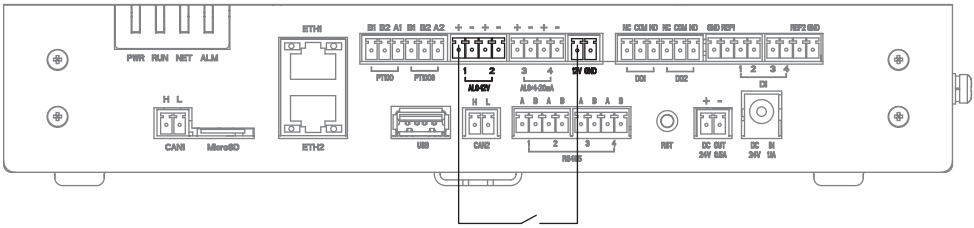


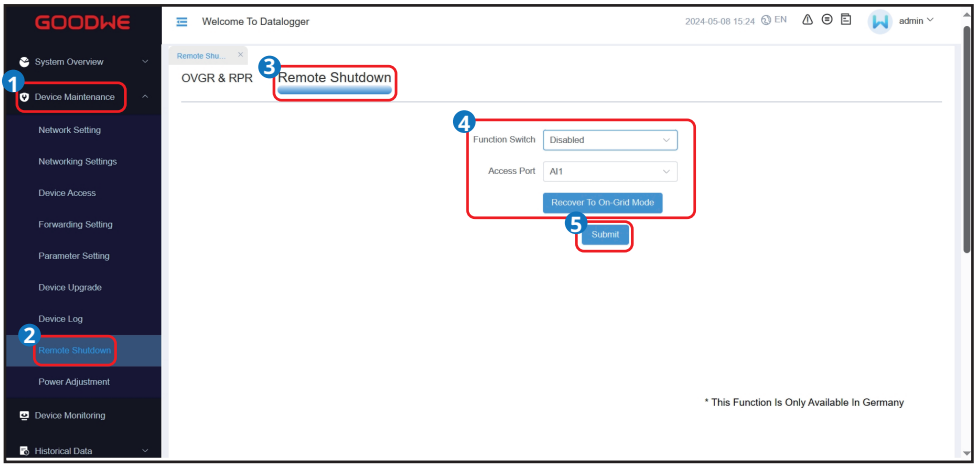


Parameter	Description
OVGR	
OVGR Switch	Enable or disable OVGR remote shutdown function.
Access Port	Select the actual port on the EzLogger which the OVGR is connected to. Supported: DI1, DI2, DI3, DI4, None.
OVGR Contact Initial Status	Set the initial status of OVGR. Supported: Normally Close Contact or Normally Open Contact.
On-grid Mode	Reconnect to the utility grid manually or automatically when the inverter is restarting due to remote shutdown.
Enable Delay Start	Set **Enable Delay Start** when the **On-grid Mode** is **Automatic**. The automatic on-grid connection will be delayed after the OVGR restores to the initial contact status.
Recover to On-grid Mode	If the **On-grid Mode** is **Manual**, click **Recover to On-grid Mode** to reconnect to the utility grid . If the **On-grid Mode** is Automatic, the inverter will reconnect to the utility grid automatically after the OVGR restores to the initial contact status.
RPR	
RPR Switch	Enable or disable RPR function.
Access Port	Select the actual port on the EzLogger which the RPR connected to. Supported: DI1, DI2, DI3, DI4, None.
RPR Contact Initial Status	Set the initial status of RPR. Supports: Normally Close Contact or Normally Open Contact.
On-grid Mode	Reconnect to the utility grid manually or automatically when the inverter is restarting due to remote shutdown.
Enable Delay Start	Set **Enable Delay Start** when the **On-grid Mode** is **Automatic**. The automatic on-grid connection will be delayed after the RPR restores to the initial contact status.
Recover to On-grid Mode	If the **On-grid Mode** is **Manual**, click **Recover to On-grid Mode** to reconnect to the utility grid . If the **On-grid Mode** is **Automatic**, the inverter will reconnect to the utility grid automatically after the OVGR restores to the initial contact status.

Remote Shutdown

- The standards of some countries and regions require that a remote shutdown device should be connected to the **AI1+** or **AI2+** port and **12V Output** port of the EzLogger to realize remote shutdown function.
- The remote shutdown device can detect the voltage and shutdown the inverter through AI1 or AI2 port.
- Once the remote shutdown device is disconnected, the voltage of AI1 or AI2 port will decrease to 0V and the inverter will be shut down. When the remote shutdown device is reconnected, the voltage of AI1 or AI2 port will increase to 12V. Click **Recover to On-grid Mode**, the inverter will restart and connect to the grid.



