GOODWE

SCB3000
SOLAR COMMUNICATION BOX

User Manual

Solar Communication Box

SCB3000

V1.1-2023-07-10

1 Symbol Definition

⚠️	Safety Warning - Ignoring the warning signs in this manual may cause minor or moderate injuries.	♻️	Recyclable
⚡	Danger of high voltage, avoid electric shock	⬆️⬆️	This side shall be upside, do not tilt
🗑️	The product must not be disposed of as ordinary waste, but must be recycled by special methods	**6**	Stacking limit, up to 4 layers can be stacked
CE	CE mark	🍷	Fragile items, handle with care
☂️	Avoid humidity		

2 Installation Instructions and Warnings

The SCB3000 is designed and tested in strict accordance with relevant safety regulations. However, as electrical and electronic equipment, the following safety instructions must be observed during installation and maintenance, and improper operation will cause serious injury and property damage to the operator and a third party.

• The SCB3000 must be installed and maintained by professionals in accordance with local standards and regulations.

• When installing and maintaining the SCB3000, power must be disconnected from the SCB3000 to prevent electric shock.

• During operation, do not touch any live parts of the SCB3000, such as its internal components and cables, to avoid electric shock.

• Before replacing any components within the SCB3000, power must be disconnected from the SCB3000 and the newly replaced components must be ensured to meet the requirements for use of the SCB3000, and GOODWE will not be liable for any personal harms or warranty claims arising from noncompliance with this instruction.

• When the SCB3000 is in operation, do not plug in or remove any cable.

• The SCB3000 has an internal lightning protection module installed, inside which the PE is connected to ground when installing the SCB3000.

• Ensure that the AC input voltage and current are matched with the voltage and current ratings of SCB3000, otherwise the components could be damaged or not functioning properly, and GOODWE will not be liable for any responsibilities or warranty claims arising from this mismatch.

3 Product Introduction

3.1 Product Overview

The SCB3000 is used in photovoltaic power generation systems to integrate data collectors, allowing for the port aggregation, data acquisition and storage, as well as centralized monitoring and maintenance of inverters and instrumentations in photovoltaic power generation systems.

SCB3000 model description:

SCB3000 includes the SCB3000P00 and SCB3000P01. The SCB3000 is the name of the series of photovoltaic communication boxes; P means that the local communication mode is PLC2.0; 00 means that the cloud communication method supports LAN; 01 means that the cloud communication method supports LAN and optical fibre. In this manual, the SCB3000P00 and SCB3000P01 models are both referred to as the SCB3000.

Flexible networking:

Communication with inverters supported via PLC or RS485.

Communication with the server available via Ethernet, fiber optics, etc.

Note: When the SCB3000 uses PLC communication, it can only communicate with inverters supporting PLC2.0. Currently, inverters equipped with PLC2.0 function include the HT and SMT series. For details, please contact the Goodwe after-sales service centre.

3.2 Appearance Introduction

After opening the package, check the product to confirm whether it is consistent with the specifications of the SCB3000 you purchased. The appearance of the SCB3000 is shown in Figure 3.2-1.
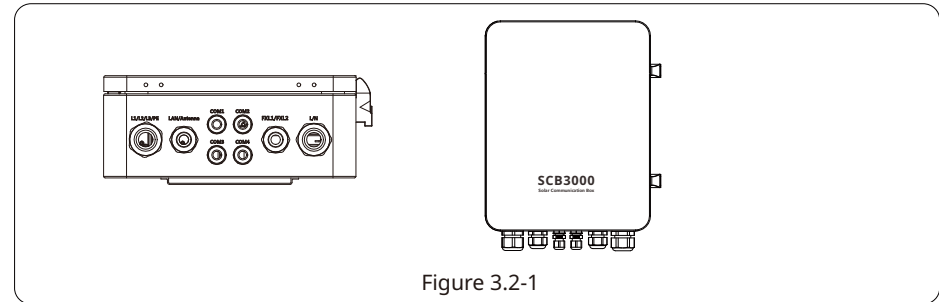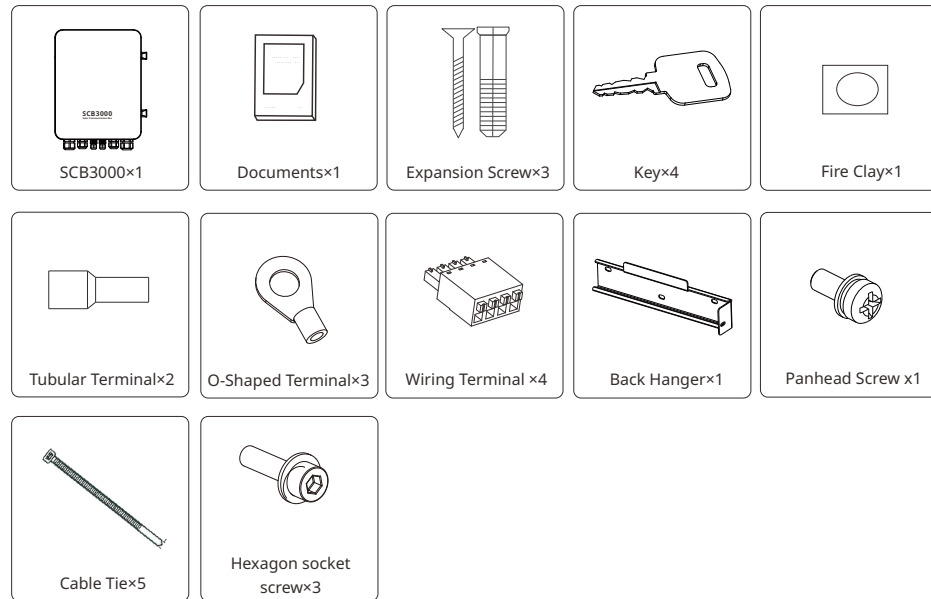

Figure 3.2-1

No.	Label	Description
1	L1/L2/L3/PE	Three-phase AC and protective ground wiring port (with a waterproof cap)
2	LAN/ANTENNA	Ethernet/Antenna port (with a waterproof cap)
3	COM1	RS485-1 port (with a waterproof cap)
4	COM2	RS485-2 port (with a waterproof cap)
5	COM3	RS485-3 port (with a waterproof cap)
6	COM4	RS485-4 port (with a waterproof cap)
7	FXL1/FXL2	Fiber Optic Wiring port (with a waterproof cap)
8	L/N	AC Power Supply port (with a waterproof cap)

3.3 Packaging information

SCB3000×1	Documents×1	Expansion Screw×3	Key×4	Fire Clay×1
Tubular Terminal×2	O-Shaped Terminal×3	Wiring Terminal ×4	Back Hanger×1	Panhead Screw x1
Cable Tie×5	Hexagon socket screw×3			

4 Equipment Installation

4.1 Installation Instructions

- The SCB3000 is installed in places where there is no significant shaking, shock or vibration, and not subject to rain or snow.
- The installation height shall be parallel to the line of sight for easy operation and maintenance.
- The installation location of the SCB3000 should be free of explosive media containing gases and dust sufficient to corrode metals and damage insulation.
- The parameter labels and warning signs must be clearly visible after the SCB3000 is installed.
- The installation location of the SCB3000 shall avoid sunlight, rain, and snow.

Avoid sunlight ✓	Avoid rain✓	Avoid snow✓	Sunlight ×	Rain ×	Snow ×
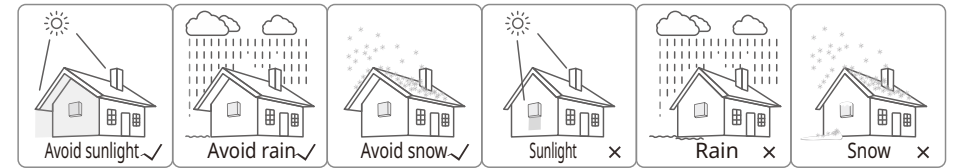
4.2 Installation Location

The following factors must be considered when choosing the installation location:
- The installation method and location must be suitable for the weight and size of the SCB3000.
- Install on a solid surface.
- The installation location must be sufficiently ventilated.
- The SCB3000 can be horizontally placed or vertically installed.
- The vertical installation or tilt back can not exceed 15 degrees, must not be tilted sideways, the wiring area should be facing down, as shown in Figure 4.2-1.

