GOODWE



User Manual

Solar Communication Box

(SCB3000A | SCB3000B)

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Notice

The information in this user manual is subject to change due to product updates or other reasons. This manual cannot replace the product labels or the safety precautions unless otherwise specified. All descriptions in the manual are for guidance only.

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1 About This Manual

This manual describes the product information, installation, electrical connection, commissioning, troubleshooting, and maintenance of solar communication box SCB3000A and SCB3000B. Read through this manual before installing and operating the product. All the installers and users have to be familiar with the product features, functions, and safety precautions. This manual is subject to update without notice. For more product details and latest documents, please visit www.gesolarinverter.com.

1.1 Applicable Model

This manual is applied to SCB3000Aand SCB3000B.

1.2 Target Audience

This manual applies to trained and knowledgeable technical professionals. 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 manual are defined as follows:

A 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.
Indicates a low-level hazard that, if not avoided, could result in minor or moderate injury.
NOTICE
Highlight and supplement the texts. Or some skills and methods to solve product-related problems to save time.

1.4 Updates

The latest document contains all the updates made in earlier issues.

V1.0 2022-07-30 First Issue

2 Safety Precaution

NOTICE

The communication box SCB3000A and SCB3000Bhave been designed and tested strictly according to the relative safety regulations. As an electrical and electronic equipment, below safety instructions shall be followed during its installation and maintaining. Improper operations may cause severe injuries or property loss to the operator and a 3rd party.

2.1 General Safety

Notice

- The wiring between the grid and the communication box must be disconnected during its installation and maintaining, in case of electric shock.
- Do not touch the electrical parts such as the internal components or cables during the communication box in operation, in case of electric shock.
- The wiring between the grid and the communication box must be disconnected for internal components replacement. Ensure that the new components meet the communication box using requirements. GoodWe shall not be liable for such human injuries or quality warranty.
- It is forbidden to insert or pull the cables when the communication box is in operation.
- Ensure the AC input voltage and current are matched with the communication box's rated voltage and current. Otherwise it may cause damages to the components and the device can not operate. In this case, GoodWe will not be liable for such damage or quality warranty.

Â	Potential risks exist. Wear proper PPE before any operations.	Ţ	Fragile. Handle with care.
	Recyclable.	Ť	Ensure that no moisture can penetrate the product.
X	Do not dispose of the inverter as household waste.Discard the product in compliance with local laws and regulations, or send it back to the manufacturer.	CE	CE marking
	Grounding point. Indicates the position for connecting the PE cable.	-	-

2.2 Symbol Definition

3 Product Introduction

3.1 Product Overview

SCB3000A and SCB3000B are applied in PV power generating system for data acquisition, which achieve data acquisition, protocol switching, centralized monitoring, centralized maintenance and other functions for the inverters, watthour meter, environmental monitors and other devices within the system.

Flexible in networking:

Support PLC or RS485 communication when connecting with the inverter. Support Ethernet or optical fiber communication when connecting with the server.

NOTICE

For PLC communication, SCB3000A and SCB3000B can only communicate with inverters matched. Contact GoodWe after-sale service for details.

3.2 Appearance Introduction



No.	Screen print	Description		
1	PE	PE cable hole		
2	PLC1/PLC2	Three-phase AC input Cable hole		
3	RS485/ETH	RS485 communication cable and network cable hole		
4	SEP1/SEP2	Optical fiber cable hole		
5	-	Ventilation valve		
6	NA	Reserved		
7	AC INPUT	Single-phase AC input Cable hole		
8		PE Terminal		

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 Deliverables



- OT terminal for outer box and communication grounding: SCB3000A *2; SCB3000B *3
- Communication terminal: SCB3000A *1; SCB3000B *2
- Pin terminal: SCB3000A *4; SCB3000B *8

4.3 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. The height and direction of the stacking inverters should follow the instructions on the packing box.
- 4. The equipment must be stacked with caution to prevent them from falling.
- 5. If the equipment has been long term stored, it should be checked by professionals before being put into use.