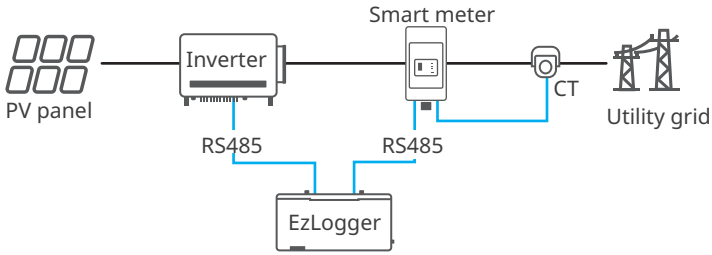


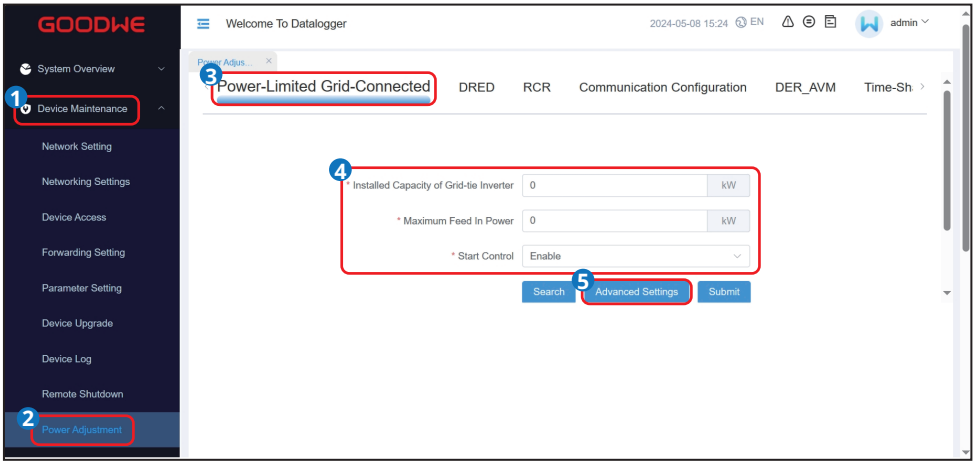
Parameter	Description
Function Switch	**Enable** or **Disable** remote shutdown function.
Access Port	Select the actual port on the EzLogger which the remote shutdown device is connected to. Supported: AI1 or AI2.
Recover to On-grid Mode	If the the inverter is power off, click **Recover to On-grid Mode** to restart and reconnect the inverter to the utility grid .

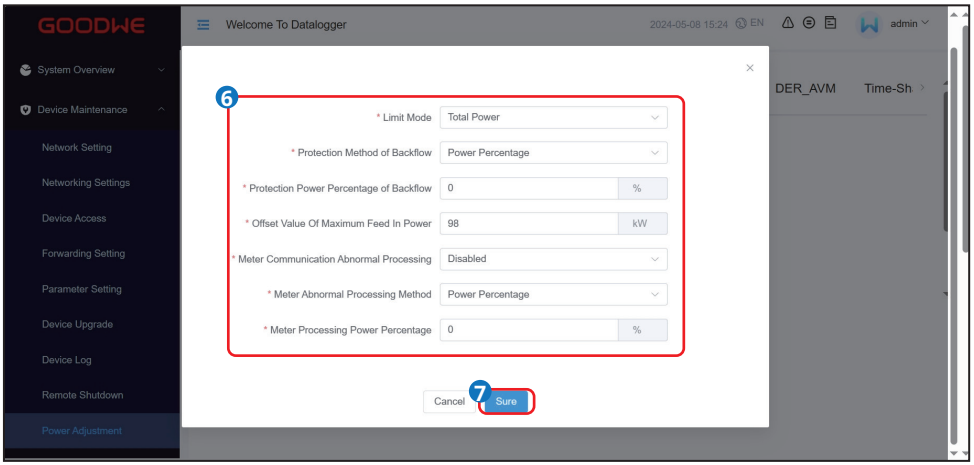
8.4 Setting Power Adjustment Parameters

Power-Limited Grid-Connected

If the power generated by the PV system cannot be consumed by loads, the remaining power will be fed into the utility grid. Control the power fed into the grid by setting the Power-Limited Grid-Connected parameters.