Figure 4.2-1

• To ensure good heat dissipation and easy disassembly, the minimum clearance around the SCB3000 must not be less than the following values, as shown in Figure 4.2-2.

≥200mm

≥200mm   ≥200mm   ≥500mm

SCB3000

≥500mm

Top----------200mm
Bottom----------500mm
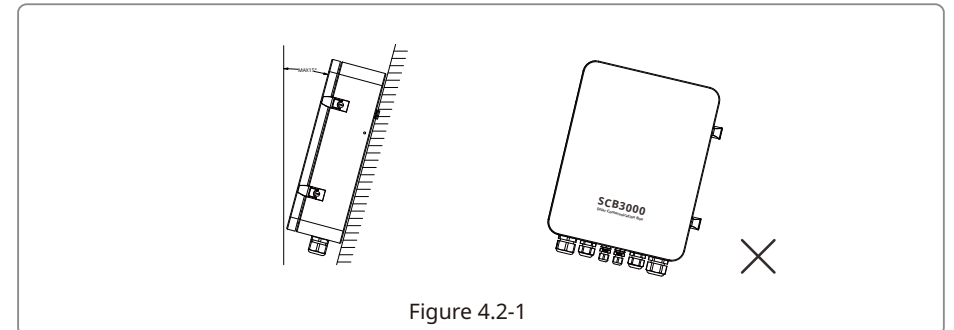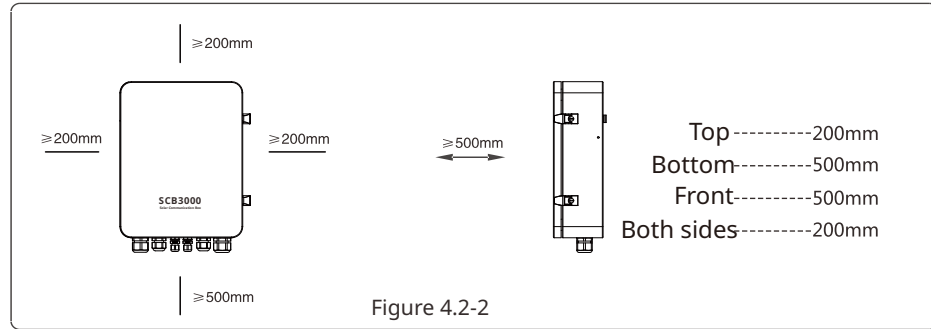Front----------500mm
Both sides----------200mm

Figure 4.2-2

4.3 Installation Method

Vertical Installation:

1. Drill holes in the wall with a diameter of 8mm and a depth of 45mm. The spacing of the holes is shown in Figure 4.3-1.

2. Use the expansion screws in the accessory pack to fix the back plate on the wall, as shown in Figure 4.3-2.
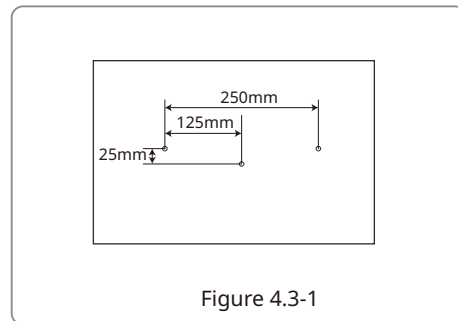
250mm
125mm
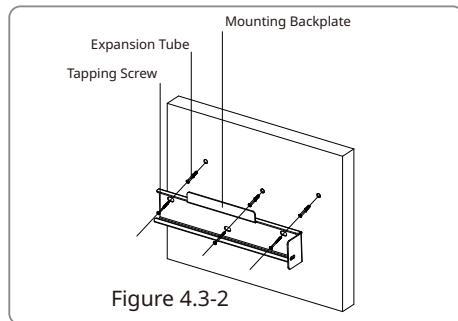25mm

Figure 4.3-1

Mounting Backplate
Expansion Tube
Tapping Screw

Figure 4.3-2

3. Install the enclosure as shown in Figure 4.3-3.

Install the SCB3000 enclosure bracket on the back plate and tighten it securely with screws to prevent the enclosure from shaking.
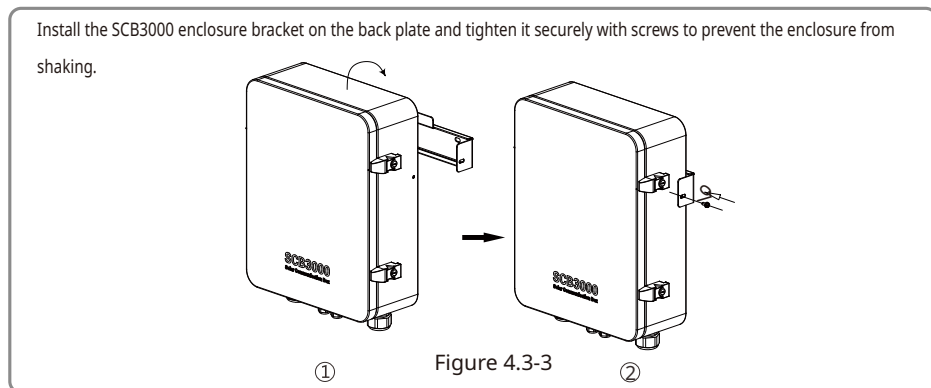
SCB3000

SCB3000

① Figure 4.3-3 ②

Horizontal Placement:
1. The SCB3000 can be placed horizontally, as shown in Figure 4.3-4.
2. The SCB3000 needs to be placed indoors at a location where it can be fixed, as shown in Figure 4.3-5.

L1/L2/L3/PE LAN/Antenna COM1 COM2 FXL1/FXL2 L/N
COM3 COM4
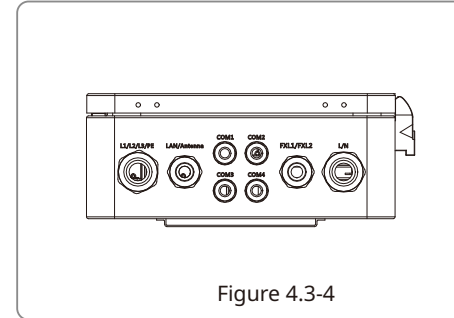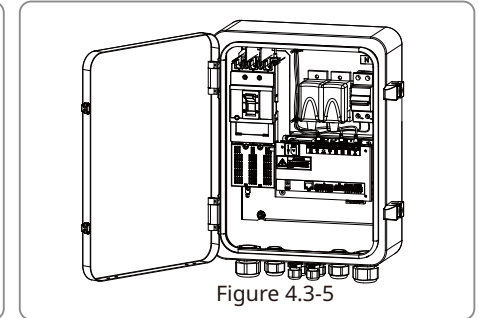
Figure 4.3-4

Figure 4.3-5

4.4 Port Description

The internal ports of SCB3000 are described as follows:

POWER
12V

NET

DI
REF1 1 2 3 4 REF2

COM1 COM2 COM3 COM4
A B A B   A B A B

1000M ACT1000M ACT1000M ACT

TP1   TP2   TP3

RUN FXL1FXL1B
APWR FXL2

FXL1   FXL2

RESET
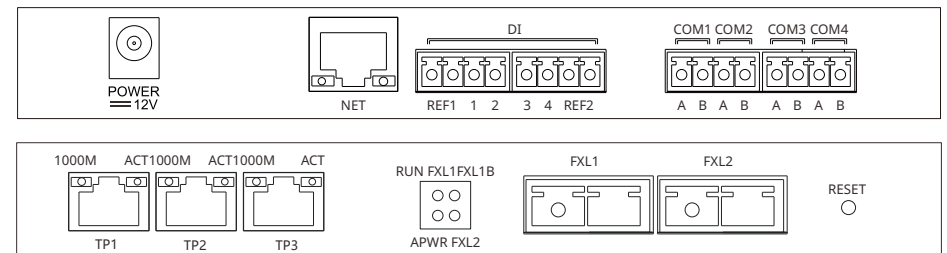
No.	Port	Port Description
1	POWER	DC Power Input (occupied)
2	NET	Ethernet (occupied for fiber optic version)
3	DI	DRED (for Australia) or RCR (for Germany) function
4	NC	Reserved
5	COM1	RS485 port for communications with the inverter
6	COM2	RS485 port for communications with the inverter
7	COM3	RS485 port for communications with the inverter
8	COM4	For connections to third-party equipment
9	TP1, TP2	Ethernet (for fiber optic version only)
10	TP3	Ethernet (occupied, for fiber optic version only)
11	FXL1, FXL2	Fiber Optical Port (for fiber optic version only)

Note: Item numbers 9, 10 and 11 in the above list are fiber optic module ports, and will only be used when the fiber optic version is selected. These 3 ports will not exist if there is no fiber optic version. Ports 5, 6 and 7 are RS485 ports, and will not be used when the SCB3000 is communicating with inverters through the PLC.

4.5 Wiring Instructions
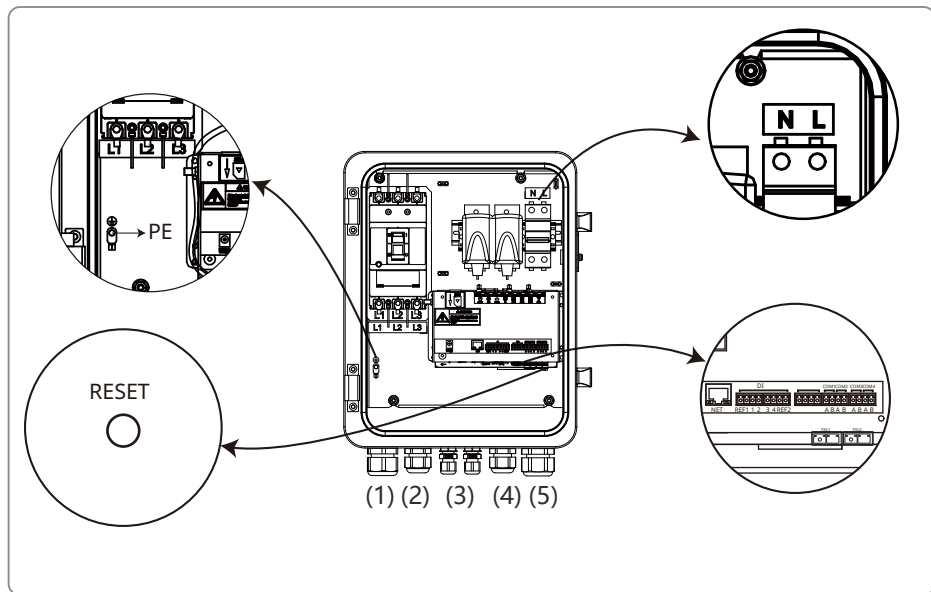
RESET Button:
• Long press the button for 10s to switch the equipment from dynamic IP mode to static IP mode. The indicator lights up from right to left after switching the mode.
• Long press the button for 3s to switch the equipment from static IP mode to dynamic IP mode. The indicator lights up from left to right after switching the mode.

4.5.1 Description of SCB3000 Power Supply Cable
The single-phase power supply cable is connected to the internal single-phase switches L and N of the SCB3000.
Input phase voltage range: AC100V~AC240V; AC frequency: 50Hz/60Hz
Input wire and crimping:

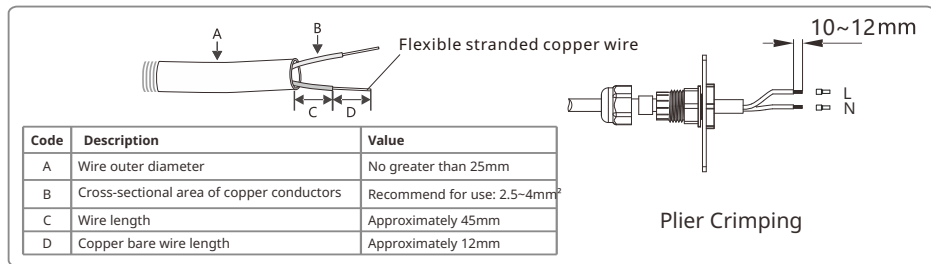| Code	Description	Value
A	Wire outer diameter	No greater than 25mm
B	Cross-sectional area of copper conductors	Recommend for use: 2.5~4mm²
C	Wire length	Approximately 45mm
D	Copper bare wire length	Approximately 12mm

Plier Crimping

Note: Before connecting the AC power line, make sure that the switch upstream of SCB3000 is open

4.5.2 PLC Wiring Instructions
(a) Protective Earth Wiring:
The protective ground wire is connected to the PE of the base plate of inside the SCB3000 enclosure.
(b) Remove the three-phase AC power line cover panel.
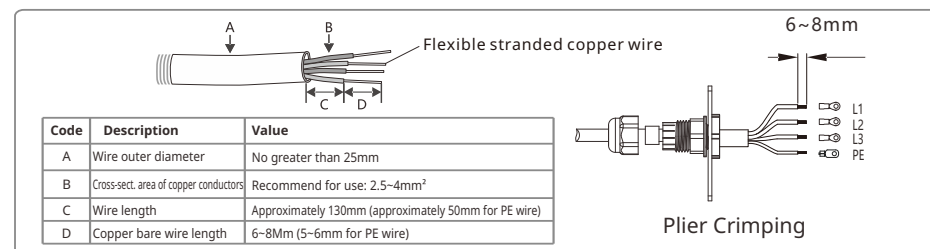(c) Connect the three-phase AC power line
Note: Before connecting the AC power line, make sure that the switch upstream of SCB3000 is open.
Three-phase input line voltage range: AC342V~AC800V; AC frequency: 50Hz/60Hz.
The three-phase AC power line is connected to the transformer bus, and then to the circuit breakers L1, L2 and L3 in the SCB3000 via port (1).
(d) Install the three-phase AC power line cover panel.

AC Input wire specifications and crimping:

| Code	Description	Value
A	Wire outer diameter	No greater than 25mm
B	Cross-sect. area of copper conductors	Recommend for use: 2.5~4mm²
C	Wire length	Approximately 130mm (approximately 50mm for PE wire)
D	Copper bare wire length	6~8Mm (5~6mm for PE wire)

Plier Crimping

4.5.3 Description of RS485 communication wiring
COM1, COM2 and COM3 are RS485 ports for communications with the inverter that can be left unused if communications with inverter PLC can meet the requirements, users can choose to connect COM1, COM2 or COM3 for communications with the inverter as needed. The COM4 port is only connected to third-party equipment such as environment monitors.

Note:
1. Contact the after-sales service if you need to connect a third-party device, like an environmental monitoring device, to the COM4 port of the SCB3000.
2. For RS485 communication wiring, please use standard RS485 communication twisted pair.
3. The maximum number of inverters connected to each of COM1, COM2 and COM3 is 20 units, with the total of 60 units allowed for the 3 ports.
4. In the ports COM1, COM2, COM3 and COM4, A corresponds to the differential signal +, and B corresponds to the differential signal.

Wire specifications and installation: for RS485 communication cables, shielded twisted pair cables with a conductor cross-sectional area of 1mm² are recommended for use.