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. Install the equipment on a surface that is solid enough to bear the equipment weight.
- 3. Install the equipment in a well-ventilated place to ensure good dissipation. Also, the installation space should be large enough for operations.
- 4. The equipment with a high ingress protection rating can be installed indoors or outdoors. The temperature and humidity at the installation site should be within the appropriate range.
- 5. Install the equipment in a sheltered place to avoid direct sunlight, rain, and snow. Build a sunshade if it is needed.
- 6. Do not install the equipment in a place that is easy to touch, especially within children's reach. High temperature exists when the equipment is working. Do not touch the surface to avoid burning.
- 7. Install the equipment at a height that is convenient for operation and maintenance, electrical connections, and checking indicators and labels.
- 8. Install the equipment away from high magnetic field to avoid electromagnetic interference.



Mounting Support Requirements

- 1. The mounting support shall be nonflammable and fireproof.
- 2. Make sure that the support surface is solid enough to bear the product weight load.

Installation Angle Requirements

- Install the equipment vertically or at a maximum back tilt of 15 degrees.
- Do not install the equipment upside down, forward tilt, back forward tilt.



5.2 Installation

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.

Step 1: Put the communication box on the wall horizontally and mark positions for drilling holes. **Step 2:** Drill holes to a depth of 75-80mm using the hammer drill. The diameter of the drill bit should be 15mm.

Step 3: Use the expansion bolts to fix the communication box on the wall.



6 Electrical Connection

6.1 Safety Precaution

- Ensure the switches of communication box and its upstream are powered off before electrical connection. Do not work with power on. Otherwise, an electric shock may occur.
- All operations, cables and parts specification during the electrical connection shall be in compliance with local laws and regulations.
- If the cable bears too much tension, the connection may be poor. Reserve a certain length of the cable before connecting it to the communication box's cable port.

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.

6.2 Open the Box

NOTICE

- Contact after-sale service to obtain the key for the box.
- Keep the key after usage and do not lose it.





6.3 Internal Parts Introduction

SCB3000A



SCB3000B



No.	Item	Function		
1	Grounded bus- bar	For the communication box grounding, PLC grounding or the AC power cable grounding.		
2	Single phase AC input switch	To connect or disconnect the single phase AC input.		
3	Three phase AC input switch	To connect or disconnect the three phase AC input.		
4	Three phase AC input terminal	To connect Three phase AC input cables for PLC communication. For SCB 3000B: the left Three phase AC connecting terminals are corresponded to the left data logger and the right ones for the right data logger.		
5	Single phase input terminal	To connect with Single phase input cables for supplying power to the equipment.		
6	RS485 grounding terminal	To connect with RS485 communication grounding cables.		
7	RS485 communication terminal	To connect with inverter. For SCB 3000B: the left 4 pins are corresponded to the left data logger; while the right pins are for the right data loggers.		
8	Fiber splice tray	To connect with optical fiber devices connected to the network.		
9	Data logger	To collect and analyze the PLC and RS485 signals.		
10	RS485 communication terminal	To connect with the inverter or a third party device.		
11	Power adapter	To supply power to the data logger.		
12	Ethernet port and Indicator	To connect with the computer, router and other Internet devices.		

6.4 Wiring

6.4.1 Connecting the Box for Grounding

PE grounding of the communication box shall not replace the groundings of other ports. Ensure each grounding connections are reliable while wiring.

PE connection outside of the box



PE connection inside of the box



6.4.2 Connecting the Three Phase AC Input Cable

NOTICE

- Ensure the upstream switches of the communication box are disconnected before connecting the three phase AC input cable.
- The voltage range for the three phase AC input cables: AC342V~AC800V; the AC frequency is 50Hz/60Hz.
- For three phase AC input cables, it is recommended to use copper ones.



6.4.3 Connecting the Single Phase Input Cable

NOTICE

- Ensure the upstream switches of the communication box are disconnected before connecting the single phase AC input cables.
- The voltage range for the single phase AC input cables: AC100V~AC240V; the AC frequency is 50Hz/60Hz.
- For single phase AC input cables, it is recommended to use copper ones.



6.4.4 Connecting the RS485 Communication Cable (with the inverter)

RS485 here refers to the RS485 port communicating with the inverter. Users can choose one specific RS485 port to communicate with the inverter upon their demanding. For RS485 communication cables, it is recommended to use Shielded Twisted Pair(STP). Use OT terminals to crimp the shielding layer of the STP. Insert the cable into the communication cable grounding port.