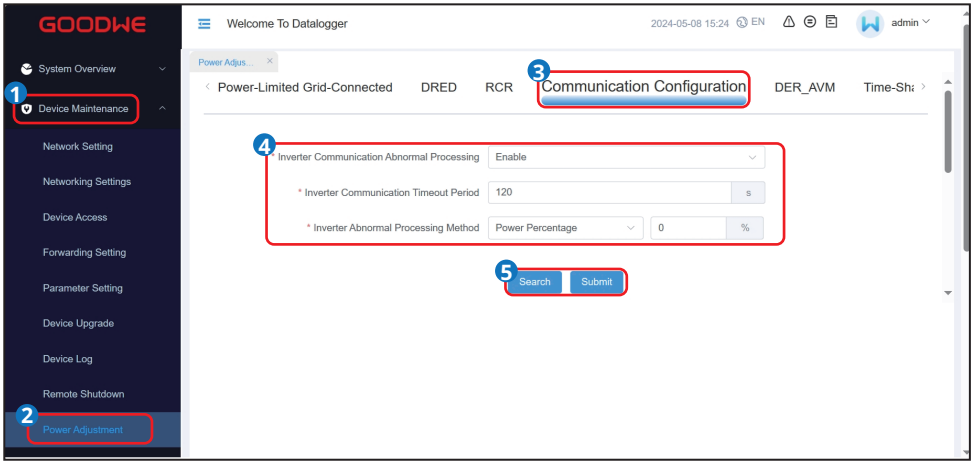






Parameter	Description
Installed Capacity of Grid-tie Inverter	Set the total capacity of all inverters in the system.
Maximum Feed In Power	Set the maximum power that is allowed feed into the utility grid based on local grid standards and requirements.
Start Control	Enable or disable Power-Limited Grid-Connected.
Limit Mode	Select the output power control mode based on actual situation. • Total Power: controls the total power at the grid-connection point to limit the power fed to the power grid. • Each Phase Power: controls the power of each phase at the grid-connection point to limit the power fed to the power grid.
Protection Method of Backflow	The power feed into the utility grid is allowed to exceed the limit value within a specified duration(5s by default). The following measures can be taken when output power exceeds the limit value more than the maximum allowed time: • Power Percentage: the equipment continues to work at the percentage of the rated power. • Device Offline: stop the equipment.
Protection Power Percentage of Backflow	The equipment works at the percentage of the rated power.
Offset Value Of Maximum Feed In Power	• Set the adjustable range of the maximum power to be exported to the utility grid. • Maximum power exported to the utility grid = maximum feed in power + offset value of maximum feed in power.
Meter Communication Abnormal Processing	Enable Meter Communication Abnormal Processing, protective measures will be taken when the communication between the smart meter and the EzLogger is abnormal.
Meter Abnormal Processing Method	The following measures will be taken when the smart meter communication is abnormal. • Power Percentage: the equipment continues to work at the percentage of the rated power. • Device Offline: stop the equipment.
Meter Processing Power Percentage	The equipment works at the percentage of the rated power.

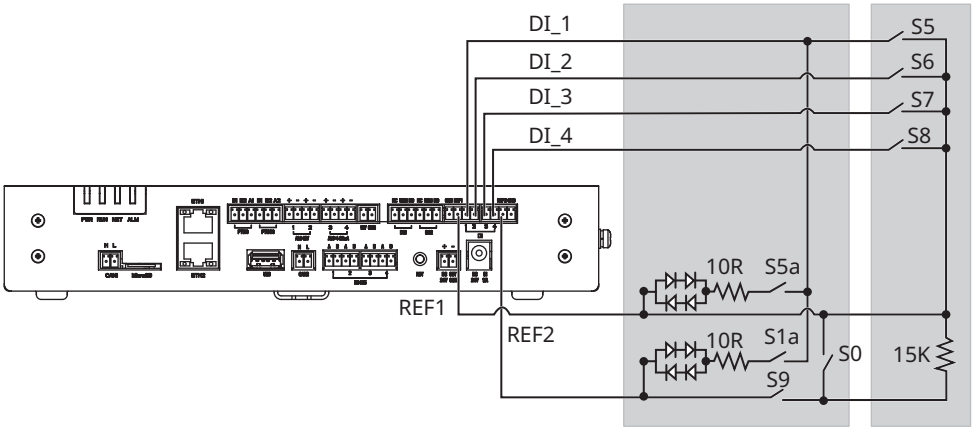
Communication Configuration

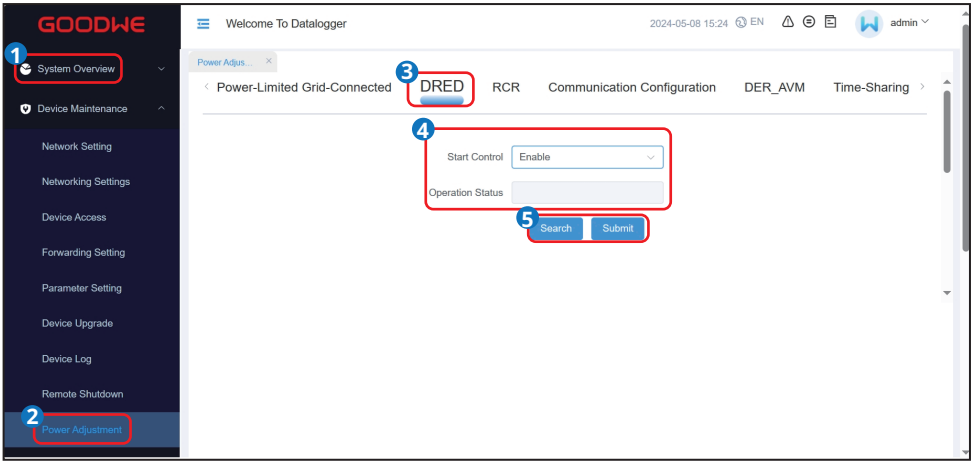


Parameter	Description
Inverter Communication Abnormal Processing	Enable Inverter Communication Abnormal Processing, protective measures will be taken when the communication between the inverter and the EzLogger is abnormal.
Inverter Communication Timeout Period	The protective measures will be taken when the communication exception time exceeds the set time.
Inverter Abnormal Processing Method	The following measures can be taken when the communication between the inverter and the EzLogger is abnormal: • Power Percentage: the equipment continues to work at the percentage of the rated power. • Device Offline: stop the equipment.

DRED

- The standards of Australia and other regions require that the inverter must pass DRM (DEMAND RESPONSE MODES) certification.
- To realize DRM, connect DRED (Demand Response Enabling Device) to **DI1/DI2/DI3/DI4/REFI/REF2** port of the EzLogger.