Wire No	Functions
1	RS485 +
2	RS485 -

Screw Nut Isolator Nut
Gasket Cable
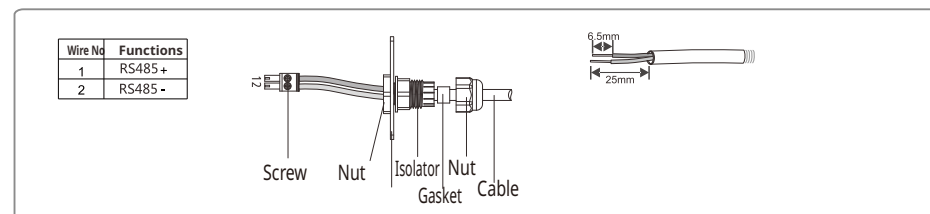
4.5.4 Description of LAN communication wiring

The SCB3000 can be connected to routers, computers, switches and other equipment through

the network cable; The network cable is connected to the internal NET port of the SCB3000; if you select the fiber optic version of this device, the network cable can be connected to the TP1 or TP2 port (the NET port has been connected to the TP3 port for the fiber optic version of this device).

Cat 5e is recommended for use as the network cable. After wiring, please use the fire clay included to block it to ensure its fireproof performance.

4.5.5 Description of fiber optic communication wiring

The SCB3000 fiber optic version can be connected to fiber optic terminals through optical cables for data transmission.
The optical cables are connected to the FXL1 and FXL2 ports inside the SCB3000.

Note: Both ends of the same fiber optic must be connected to the TX and RX ports, otherwise the fiber optic connection will not be made correctly.

4.5.6 Wiring instructions for other ports

The DI port of SCB3000 is compatible with both RCR (for Germany) and DRED (for Australia)

functions. The port definitions in different functions are as follows:

	REF1	1	2	3	4	REF2
RCR	+5V	D_IN1	D_IN2	D_IN3	D_IN4	+5V
DRED	RefGen	DRM1/5	DRM2/6	DRM3/7	DRM4/8	Com/DRM0

If the user does not need to use this function, the port does not need to be wired.

4.6 Networking Diagrams

Standalone

Multi-machine fiber optic ring network
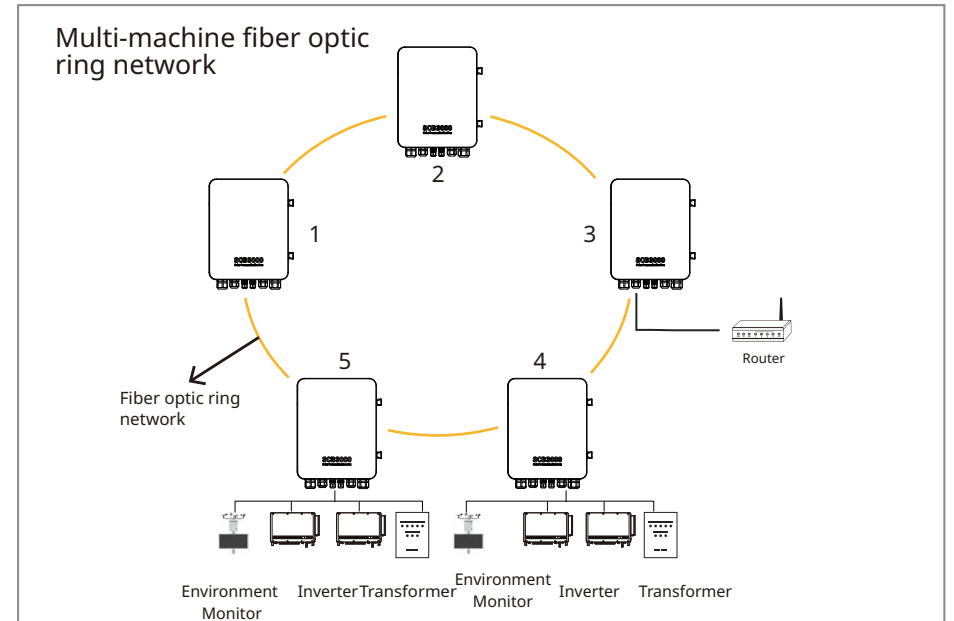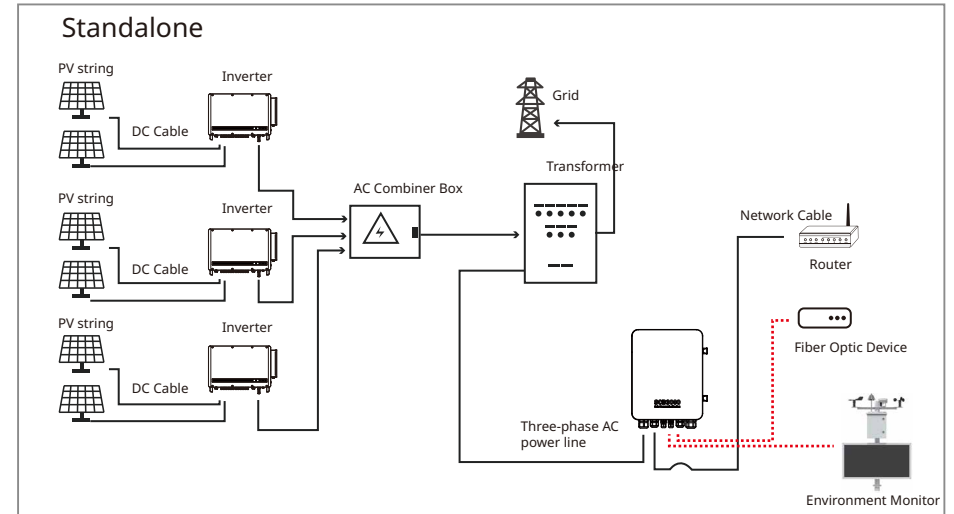
One of the SCB3000s need to be set as the master (root node), with the others as the slaves (slave nodes).
SCB3000 can work with the environmental monitoring device from Jinzhou Sunshine Technology Co.Ltd. Contact the after-sales service to get more information if you have any questions.

5 System Operations

5.1 Indicator Description

⏻	▶	☁	📶	📶	📶	📶	⚖
POWER	RUN	SERVER	PC	COM1	COM2	COM3	COM4

Port	Status	Status Description
POWER	Blue Light On	The power supply is OK
	Blue Light Off	The power supply is Off
RUN	Blue Light flashing (on for 1 second, off for 1 second)	The SCB3000 is not operating properly
	Blue Light On or Off continuously	The SCB3000 is operating properly
SERVER	Blue Light On continuously	The SCB3000 is connected to the external network server correctly.
	Blue Light flashing (on for 1 second, off for 1 second)	The SCB3000 is connected to the router correctly, but not connected to the external network server.
	Blue Light Off	No network connection for SCB3000
PC	Blue Light On	The SCB3000 is connected to a computer and ProMate software
	Blue Light Off	The SCB3000 is not connected to a computer and ProMate software
COM1	Blue Light On	The actual number of inverters acquired by SCB3000 is equal to the number of acquired inverters set for the port
	Blue Light flashing (on for 1 second, off for 1 second)	The actual number of inverters acquired by SCB3000 is less than the number of acquired inverters set for the port
	Blue Light flashing (on for 1 second, off for 3 seconds)	The number of inverters acquired by SCB3000 is not set for the port
	Blue Light Off	The SCB3000 has not acquired any data from the inverter
COM2	Blue Light On	The actual number of inverters acquired by SCB3000 is equal to the number of acquired inverters set for the port
	Blue Light flashing (on for 1 second, off for 1 second)	The actual number of inverters acquired by SCB3000 is less than the number of acquired inverters set for the port
	Blue Light flashing (on for 1 second, off for 3 seconds)	The number of inverters acquired by SCB3000 is not set for the port
	Blue Light Off	The SCB3000 has acquired data from the inverter
COM3	Blue Light On	The actual number of inverters acquired by SCB3000 is equal to the number of acquired inverters set for the port
	Blue Light flashing (on for 1 second, off for 1 second)	The actual number of inverters acquired by SCB3000 is less than the number of acquired inverters set for the port
	Blue Light flashing (on for 1 second, off for 3 seconds)	The number of inverters acquired by SCB3000 is not set for the port
	Blue Light Off	The SCB3000 has not acquired any data from the inverter
COM4	Blue Light On	Other equipment (such as external environment monitors) communication good.
	Blue Light Off	No other equipment, such as external environment monitors

5.2 Master Computer Operations & Parameter Configurations

ProMate is a software released by us for the configuration of the SCB3000 functions, it enables the modification of the network IP address of the SCB3000, the configuration of the number of port-connected inverters, time settings, RCR and DRED feature configuration, field debugging and more.