No.	Туре	Port	No.	Туре	Port
1	SCB3000A& SCB3000B	RS485 A	5	SCB3000B	RS485 A
2		RS485 B	6		RS485 B
3		RS485 A	7		RS485 A
4		RS485 B	8		RS485 B



6.4.5 Connecting RS485 Communication Cables (with the inverter or a third party device)

For RS485 communication cables, it is recommended to use Shielded Twisted Pair(STP).

Silk Screen	Туре	Port
60.10	RS485 A	
COM3	RS485 B	Connect with the inverter.
	RS485 A	Connect with a third party device like the environmental
COM4	RS485 B	monitor and so on. Contact after-sale service for this specific function Contact after- sale service to connect the environmental monitor.



6.4.6 Connecting the Ethernet Cable

The communication box can connect with Router, computer, switch and other devices via the Ethernet cables.

For Ethernet cables, it is recommended to use Cat5e or above.





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

6.4.7 Connecting the Optical Fiber

The communication box can connect with optical fiber equipments via the optical fiber for data transmitting. The optical fiber shall be connected by the professionals.

6.5 Network Diagram

NOTICE

- The maximum quantity of inverters connected with the communication box single PLC cable shall not exceed 60 pieces.
- For the paralleling quantity connected with the inverter, please refer to the specific inverter's statement.
- Contact after-sale service for this specific function Contact after-sale service to connect the environmental monitor.



7 Equipment Commissioning

7.1 Check Before Power ON

No.	Check Item
1	The communication box is firmly installed at a clean place that is well-ventilated and easy-to operate.
2	The PE, AC input&AC output cables, RS485 communication cables, PLC communication and the optical fiber are connected correctly and securely.
3	Cable ties are intact, routed properly and evenly.
4	Unused ports and terminals are sealed.

7.2 Power On

Step 1 Turn off the power supply switch of the communication box.Step 2 Turn off the three phase AC input switch.

7.3 Close the Box

NOTICE

Close the door of the box the moment finishing power on, to avoid wrong operations or electric shock danger.





8 System Commissioning

8.1 Indicators

U	\bigcirc	\bigcirc					GHO E
POWER	RUN	SERVER	PC	COM1	COM2	COM3	COM4

Port	Status	Description			
DOWED	ON	The power supply is normal.			
POWER	OFF	The power supply is abnormal.			
RUN	Blinking (1 second ON, 1second OFF)	The device is working normally.			
	ON or OFF	The device cannot work normally.			
	ON	The network is normal.			
SERVER	Blinking (1 second ON, 1 second OFF)	The connection to the router is normal, but the connection to the server fails.			
	OFF	The network is abnormal.			
26	ON	The device is connected to the computer and the ProMate app.			
PC	OFF	The device is not connected to the computer or the ProMate app.			
	ON	The actual number of inverters collected by the communication box is equal to that set by the ProMate app.			
сом1	Blinking (1 second ON, 1second OFF)	The actual number of inverters collected by the communication box is smaller than that set by the ProMate app.			
	Blinking (1 second ON, 3 seconds OFF)	The number of inverters to be collected was not set by the ProMate app.			
	OFF	The communication box cannot collect any inverter data.			
	ON	The actual number of inverters collected by the communication box is equal to that set by the ProMate app.			
COM2	Blinking (1 second ON, 1 second OFF)	The actual number of inverters collected by the communication box is smaller than that set by the ProMate app.			
	Blinking (1 second ON, 3 seconds OFF)	The number of inverters to be collected was not set by the ProMate app.			
	OFF	The communication box cannot collect any inverter data.			

Port	Status	Description
	ON	The actual number of inverters collected by the communication box is equal to that set by the ProMate app.
сомз	Blinking (1 second ON, 1 seconds OFF)	The actual number of inverters collected by the communication box is smaller than that set by the ProMate app.
	Blinking (1 second ON, 3 seconds OFF)	The communication box cannot collect any inverter data.
	OFF	The inverter data is not collected.
60144	ON	Communication with third-party devices like environmental monitoring equipment is normal.
COM4	OFF	Not connected to third-party devices like environmental monitoring equipment.