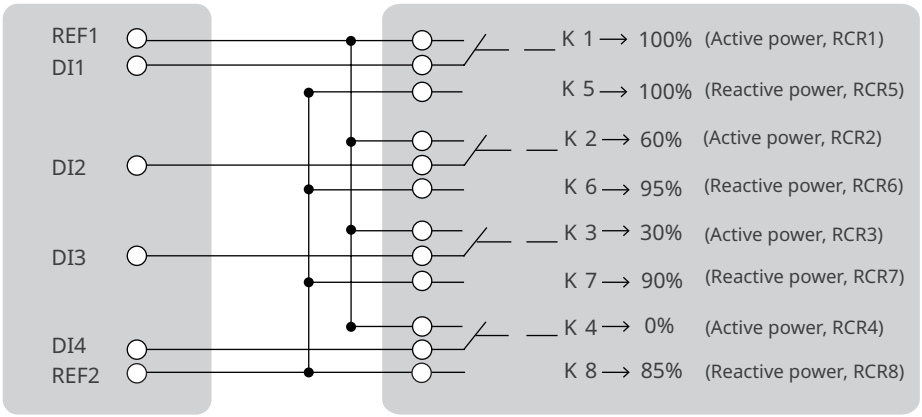


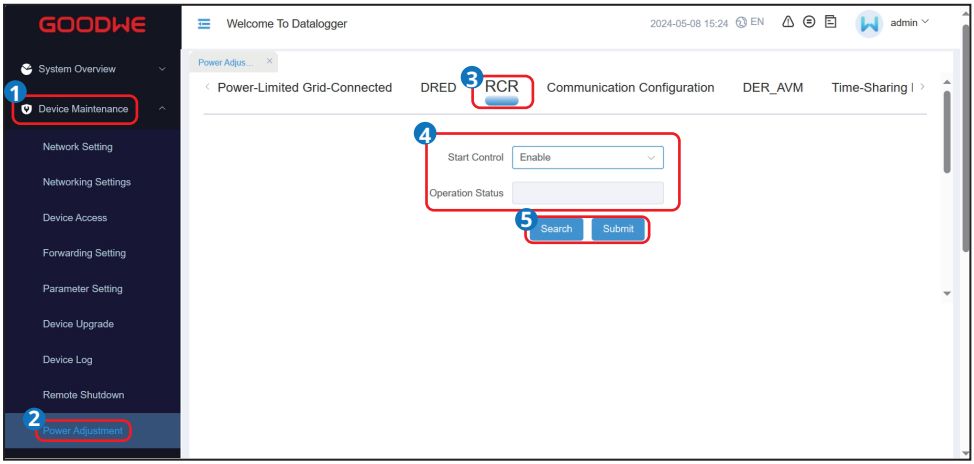


Parameter	Description
Start Control	Enable or disable DRED.
Operation Status	• The connection status of the device, including: nDRM, DRM5, DRM6, DRM7, DRM8. • nDRM: the device works at full power.

RCR

- The standards of German and other regions require that the inverter must provide signal controlling port for RCR (Ripple Control Receiver), which can be used for grid scheduling.
- To realize RCR, connect RCR to **DI1/DI2/DI3/DI4** port of the EzLogger.

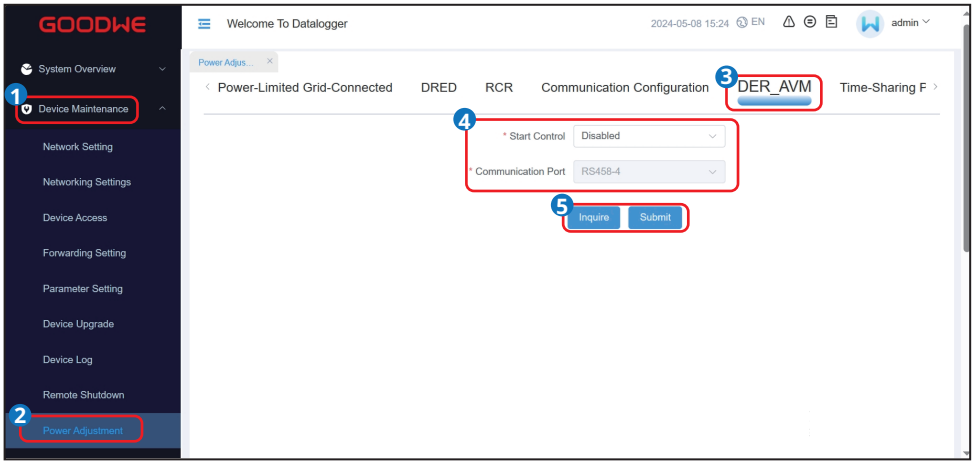




Parameter	Description
Start Control	Enable or disable RCR.
Operation Status	• The connection status of the device, including: nRCR, RCR1, RCR2, RCR3, RCR4, RCR5, RCR6, RCR7, RCR8. • nRCR: neither active power derating nor reactive power compensation is conducted.

DER_AVM

- The standards of Korea and other regions require that the inverters must provide a signal controlling port forDER_AVM, which can be used for grid scheduling.
- To realize DER_AVM, connect a third party KDN device to **RS485-4** of the EzLogger.



Parameter	Description
Start Control	Enable or disable DER_AVM.
Communication Port	Port for connecting the KDN device and the EzLogger. The default port is RS485-4.

9 Maintenance

9.1 Routine Maintenance

DANGER

Power off the EzLogger before operations and maintenance. Otherwise, the EzLogger may be damaged or electric shocks may occur.

Maintaining Item	Maintaining Method	Maintaining Period
Electrical connection	Check whether the cables are securely connected. Check whether the cables are broken or whether there is any exposed copper core.	Once 6 months or once a year
Environmental inspection	Check whether there is any high electromagnetic interference devices or heat sources around the EzLogger.	Once 6 months or once a year

9.2 System Maintenance (WEB)

9.2.1 Upgrading

NOTICE

Ensure that the EzLogger is powered on during the upgrade, otherwise, the upgrade may fail.