Please download the ProMate app at https://en.goodwe.com/.

5.2.1 Connecting to the Master Computer Software

If the user wants to configure the SCB3000 using ProMate software, the master computer needs to be connected in either dynamic IP (DHCP) or static IP according to the way the network is connected.

1. SCB3000 dynamic IP address connection:

SCB3000 is set to dynamic IP mode by default, and the network connection is simply made by connecting the SCB3000 NET port to the router LAN port with the network cable, which is plug and play. To configure the SCB3000, connect your computer to the router with a network cable, and launch the ProMate software in which you can click "Scan" to complete the connection successfully. When the configuration is complete, disconnect the computer from the router.
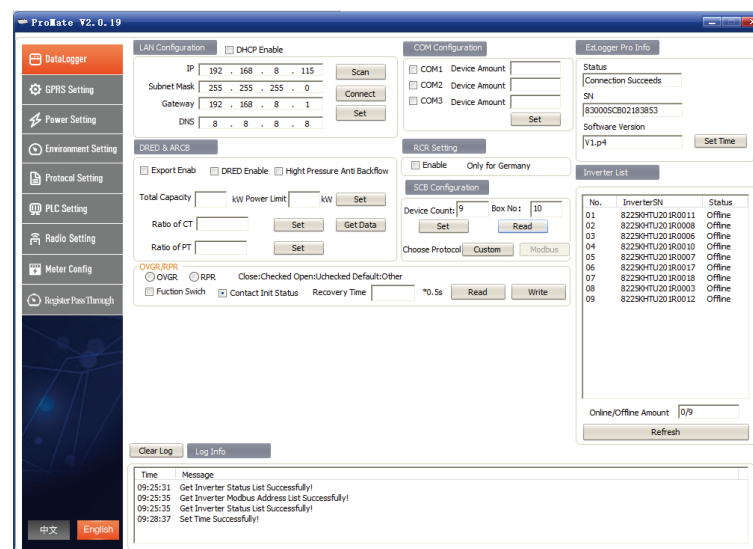

Note: If the SCB3000 is set to static IP mode, you need to switch to dynamic IP mode before you can configure it using dynamic IP connection. Press and hold the "RESET" button for about 4 seconds, this will make the LED signal indicators flash from right to left, indicating a completed reset and restart, after which the SCB3000 will be switched to static IP mode.

2. SCB3000 static IP address connection:
Note: SCB3000 is set to dynamic IP mode by default, you need to switch the SCB3000 to static IP mode first by pressing and holding the "RESET" button for about 10 seconds, this will make the LED signal indicators of the SCB3000 flash from right to left, indicating a completed reset and restart, after which the SCB3000 will be switched to static IP mode (the default IP address is 192.168.1.200). The user needs to set the computer to static IP mode, and configure the computer's IP address and the SCB3000's IP address in the same network segment. The steps are as follows (using Windows 7 OS as an example). Users can find the methods on the Internet that can be used to modify the IP addresses of computers running different operating systems.
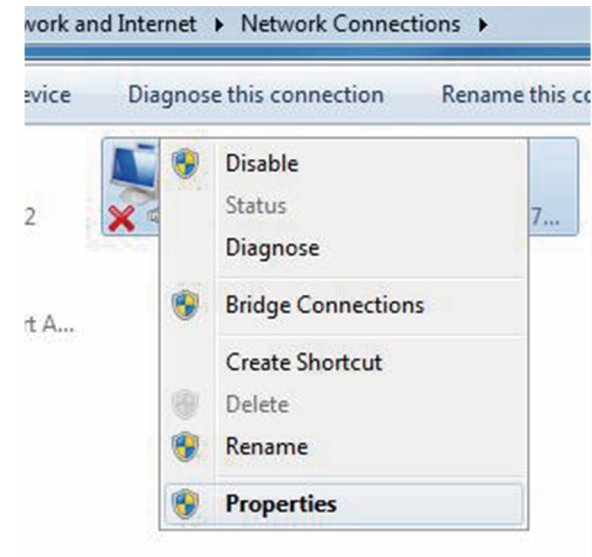(a) Use a network cable to connect the "NET" of the SCB3000 to the Computer's Ethernet port.
(b) Right-click "Network" and select "Properties".
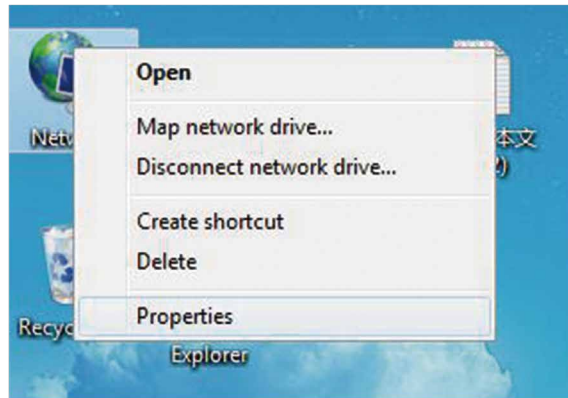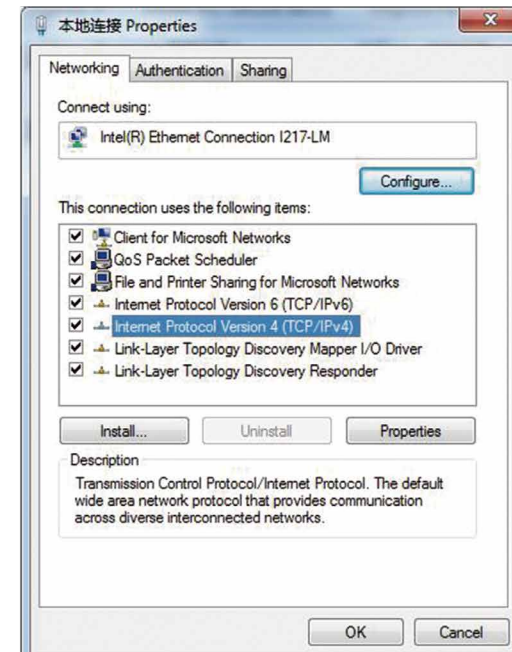

(c) Click "Change adapter settings".
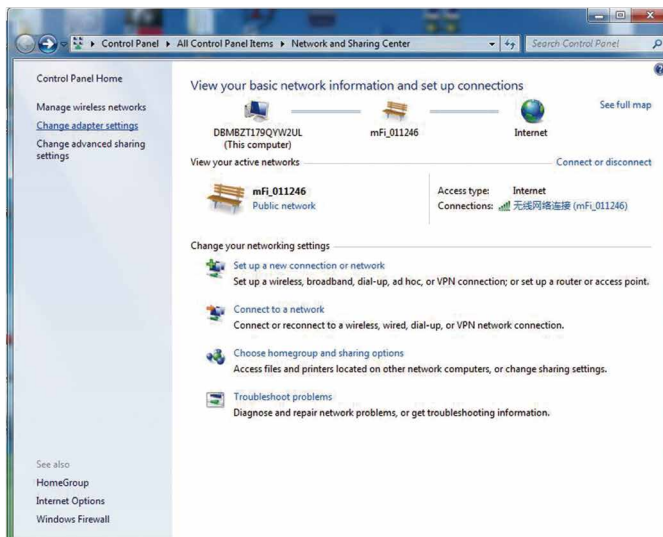
(d) In the local connection popup dialog box, right-click "Local connection" and click "Properties".