8.2 Setting the Communication Box Parameters via ProMate APP

ProMate software is designed by GoodWe for functional configuration of the communication box, by which we can realize modification to the IP address of communication box, quantity setting of connected inverters via ports, configuration and field debugging for PLC communication and RS485 communication, etc.

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

Use a network cable to connect the computer and the communication box.

8.2.1 Connecting with PC Software

When Users configure the communication box via ProMate software, there are two ways for the network connection with the PC: through Dynamic IP (DHCP) or Static IP.

Deploy Static IP addresses when use a computer to configure the communication box directly. Deploy Dynamic IP addresses for long-term communication for the communication box. 1. Communication box dynamic IP address connection:

The default value for the communication box is Dynamic IP mode. The communication box can be connected to the Internet in a plug-and-play way simply through the connection of the ETH port of the communication box to the LAN port of the router with an Internet cable. To configure the communication box, connect the computer to the router with a network cable. Open the ProMate software, click **Scan** in the ProMate software, and the Internet connection is successful. Disconnect the computer from the router after the configuration is complete.

Prolate V2.0.6		(**) (**)
Etlagger Pro	Excoper Pho Info Status Connection Succession By \$30005C820460005 Software Version \$10.00 Ten Trave	Inverter List No. InverterSN Status
& Power Setting	LAN Configuration of OHCP Enable COM Configuration	
Environment Setting	Subnet Mask 255 , 255 , 255 , 0 Connect	
Protocol Setting	Gateway 192 . 168 . 8 . 1 DR5 192 . 168 . 1 . 253	
💭 PLC Setting	DRED & ARCB RCR Setting	
	Deto trade Origination Deto trade of Vir Audites and new cessed Deto trade Vir Vir Audites and new cessed Deto trade Vir Vir Vir Vir Audites and new cessed Deto trade Vir	
		Online/Offline Amount
		Refresh
	Log Info	
	Time Message	

NOTICE

If the communication box is set as Static IP mode, it is necessary to switch to Dynamic IP mode before configurations under the Dynamic IP connection mode. Press **RELOAD** button for about 4 seconds to reset and restart the communication box, and the LEDs blink one after another from left to right. After the restart, the communication box will be switched to Dynamic IP mode.

2. Communication box static IP address connection:

Note: If the communication box is set as Dynamic IP mode, it is necessary to switch to Static IP mode first. Press the RELOAD button for about 10 seconds to reset and restart the communication box, and the LEDs blink one after another from left to right. After the restart, the communication box will be switched to Static IP mode. (The default IP address for the Ezlogger of SCB3000A is 192.168.1.200. While the default IP addresses are respectively 192.168.1.200 for Ezlogger A of SCB3000B and 192.168.1.100 for Ezlogger B).

When the communication box is in Static IP mode, the computer it is connected with shall be set to Static IP mode as well. The IP addresses of the computer and the communication box must be set in the same network segment while not the same one. Please configure the IP address on the computer by yourself.

Click the **Connect** button in ProMate. After the connection is displayed successfully, the ProMate will be successfully connected to the communication box.

Extensor Pro	ExLogger Pro Info	Inverter List
G GPRS Setting	Status Connection Succeeds SN 930005C8206E0005 Software Version V1.00	No. InverterSN Status
Power Setting Environment Setting Protocol Setting	LAV Configuration DMCP truble COME Configuration 3P 192 108 1 100 Scan Submet Mark 225 235 0 Connect COME Configuration Getmann 192 108 1 244 Connect COME Configuration Getmann 192 108 1 244 Connect COME Configuration	
💭 PLC Setting	Control Contro Control Control Control Control Control Control Control Control Co	
		Online/Offine Amount Refresh
1.4	Log tillo Clear Log	

NOTICE

If there is only one communication box on the site of the customer and the data is uploaded to GoodWe servers, there is no need to configure the communication box number and location via ProMate software. Connect the ProMate software, click and get the inverter list to see whether all inverters are on line. If there are multiple communication boxes on the site, refer to 8.2.2 for the setting.