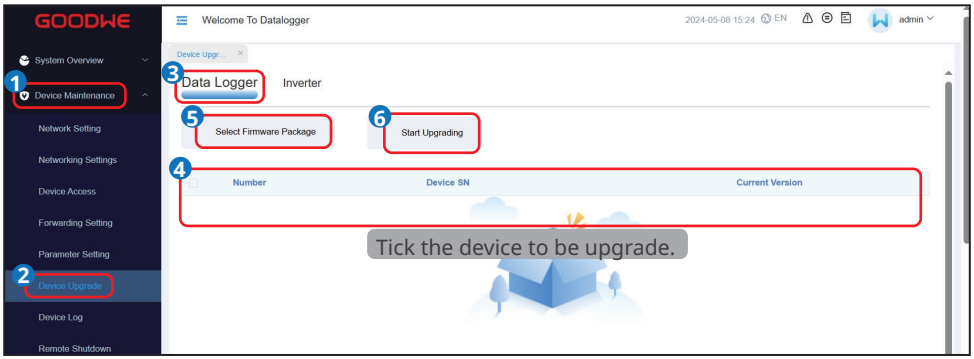
Upgrading via USB flash drive (only for EzLogger)

Step 1 Obtain the upgrading package from after-sales service and prepare a FAT32 USB flash drive (≤32G).
Step 2 Create a new folder named **collector** in the root directory of the USB flash drive. Put the upgrade folder into the collector folder.
Step 3 Insert the USB flash drive into the USB port of the EzLogger. The fault indicator turns to fast blinking after the EzLogger detects the update package and starts upgrading. If the fault indicator does not blink fast, check whether the upgrade package and USB flash drive are in proper state.
Step 4 The EzLogger will restart automatically after upgrading.

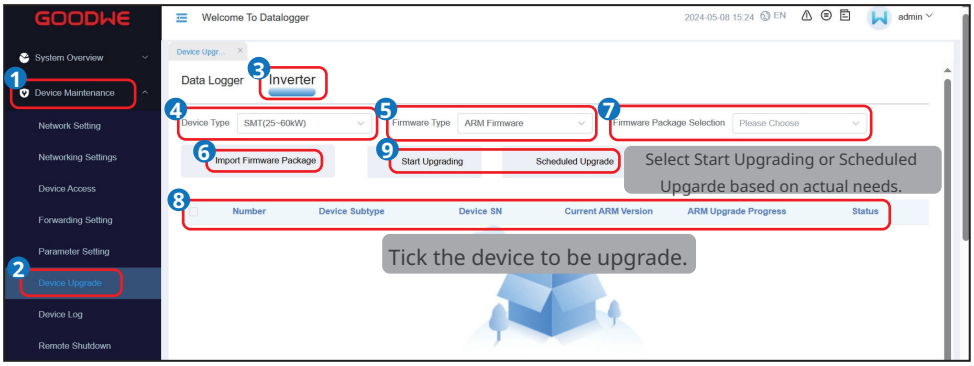
Upgrading via web

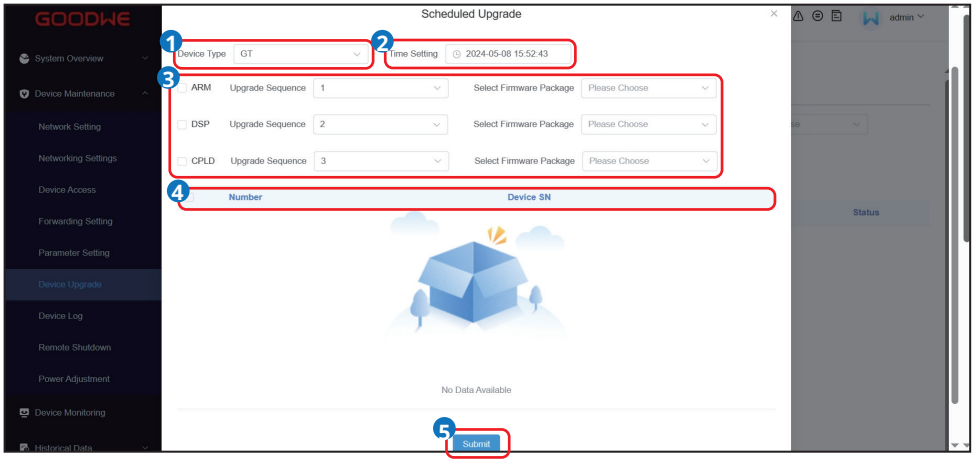
Step 1 Obtain the upgrading package from after-sales service.
Step 2 Save the upgrade package to the PC and upgrade the device as following.

Upgrade the EzLogger



Upgrade the inverter





NOTICE

- During upgrade, the web will turns to log in page automatically. Do not log in during the upgrade period.
- It takes about 10min for upgrading.