The following popup dialog box is displayed:

(e) Double-click "Internet Protocol Version 4 (TCP/IPv4)" to show the "Internet Protocol Version 4 (TCP/IPv4)" popup dialog box, and set up the dialog box according to the requirements below. The default IP address of the SCB3000 is 192.168.1.200. To keep the computer and SCB3000 in the same network segment, the "IP address" and "Default Gateway" should be set at the 192.168.1.XXX segment (1≤XXX≤250 and XXX≠200). For example: The IP address can be set to 192.168.1.100 and the default gateway 192.168.1.254.
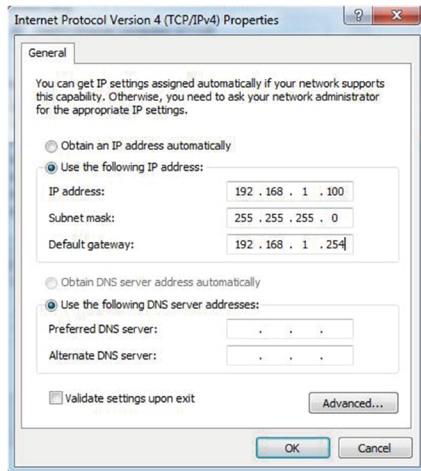
Click the "Connect" button in ProMate, when it shows that the connection is successful, ProMate is connected to the SCB3000 successfully.
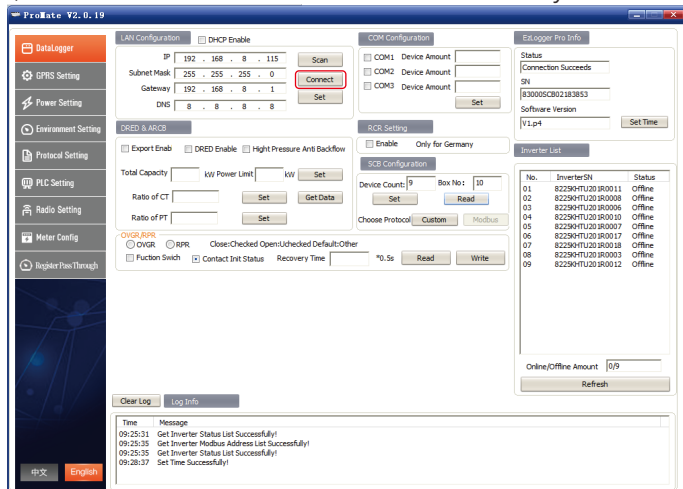
Note: If there is only one Box-type substation on the customer site, and the data is uploaded to GOODWE servers, there is no need to configure the box number and address through ProMate, simply connect ProMate, click to get the inverter list to see if the inverter is all online. If there are multiple box Box-type substations onsite, refer to 5.2.2 for setup.

5.2.2 Parameter Configurations (for PLC communication with the inverter)
When the connection to ProMate is successful, parameter configurations can be made on the SCB3000 and the inverter to which it is connected.
(a) Choose Protocol
Click the "Ezlogger Pro" button and select the protocol in the following popup. Custom is used for parameter configuration and Modbus protocol for normal communication.
The machine is set to "Custom" in the factory by default, and the following protocol showed in grey is the one that is currently used. After switching protocols, ProMate waits about 1 minute to proceed.
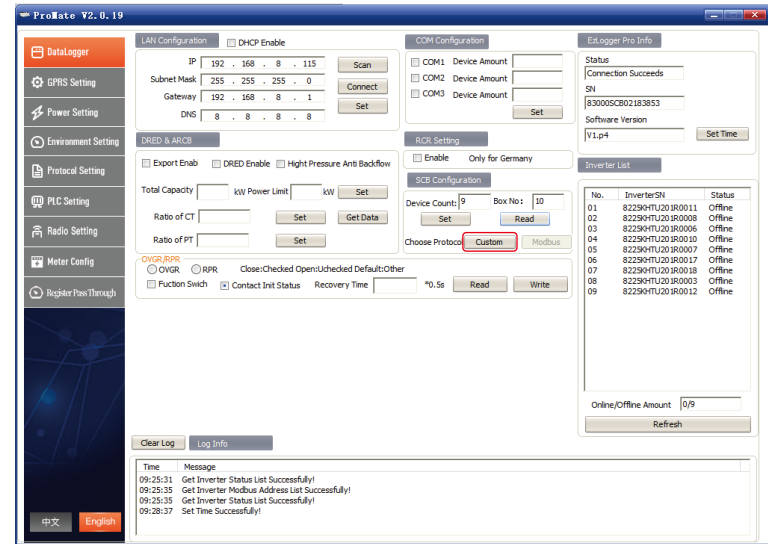

Note: Select the GOODWE custom protocol first to configure the BOX No and inverter address, then switch to the Modbus protocol for communications after all parameters have been configured.

(b) Settings of Device Count and Box No

Enter numbers for both "Device Count" and "Box No".

For "Device Count", enter the number of inverters actually connected to the current SCB3000.

The "Box No" is used to identify the Box-type substations onsite. (For example, if there are multiple SCB3000s in use onsite, they must be corresponding to different box numbers) As shown below: the number of inverters connected to the SCB3000 on-site is 3, so the "Device Count" of 3
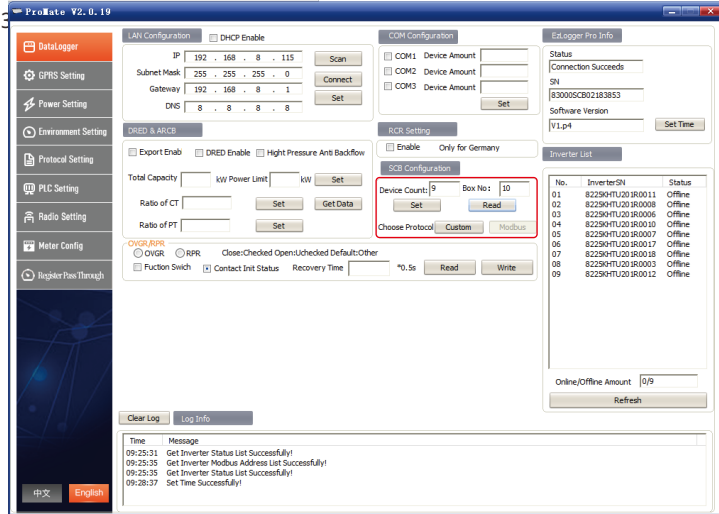
Note: The Device Count and Box No are required, the devices will not function properly if either field is not filled in.

As shown below: When finished setting the Device Count and the Box No, you can click the "Read" button to see if the settings are successful.
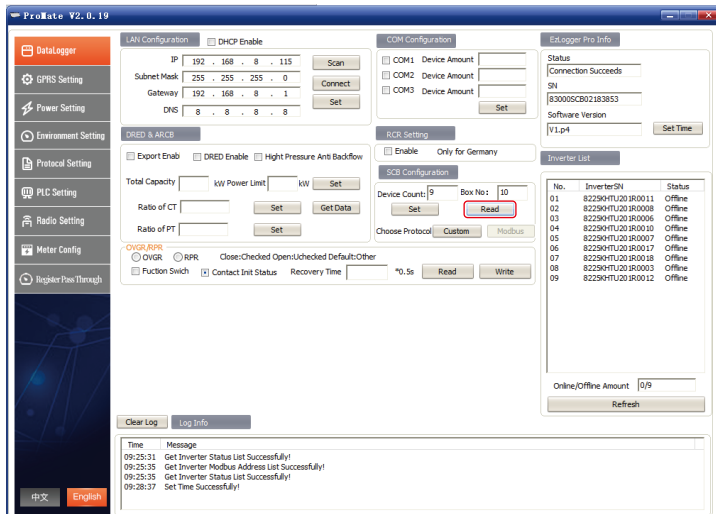
(c) Inverter Address Configuration

Connecting the SCB3000 to the inverter requires the Modbus address to be configured, with the option of one click and manual operation available for the inverter address configuration.