	Status Connection Succeeds SN 930035C8206E0005 Software Version V1.00	No. InverterSN Status
GPRS Setting	Set Time	
Power Setting	LAN Configuration DHCP Enable COM Configuration	
Featurement Settion	IP 192 168 1 100 Scan □ COM1 Device Amount 0 base Mask arr arr	
	Gateway 192 , 168 , 1 , 254	
Protocol Setting	DNS 208 . 67 . 222 . 222 Set Set	
PLC Setting	ORED & ARCB RCR Setting	
	Deport Enable DRED Enable Only for Australia and New Zesland Deport Enable Only for Germany	
	Tatal Capacity kov Prover Limit kov Set	
	Device Count: Box No:	
	Kaso of Ci Set Get Data Set Road	
- al	Choise Protocol Custom Products	
100		
IT 1		
		Online/Offline Amount
131-373		Refresh
11	Log Info Cear Log	
	Time Marrana	

8.2.2 Parameter Configuration (For PLC communication on the inverter)

When the ProMate software is successfully connected, start parameter settings for the communication box and the inverter.

(a) Protocol Selection

Click the **Ezlogger Pro** button to select the protocol in the following popping out window. The **Custom** protocol is used for parameter configuration and the **Modbus** protocol is used for normal communication.

The default value for the communication box is the Custom protocol. The following protocol in gray is the current using one. The communication box restarts automatically after changing the protocols. Wait about 1 minute to operate the ProMate software.

- Prolate V2.0.6		
Exterger Pro	Estagger Pro Info	Inverter List
GPRS Setting	Status Connection Succeeds SN 930005CB206E0005 Software Ver	ion V1.00 No. InverterSN Status Set Time
Fower Setting	Image: Configuration Image: Configuration Configuration IP 192 158 1 100 Submet Neek 255 255 0 Connect CONfiguration Extreme V 00 100 Scannect CONfiguration	ount
Protocol Setting	DNS 208 . 67 . 222 . 222 Sat	Set
	Cold and Cold Cold Credit Cold Credit	Ber Not Read
1111		Online/Offline Amount
		Refresh
中文 English	Log to/a Char Log	

NOTICE

Select **Custom** protocol first to configure the communication box number and the inverter address. After all parameters are configured, switch to **Modbus** protocol for communication.

- Prolate V2.0.6		
Et anne Pro	Extragger Piro Info	Inverter List
G GPRS Setting	Status Connection Succeeds SN 930005CB206E0005 Software Version V1.00	No. InverterSN Status 01 8120KHTU201R0013 Online
 Power Setting Environment Setting 	Image: Second	02 8100H7TU212W8002 Online 03 8136H7TU20CP0007 Online
Protocol Setting	Gateway 192 . 168 . 1 . 254 DNS 208 . 67 . 222 . 222 Set Set	
PLE Setting	OPDD ANDS RCK Setting Deport Enable CRK Setting F_Source Teacher Doub for Germany Total Capabry Kor Setting Ratio of CT Set Gerbata Doub for Germany Doub for Germany Set Gerbata Doub for Germany Set Gerbata Objoint Cattern Modius	
1. 18 14		Online/Offline Amount 3/0
		Refresh
P文 English	Log Soft Cever Log The Mesosge 20:29:39 Envert Status List Successfully! 20:31:44 Get Inverter Status List Successfully!	

(b) Device Count and Box No Setting

Please fill in Arabic numbers for **Device Count** and **Box No**.

Fill in the actual quantity of inverters connected to the current communication box in **Device Count**.

Box No is used to distinguish the multiple communication boxes on site (i.e. multiple communication boxes in the field should be corresponded to different **Box No**)

As in below figure: the quantity of inverters connected to the communication box on site is 3, then fill 3 into **Device Count**.

Croffer Lie	Status Connection Succeeds SN 930005CB206E0005 Software Version V1.00	No. Smartarthi Ctabat
GPRS Setting	Set Time	no. proto an pages
Power Setting	LAN Configuration EndDe Enable COM Configuration	
Environment Setting	IP 192 168 1 100 Scan COM1 Device Amount Subnet Mask 255 . 255 . 0 Connect COM2 Device Amount	
Protocol Setting	Gateway 192 , 168 , 1 , 254 DNS 208 , 67 , 222 , 222 Set Set Set	
PLC Setting	ORED & ARCE RCR Setting	
	Court toxis DRED Enable Only for Austhala and New Zaaland Legoot toxis DRED Enable Only for Austhala and New Zaaland Legoot Toxis Conformation Set Conformation Set Conformation Set Conformation Set Read Concert Particular Concert Particular Concert Particular	
T		Online/Offline Amount
		Refresh
	Log Info Clear Log	
	Time Message	

NOTICE

Device Count and Box No must be filled in, otherwise the device cannot work properly.