9.2.2 Maintaining the System

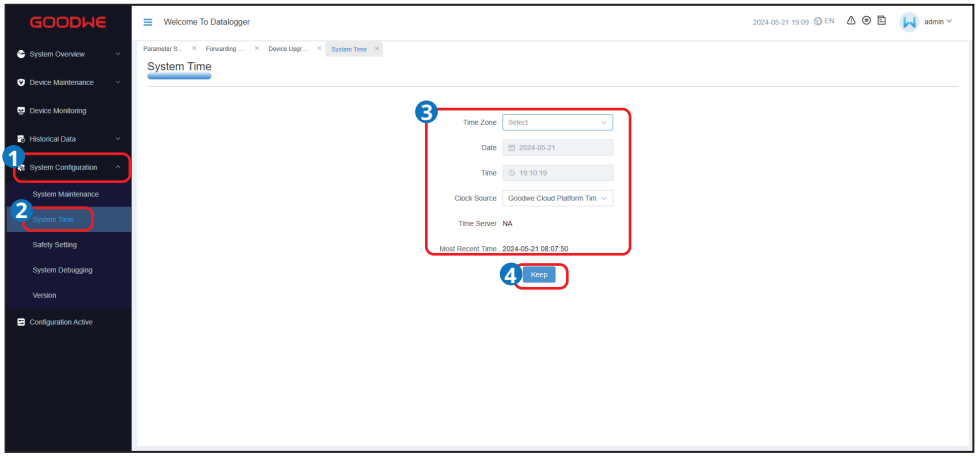


Parameter	Description
Reset Logger	Perform a system reset, and the EzLogger will automatically shut down and restart.
Restore Factory Settings	After restoring factory settings, all parameter values that have been set (except for current date, time, and communication parameters) will be restored to the factory default state. Operational information, alarm records, and system logs will not be affected. Please proceed with caution when performing this operation.
Import All Configuration Files	Before replacing the EzLogger, export the configuration file to the local storage.
Export All Configuration Files	After replacing the EzLogger, import the previously exported configuration file from the local storage to the new EzLogger. Once the import is successful, the EzLogger will restart, and the configuration file will take effect. Confirm that the device parameters are correctly configured.

9.2.3 Set System Time

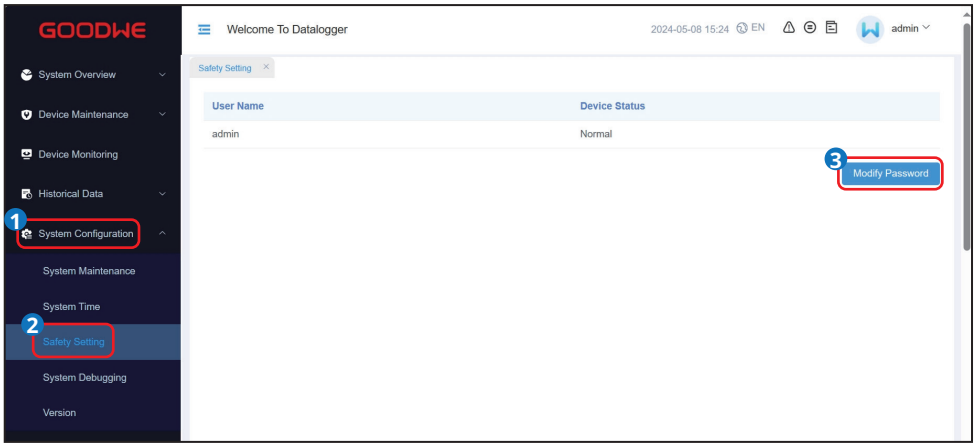
NOTICE
Modifying the date and time will affect the integrity of the system's power generation and performance data records. Please refrain from changing the time zone and system time arbitrarily.

Step 1 Set the system time as following.



Parameter	Description
Time Zone	The parameters can be modified when **Management System** is selected as **Clock Source**.
Date	
Time	
Clock Source	Se the clock source. Supported: NTP, IEC104, Modbus-TCP, Management System, Goodwe Cloud Platform Time Synchronization.

9.2.3 Change Login Password



9.3 Power Off

DANGER

- Power off the EzLogger before operations and maintenance. Otherwise, the EzLogger may be damaged or electric shocks may occur.

Step 1 Disconnect the power adapter from the AC socket.

Step 2 Disconnect the power adapter from the EzLogger.

9.4 Removing the EzLogger

WARNING

- Make sure that the EzLogger is powered off.
- Wear proper personal protective equipment before any operations.

Step 1 Disconnect all electrical connections of the equipment, including the power cable and communication cables.

Step 2 Remove the equipment.

Step 3 Store the equpment properly.If the equipment will be used again in the future, ensure that the storage conditions meet the requirements.

9.5 Disposing of the EzLogger

If the equipment cannot work any more, dispose of it according to the local disposal requirements for electrical equipment waste. Do not dispose of it as household waste.

9.6 Troubleshooting

Perform troubleshooting according to the following methods. Contact the after-sales service if these methods do not work.
Collect the information below before contacting the after-sales service, so that the problems can be solved quickly.

1. Equipment information like serial number, software version, installation date, fault time, fault frequency, etc.
2. Installation environment. It is recommended to provide some photos and videos to assist in analyzing the problem.
3. Utility grid situation.

No.	Fault	Cause	Solutions
1	The equipment is not able to be powered on.	1. Cable of the power adapter is improperly connected to the EzLogger. 2. The power adapter is improperly connected to the socket. 3. Power adapter malfunction. 4. Equipment malfunction.	1. Check whether the power adapter is properly connected to the EzLogger. 2. Check whether the power adapter is properly connected to the socket. 3. Replace the power adapter. 4. Contact your distributor or after-sales service center.
2	Fail to log into the web over LAN.	1. The operating system or browser version is lower than required. 2. The network cable is connected to an incorrect port. 3. Incorrect IP address. 4. Incorrect web login address. 5. Browser exception. 6. Equipment malfunction.	1. Recommended operating system: Windows 7 or later. Recommended browser: Chrome52, Firefox58, or later version. 2. Check whether the network cable is connected to ETH2 port of the EzLogger when loging using the default IP. 3. Check whether the IP address of the EzLogger and the PC are on the same network segment. 4. Enter http://XX.XX.XX.XX or https://XX.XX.XX.XX:443 in the address bar of the web. XX.XX.XX.XX is the IP address of the EzLogger. 5. Clear browser history data or cache. 6. Contact your distributor or after-sales service center.