As shown below: **Click the "One key config" button, and the software randomly assigns the inverter address.**
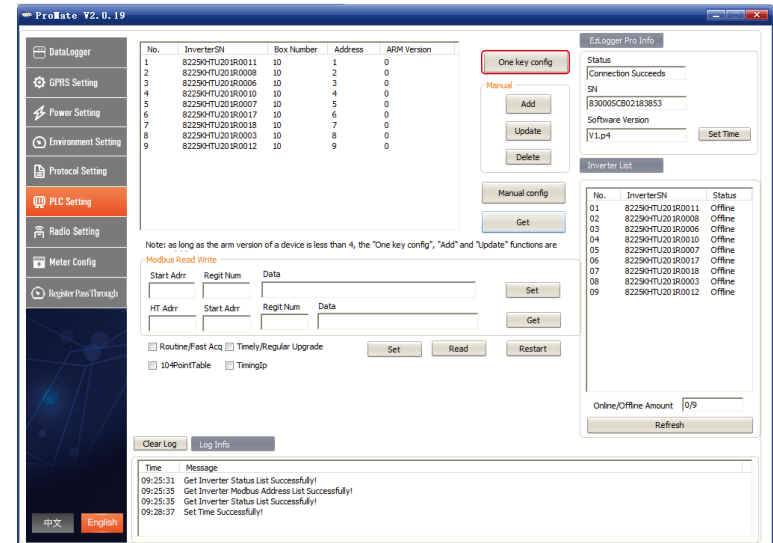
As shown below: Click the "Set" button to see if the configuration is successful.

(d) Manually configure the inverter address

As shown below: If there are special requirements for the inverter address on the customer site, you can choose to manually add the Modbus address by clicking "Add", entering the 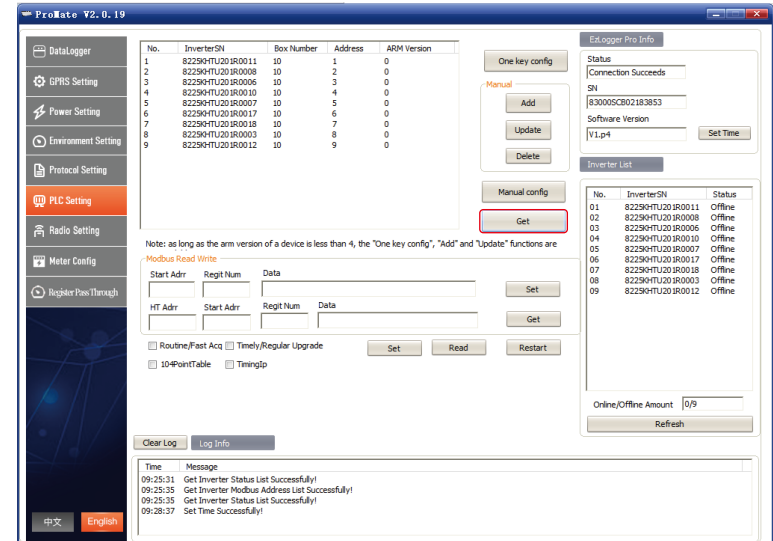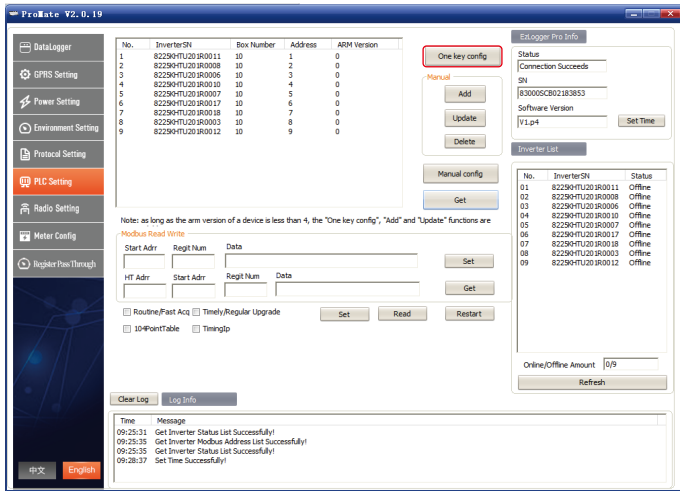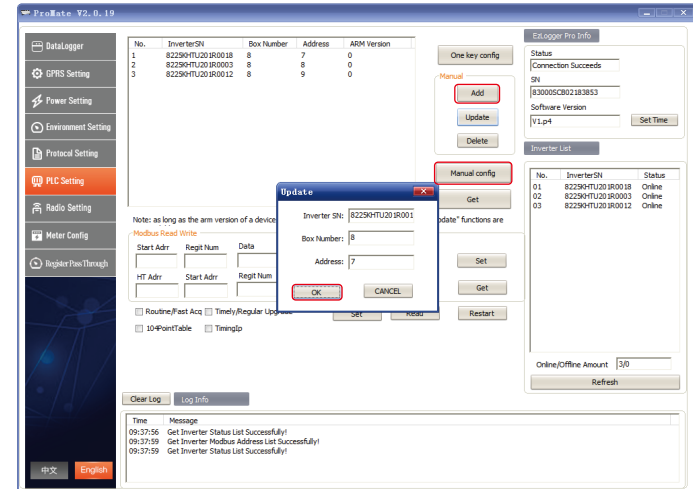inverter serial number, box number, and the corresponding Modbus address in the following popup box, selecting "OK", and then clicking "Manual config" to add the address.
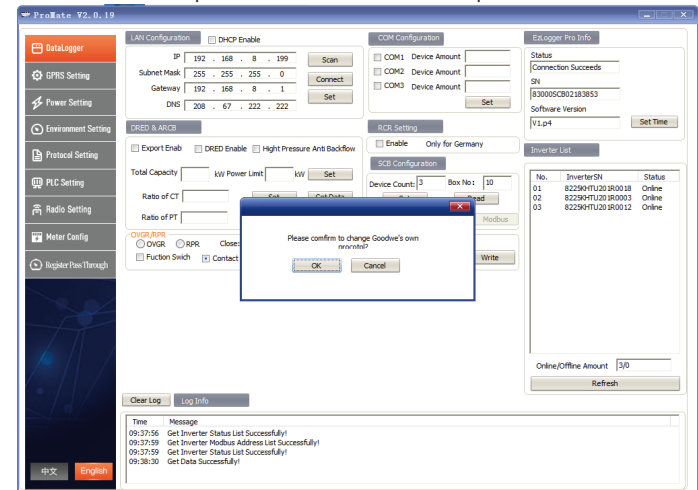

As shown below: If you need to modify the Modbus address after adding it, you can select the inverter serial number that needs to be modified, click the "Update" button, enter the parameters to be modified in the popup dialog box, click "OK" and then click "Manual config".
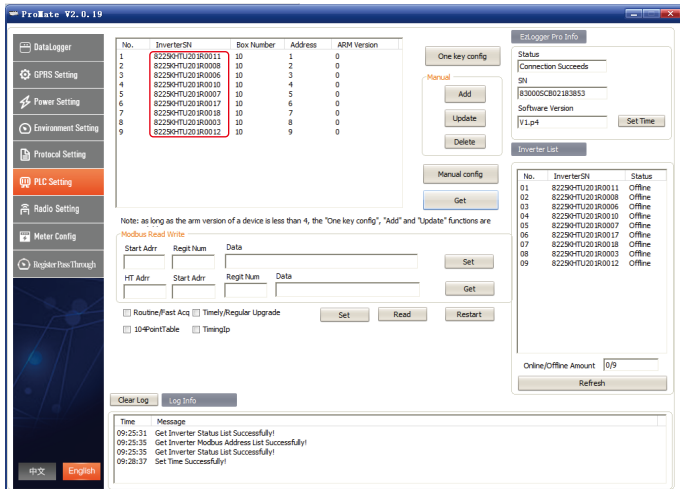
Note: After selecting "Add", "Update" or "Delete" in the manual configuration section, you must click the "Manual config" button to make it become effective.