Below figure: after the **Device Count** and **Box No**. are set, click the **Read** button to check whether the settings are successful.

EzLagger Pro		
GPRS Setting	Status Connection Succeeds SN (950005L82062005 Software Version (V1.00) Set Time	No. InverterSN Status 01 8: Online 02 8: Online
SF Power Setting	UNI Configuration DHCP Enable COM Configuration	03 8: Online
Environment Setting	IP 192 188 1 100 Scan COM1 Device Amount Subnet Nask 255 255 0 Connect COM2 Device Amount	
Protocol Setting	Gateway 192 . 168 . 1 . 254 DNS 208 . 67 . 222 . 222	
PLC Setting	ORED & ARCB RCR Setting	
	Relie of CT Set Set Set Set Set Codese Prolocol Codese Prolocol Codese Prolocol Codese Prolocol Contem Montum	
🖌 AB 74		Online/Offline Amount 3/0
Al Va		Refresh
	Log Info Clear Log	
	Time Message 20:29:58 Get Inverter Status List Successfully! 20:31:44 Get Inverter Status List Successfully!	

(c) Inverter Address Configuration

The communication box and the inverter shall be configured with Modbus address. Users can choose to configure the inverter address by one key or manually.

Below figure: click **One key config** button, and the software randomly assigns the inverter address.

EzLogger Pro	ExLogge	r Pro Info					Inverte	r List	
GPRS Setting		Status Connection	Succeeds	SN 93000	SCB206E0005	Software Version V1.00 Set Time	ND. 01 02	DriverterSN 8	Status Online Online
Fower Setting	No.	InverterSN 8	Box Number	Address 1	ARM Version 0	One key config	03	8	Online
Protocol Setting	2 3	8	1	2 3	0	Manual			
PLC Setting						Update			
						Delete			
						Manual config			
A	Note: as available	long as the arm vers	ion of a device is less	than 4, the "C	One key config", ")	add" and "Update" functions are not			
C. N. 74							Online	c/Offine Amount	3/0
117								Refresh	ž.
	Log Inf	۰ E	Clear Log						
	Tim	e Message							

Below figure: click the **Get** button to check whether the configuration is successful.

Prollate V2.0.6				
🖾 Extense Pre	EzLogger Pro Info			Inverter List
GPRS Setting	Status Connection Succeeds	5N 930005CB206E0005	Software Version V1.00 Set Time	No. InverterSN Status 01 8 Online 02 8 Online
Prover Sorting Fraincorrent Setting Protect Setting Protect Setting Protect Setting	No. Doverber SH Box Num 1 0 1 3 0 1 3 0 1 3 0 1 3 0 1 4 1 5 0 1 1 1 5 0 1 5	er Address ARM Version 1 0 2 0 3 0	One key config Menual Add Update Delete Manual config Get	03 8 Onine
1	Note: as long as the arm version of a device is available	ess than 4, the "One key config", "	Add" and "Update" functions are not	Onine/Offine Amount 3/0 Refresh
中文 English	Log Info Cherr Log			

(D) Inverter Address Configuration Manually

Below figure: choose to add **Modbus** address manually if there is special requirements about the inverter's address on site. Click **Add**, the following box will pop up. Then enter **Inverter SN**, **Box Number** and the corresponding Modbus **Address**. Select **OK**, and click **Manual config**.

ProMate V2.0.6		
EzLogger Pro GPRS Setting Prover Setting	Ectopper Prio Trito Status Connection Succeeds SN 930005CB20620005 Software Version V1.00 Set Time	Inverter List No. InverterSN Status 01 8. Online 02 8. Online 03 8. Online
forward Setting fortace Setting Protocol Setting Protocol Setting Protocol Setting	No. InverterSN Dex Number Address Address Address 1 0 1 0 0 2 0 1 0 0 3 0 1 0 0 3 0 1 0 0 3 0 1 0 0 3 0 1 0 0 3 0 1 0 0 3 0 1 0 0 3 0 1 0 0 Address 0 0 0 0 Address <td< td=""><td></td></td<>	
	Log info Tree Message	Onine/Offine Amount 30 Refresh

Below figure: if you need to modify the Modbus address after adding it, you can select the Inverter serial number for modification. Click **Update** button, and a dialog box will pop up. Enter the parameters for modification, click **OK**, and then click **Manual config**.