No.	Fault	Cause	Solutions
3	Fail to log into the web over WiFi.	1. The operating system or browser version is lower than required. 2. The WiFi signal is too weak. 3. Incorrect web login address. 4. Browser exception. 5. Equipment malfunction.	1. Recommended operating system: Windows 7 or later. Recommended browser: Chrome52, Firefox58, or later version. 2. If there is no obstacles, the recommended distance between the PC or mobile phone and the EzLogger is 15m. Check if the distance is too far. 3. Enter http://XX.XX.XX.XX or https://XX.XX.XX.XX:443 in the address bar of the web. XX.XX.XX.XX is the IP address of the EzLogger. 4. Clear browser history data or cache. 5. Contact your distributor or after-sales service center.
4	Fail to connect to the WiFi hotspot of the EzLogger.	1. The WiFi hotspot of the EzLogger is disabled. 2. The WiFi antenna is not installed or installed in an improper way. 3. The distance between the EzLogger and the PC exceeds the allowed WiFi communication distance. 4. Equipment malfunction.	1. Log into the web over LAN to enable WiFi hotspot and reconnect to the WiFi hotspot. 2. Check whether the included WiFi antenna is installed properly. 3. If there is no obstacles, the recommended distance between the PC or mobile phone and the EzLogger is 15m. Check if the distance is too far. 4. Contact your distributor or after-sales service center.
5	Cannot search the devices automatically.	1. Automatic search applies only to the first networking. 2. The inverter is powered off. 3. The RS485 cables are connected in a wrong way, like reverse connection, missing connection, loose connection. 4. Equipment malfunction.	1. Add devices through Device Access if more devices are required. 2. Check whether the inverter is powered on. 3. Check whether the RS485 cables are connected properly. 4. Contact your distributor or after-sales service center.
6	The data cannot be uploaded to the server over LAN.	1. The router or Ethernet switch connected to the EzLogger cannot access the Internet. 2. Incorrect parameters, like Acquisition Method, IP Address, etc.. 3. Equipment malfunction.	1. Check the working status of the router or the Ethernet switch. 2. Check the network parameters. 3. Contact your distributor or after-sales service center.

No.	Fault	Cause	Solutions
7	The data cannot be uploaded to the server over 4G.	1. The 4G antenna is not installed or installed in an improper way. 2. The SIM card is improperly inserted or has no data for Internet. 3. 4G is disabled. 4. The network cable between the EzLogger and the router is connected. 5. Equipment malfunction.	1. Check whether the included 4G antenna is installed properly. 2. Check whether the SIM card is intact and has enough data. 3. Enable 4G on the web page. 4. Disconnect the network cable between the EzLogger and the router. 5. Contact your distributor or after-sales service center.
8	Cannot upgrade the EzLogger via USB flash drive.	1. Incorrect USB format. 2. The upgrade package is not stored in the specific directory. 3. Equipment malfunction.	1. Check whether the USB flash drive is an FAT32 USB. 2. Create a new folder named collector in the root directory of the USB flash drive. Put the upgrade folder into the collector folder. 3. Contact your distributor or after-sales service center.
9	Cannot upgrade the inverter via web.	1. The inverter does not support remote upgrade. 2. Incorrect or damaged upgrade package. 3. The upgrade package does not match the inverter version. 4. Improper connection of RS485 communication cables. 5. Equipment malfunction.	1. Check whether the inverter supports remote upgrade. 2. Contact your distributor or after-sales service center for correct upgrade package. 3. Check whether the RS485 cables are properly connected. 4. Contact your distributor or after-sales service center.
10	Power limit exception	1. The RS485 cables between the EzLogger and the inverter or smart meter are improperly connected. 2. The power limit function is disabled or enabled but not take effect. 3. The inverter does not support power limit. 4. Equipment malfunction.	1. Check whether the RS485 cables are properly connected. 2. Check whether the power limit function is enabled on web page. 3. Contact your distributor or after-sales service center to check whether the inverter supports power limit.
11	Remote shutdown or OVGR&RPR fails.	1. The RS485 cables between the EzLogger and the inverter are improperly connected. 2. The remote shutdown device or OVGR&RPR is connected improperly. 3. Incorrect web configuration. 4. Equipment malfunction.	1. Check whether the RS485 cables are properly connected. 2. Check whether the external protective device is connected properly. 3. Check whether the parameters are correct. 4. Contact your distributor or after-sales service center.

No.	Fault	Cause	Solutions
12	DRED/RCR fails.	1. The RS485 cables between the EzLogger and the inverter are improperly connected. 2. The DRED or RCR is connected improperly. 3. DRED/RCR is disabled. 4. Equipment malfunction.	1. Check whether the RS485 cables are properly connected. 2. Check whether the external protective device is connected properly. 3. Enable DRED/RCR on the web page. 4. Contact your distributor or after-sales service center.
13	The EzLogger fails forwarding parameters over IEC104, Modbus-TCP, IEEE2030.5, FTP, or Email.	1. Communication between the EzLogger and management platform fails. 2. Incorrect forwarding settings. 3. Equipment malfunction.	1. Check whether the network between the EzLogger and the management platform is normal. 2. Check whether the forwarding parameters are correct. 3. Contact your distributor or after-sales service center.