As shown below: Click the "Update" button, enter the parameters to be modified in the popup dialog box, click "OK" and then click "Manual config".

(e) Protocol Switching

As shown below: In the inverter list section at the right side, click "Refresh" to show the SCB3000 connected inverters' status, confirm that all inverters are online. After the Modbus address has been configured, you can return to the "EzLogger Pro" interface where the Modbus protocol is selected in the protocol selection.

Note:

1. Please confirm the inverter Box No and SCB3000 Box No are set to the same value. If this is not the case, after switching to Modbus protocol, the SCB3000 will not be able to communicate with the inverter.

2. It takes about 1 minute to complete the protocol switching. After the switching is successful, wait for all the inverters to go online and the SCB3000 communicates properly with the inverters.

5.2.3 RS485 Port Configuration

If it is required to apply the three RS485 ports COM1, COM2 and COM3 to connect the inverters on the customer site, you can use the port configuration to pre-set the number of inverters. For example, if you set the number of inverters connected to the COM1 and COM2 ports to 10 and 13 respectively, then check COM1 and COM2, enter the numbers 10 and 13, click "Set" to complete the setting.
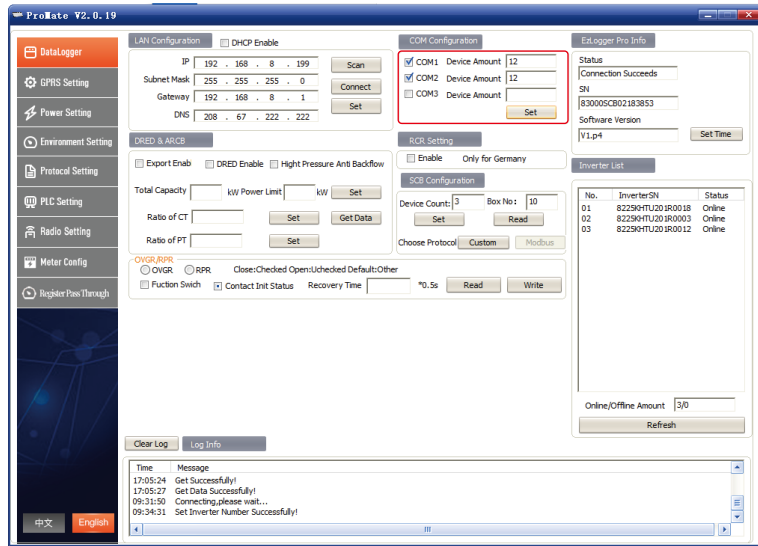
5.3 Configuration Instructions for Fiber Optic Switches

Refer to these instructions if you choose the fiber optic version.

Partial parameters of fiber optic switches: fiber optic switches use single-mode single fiber with the optical port of SC, center wavelength of 1310/1550nm, and transmission distance of 20KM.

5.3.1 Instruction for Use of Fiber Optic Switches

Connect the fiber jumper or tail fiber from the terminal boxes at both ends of the fiber to the optical port of the Gigabit fiber optic switch, or the Gigabit fiber optic port with one end being connected to the transmitter or router. Please note that both ends of the same fiber optic must be connected to the TX and RX ports, otherwise the fiber optic connection will not be made correctly.

Note: When using the fiber optic ring networking, there must be only one root node in one ring, with the others being slave node devices.

5.3.2 Indicator Description for Fiber Optic Switches

PWR	Power Indicator	When it's on, it indicates that the power supply is OK.
RUN	System Operation Indicator	Flashing slowly: System operating properly; Flashing rapidly: Ring network functions enabled
FXL1	FXL1 Optical port indicator	On: Optical port connection good; Flashing: Data transmission in progress at the port
FXL2	FXL2 Optical port indicator	On: Optical port connection good; Flashing: Data transmission in progress at the port
1000M	Network Port Indicator	On: indicates a rate of 1000M
ACT	Network Port Indicator	Light On and Flashing: Data transmission in progress

5.3.3 Resetting and Restoring Factory Settings

Press and hold the RESET key, turning the RUN indicator on continuously and then flashing rapidly, after which it turns back on continuously, now release the RESET key, and wait until the RUN indicator is flashing slowly, which means the factory defaults has been restored.

5.3.4 Instructions for Use of the Ring Network

(1) Login: System Default IP: 11.11.11.254; User name: root; Password: admin
(2) Ring network configuration: In the ring network, only one of its computers needs to be configured as the root node of the ring network, and the others are not required to be configured. The other computers default to ring slave nodes.
(3) IP Configuration: For easy management, the IP address can be modified, but each device must be in the same IP address segment.
(4) If one or more devices in the ring network cannot function properly, make sure to plug in one set of optical fibers after replacement, and then plug in another set after the device system has been started.

6 Program Upgrade

6.1 Local Upgrade

Copy the bin file required for the upgrade to the root directory of a USB flash drive (please use a USB 2.0 device with the format of FAT32), insert it into the USB port of the SCB3000, power off the SCB3000 and power it on again, and the program will be automatically upgraded.

Note: The name of the bin file required for program upgrade is "SCB3000_new.bin". The bin file will be sent to customers by email. After reception of the bin file, customers put it in the root directory of the USB flash drive and check whether the file name is "SCB3000_new.bin". During the upgrade process, all 8 indicators of SCB3000 are on, indicating that the program is being upgraded. When the indicators return to normal operation mode, the program is upgraded successfully. Do not power off during the program upgrade.

6.2 Remote Upgrade

The upgrade program is uploaded to the server by GOODWE in the background, and the SCB3000 will detect the upgrade by itself.

7 Maintenance and troubleshooting

Note: When maintaining, power off the system. Make sure power is completely disconnected before performing maintenance.

7.1 Maintenance

Scope of maintenance:
Make sure there are no strong electromagnetic interference devices located close to the SCB3000. Make sure there is no heat source located close to the SCB3000.
Check the SCB3000 regularly for signs of loose cable connections; make sure all cables are connected securely.

7.2 Troubleshooting

Typical faults:

No.	System error	Possible Causes	Recommendations
1	The system is not powered on	There is no power supply to the socket	Check that the LN power input is correct
		AC Input on the adapter is not inserted correctly	Check the adapter to make sure the AC Input is fully inserted into the socket
		DC Input on the adapter is not inserted correctly	Check the adapter to make sure the DC Output is inserted into the Power port
		The power adapter is faulty	Replace the power adapter
		The SCB3000 system failure	Contact the supplier or GOODWE Services
2	Cannot acquire any inverter device in ProMate software	The three-phase AC power line is not connected	Check the three-phase AC power line is connected correctly and cecurely. If not, reconnect it.
		The device Modbus address is not set	Depending on the actual connected inverter to set Modbus address
		The three-phase switch is not closed	Check the internal three-phase switch of the SCB3000 is connected correctly and cecurely.
		The PLC communication board is faulty	Contact the supplier or GOODWE Services

Note: since the SCB3000 is maintained for its entirety, replace the whole machine if there is an internal failure.
When replacing the SCB3000, power off the system.

8 Technical Data

Model	SCB3000
Communication	
Max. Inverters Supported	60
RS485 interface	4
Ethernet	1*RJ45, 10/100 Mbps
Number of PLC	1
Input Voltage Range of PLC (V)	800
Configuration	
Datalogger	Ezlogger Pro*1
Fibre Channel Switch	2 optical ports, 6 electrical ports
Fiber Termination Box	4-input, 24-ouput, SC single-mode
Power Supply	100–277Vac, 50/60 Hz
Power Consumption (W)	≤18
Mechanical	
Dimensions (W×H×D mm)	350*460*143
Weight (kg)	10.5
Installation Method	Wall mounting, bracket mounting, pole mounting
Environment	
Operating Temperature Range (℃)	-30 ~ 60℃
Storage Temperature Range(℃)	-40 ~ 70℃
Relative Humidity	0-100% (non-condensing)
Max. Operating Altitude (m)	2000
Ingress Protection Rating	IP65

9 Certifications

CE