9 BPIS Setting Status [Corrector Succeeds or [s] 0005CH304E005 Software Version [v1.00 01 02 9 Proto Setting 1 1 0 1 2 8 1 1 2 Proto Setting 3 8 1 1 1 3 0 1 1 2 Proto Setting 3 8 1 2 9 Proto Setting 1 3 0 9 Proto Setting 1 1 0 9 Proto Sett	nverterSN Statu Online Online Online
Prese Scring (Protect Scring Protect Scring (Protect Scring (Protect Scring) No InverterSN 10 Box Number Address 10 Address 10 Address 10 Address 10 One key config Merual (Update Box Number 11 One key config Merual (Update Box Number 11 No InverterSN: Box Number 11 One key config Merual (Update Debter Merual (Update Debter Manual config Get OK CANCEL Get	Online
Environment Setting Potical Setting PIC Setting PIC Setting Director Setting Director Setting Director Set B Ber Numbers 1 Address: 5 Manual config Get	
Protoci Serting PE Ser	
PECSanage Jmeeter Sik 8 Update Box Number: 1 Delete Address: 5 Menual config OK CANCEL Get	
Box Humbor 1 Delete Address 5 Or. CANCEL Get	
Address 5 Manual config OK CANCEL Get	
OR CANCEL Get	
Get	
Note: as long as the arm version of a device is less than 4, the "One key config", "Add" and "Update" functions are not	
Orline(CF	fine Amount 3,0
	Refresh
Log Info Clear Log	
Time Mercane	

NOTICE

After selecting **Add**, **Update**, or **Delete** under Manual, you must click the **Manual config** button and the settings becomes effective.

▶ 09 Maintenance

(E) Protocols Switching

Click **Get** via the Inverter List on the right, and the on line inverters connected to the communication box can be displayed. Confirm that all inverters are on line with Modbus address configured. Then select Modbus in Choose Protocol when back to **EzLogger Pro** interface.

Corolline Lun	Easter Connection Successfe SN 93200508309	roops Software Version V1.00	the formation the first
GPRS Setting	Sam forecon access 24 forecone	Set Time	ND. UTWERDESN Startu
Fower Setting	LAN Configuration DHCP Enable	COM Configuration	
Frairment Settion	P 192 . 168 . 1 . 100 Scan	COM1 Device Amount	
	Gateway 192 , 168 , 1 , 254	COM2 Device Amount	
Protocol Setting	DNS 208 , 67 , 222 , 222 Set	Set	
PLC Setting	ORED & ARCE	RCR Setting	
-	Export Enab DRED Enable Only for Australia and New Zealand	trable Only for Germany	
	Total Capacity k/W Power Limit k/W Set	Beer Mar	
	Ratio of CT Set Get Data	Set Read	
		Choose Protocol Custom Modbus	
NR OK			
1 al			
E = M			Online/Offline Amount
			Refresh
W. K.	Log Info		
	Time Messare		

NOTICE

- 1. Please confirm whether the settings of **Box No** on the inverter and the communication box are the same. If not, the communication box and the inverter are not able to communicate after choosing the **Modbus** protocol.
- 2. Wait for about 1 minute to switch protocols. After the switch is successful, wait for all inverters to become online, then the communication box and the inverter can have normal communications.

8.2.3 RS485 Port Configuration

If the customer needs the three RS485 ports **COM1**, **COM2** and **COM3** connected to the inverter, the number of inverters can be preset by port configuration. Suppose that **COM1** port connecting 10 inverters and **COM2** port connecting 13 pieces, then click **COM1**, **COM2** respectively and enter 10, 13. After that, click **Set** to finish the configuration.