10 Technical Parameters

Technical Parameters	EzLogger3000C
Device Management	
Max. Number of Connected Devices	100
Max. Number of Connected Devices 100	
Power Adapter	AC Input: 100~240V, 50/60Hz DC Output: 24V
DC Power Supply (V)	24
Power Consumption (W)	<15
Communication Interface	
LAN	2
RS485	COM×4
WIFI(local maintenance)	802.11 b/g/n, 2.412GHz-2.484GHz
4G	Optional
Digital/Analog Input/Output	DI×4, DO×2, AI×4
PT100/PT1000	PT100×1, PT1000×1
DC Output Power	12V, 100mA
Communication Protocol	
Ethernet	Modbus-TCP, IEC 60870-5-104
RS485	Modbus-RTU, IEC 60870-5-103 (standard), DL/T645
User Interface	
LED	LED×4
WEB	Embedded Web
USB	USB 2.0 x 1
Mechanical	
Dimensions (W×H×D mm)	255*47.5*173
Weight (kg)	0.8
Installation Method	Wall Mounting, DIN Rail Mounting, Tabletop Mounting
Environment	
Operating Temperature Range (℃)	-30~+60
Storage Temperature Range (℃)	-40~+70
Relative Humidity	5~95%
Max. Operating Altitude (m)	5000
Ingress Protection Rating	IP20

11 Appendix

11.1 FAQ

11.1.1 How to configure power limit parameters?

Prerequisites:

- Refer to the user manual of the devices to install and power on the inverters, EzLoggers, and smart meters properly.
- Refer to section**8.3 Log In** to log in to the web.
- Ensure that the system networking is successful and all inverters are online.

Step 1 Click **Device Maintenance** > **Device Access** > **Add Device** in the homepage of the web to add devices.

Step 2 Select **Device Type** as **Inverter** and set the parameters based on actual information. Click **Confirm** to complete the settings.

Step 3 Back to the devices access page and click **Add Device**.

Step 4 Select **Device Type** as **Smart Meter** and set the parameters based on actual information. Click **Confirm** to complete the settings.

Step 5 Click **Configuration Take Effect** and **Take Effect** to finish adding the inverter and smart meter.

Step 6 Click **Device Maintenance** > **Power Adjustment** > **Power-Limited Grid-Connected**.

Step 7 Set the parameters based on actual needs as the interface promoted.

Refer to section **8.4.3 Adding Devices** if you have any questions about adding an inverter or a smart meter. Refer to section **8.4.9 Setting Power Adjustment Parameters** if you have any questions about setting power limit parameters.

11.1.2 How to set IEC104 forwading parameters?

Prerequisites:

- Refer to the user manual of the devices to install and power on the inverters, EzLoggers, and smart meters properly.
- Refer to section**8.3 Log In** to log in to the web.
- Ensure that the system networking is successful and all inverters are online.

Step 1 Click **Device Maintenance** > **Network Setting** in the homepage of the web to set the network parameters.

Step 2 Click the **LAN** tab, set the **Acquisition Method** to STATIC, set **Intranet Or Not** to**Yes**, and set the IP based on actual information.

Step 3 Click **Device Maintenance** > **Device Access** > **Add Device** in the homepage of the web to add devices.

Step 4 Select **Device Type** as **Inverter** and set the parameters based on actual information.

Step 5 Set **IEC104 Forwarding** to **YES**, and select the forwarding table in the drop-down box. Click **Confirm** to complete the settings.

Step 6 Click **Device Maintenance** > **Forwarding Setting** in the homepage of the web to set forwarding parameters.

Step 7 Click **Add Channel** and set the channel parameters based on actual situation. Click Confirm to complete the settings.

Step 8 Click **Configuration Take Effect** and **Take Effect** to finish configuring the forwarding parameters.
Step 9 Commission the third-party platform according to actual demands to establish the connection between the EzLogger and the platform.

Refer to section **8.4.3 Adding Devices** if you have any questions about adding an inverter. Refer to section **8.4.7 Setting Forwarding Parameters** if you have any questions about setting forwarding parameters.

11.1.3 How to set Modbus-TCP forwading parameters

Prerequisites:

- Refer to the user manual of the devices to install and power on the inverters, EzLoggers, and smart meters properly.
- Refer to section**8.3 Log In** to log in to the web.
- Ensure that the system networking is successful and all inverters are online.

Step 1 Click **Device Maintenance** > **Network Setting** in the homepage of the web to set the network parameters.
Step 2 Click the **LAN** tab, set the **Acquisition Method** to STATIC, set **Intranet Or Not** to**Yes**, and set the IP based on actual information.
Step 3 Click **Device Maintenance** > **Device Access** > **Add Device** in the homepage of the web to add devices.
Step 4 Select **Device Type** as **Inverter** and set the parameters based on actual information.
Step 5 Set **Modbus-TCP** to **YES**, and select the forwarding table in the drop-down box. Click **Confirm** to complete the settings.
Step 6 Click **Device Maintenance** > **Forwarding Setting** in the homepage of the web to set forwarding parameters.
Step 7 Click **Add Channel** and set the channel parameters based on actual situation. Click Confirm to complete the settings.
Step 8 Click **Configuration Take Effect** and **Take Effect** to finish configuring the forwarding parameters.
Step 9 Commission the third-party platform according to actual demands to establish the connection between the EzLogger and the platform.

Refer to section **8.4.3 Adding Devices** if you have any questions about adding an inverter. Refer to section **8.4.7 Setting Forwarding Parameters** if you have any questions about setting forwarding parameters.

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