Coloneer Pro	Extegger Pro Info		Inverter List
GPRS Setting	Status Connection Succeeds SN 930005CB20020005	Software Version V1.00 Set Time	No. InverterSN Status
Fower Setting	L4V Configuration DHCP Enable CCM IP 192 168 1 100 Scan M cc	Configuration	
) Environment Setting	Subnet Nask 255 , 255 , 255 , 0 Connect	M2 Device Amount 13	
Protocol Setting	045 208 . 67 . 222 . 222	M3 Device Amount Set	
PLC Setting	GRED & ARCB RCR	Setting	
	Image: CRD Drake Crl for Autrata and New Zealand End Image: Autrata Autrata and New Zealand End End Total Capacity Kult Power Limit KW Set Radio of CT Set Get Data Choose	ohly for Gemany Configuration Count to Box No: Set Read Protocol Custem Moditur	
6 11 74			Online/Offline Amount
			Refresh
	Log Info Clear Log		
front Frontiet	Time Message		

8.3 Optical Fiber Switch Configuration Instructions

For optical fiber switch configuration, refer to the relative manuals.

9 Maintenance

9.1 Local Upgrading

Put the bin file for upgrading under the root directory of U disk (the U disk shall be with 2.0 interface and FAT32 in format). Insert the U disk into USB port of the data logger. Degenerate the communication box and then power on it again, and the program will upgrade automatically.

NOTICE

Name the bin file for upgrading as **SCB3000_new.bin**. The bin file will be sent to the customer in E-mail. The customer shall put the file under the root directory of U disk. Then check whether the file name is "SCB3000_new.bin". The program is upgrading if all the 8 indicators are lighted. The upgrading is successful when all indicators return to normal. The power supply shall not be disconnected during the upgrading.

9.2 Power Off

🚹 DANGER

Power off the communication box before maintain it. Otherwise it may cause damages to the communication box or electric shock.

Step 1 Disconnect the switch for the communication box's power supply.

Step 2 Disconnect the three phase AC input switch.

9.3 Maintenance

Ensure that there is no strong electromagnetic interference device around the communication box.

Ensure that there is no heating source around the communication box.

Check whether the wiring of the communication box is loosen regularly. Ensure that the cables are firmly connected.

9.4 Troubleshooting

No.	Fault	Cause	Troubleshooting	
1		There is no power supply to the socket.	Check whether LN power input is normal.	
2		The adapter does not been connected well on the AC input side.	Check the adapter and ensure it is fully inserted into the socket on the AC input side.	
3	is not able to power on.	The adapter does not been connected well on the AC input side.	Check the adapter and it is inserted into the Power port on the DC output side.	
4		The adapter is fault.	Replace a new adapter.	
5		The communication box has system fault.	Contact with the supplier or GoodWe after-sale service.	
6		The three phase AC power cable does not being connected.	Check whether the three phase AC power cable is connected. If not, re-connect it.	
7	It is unable to obtain the inverter on the ProMate software.	The Modbus address of the communication box does not being set.	Set the Modbus address according to the actual connected inverter.	
8		The three phase switch does not being closed.	Check whether the three phase switch inside of the communication box is connected.	
9		The communication board of the PLC is faulty.	Contact with the supplier or GoodWe after-sale service.	

NOTICE

The communication box is maintained as a whole part. If there is faulty happening inside of it, contact GoodWe after-sale service.

10 Technical Parameters

Model	SCB3000A	SCB3000B				
Communication						
Max. Inverters Supported	60	120				
RS485 interface	4	8				
Ethernet	1*RJ45, 10/100 Mbps	2*RJ45, 10/100 Mbps				
Number of PLC	1	2				
Input Voltage Range of PLC (V)	800					
Configuration						
Datalogger	Ezlogger Pro*1	Ezlogger Pro*2				
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	≤30				
Mechanical						
Dimensions (W×H×D mm)	724*780*229					
Weight (kg)	25.5					
Installation Method	Wall mounting, bracket mounting, pole mounting					
Environment						
Operating Temperature Range (°C)	-30 ~ 60°C					
Storage Temperature Range(°C)	-40 ~ 70°C					
Relative Humidity	0-100% (non-condensing)					
Max. Operating Altitude (m)	2000					
Ingress Protection Rating	IP65					



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Local Contacts