ShineMaster-X Operation Manual V 1.0.0.0



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1 About this manual

1.1 Manual Description

Dear user, thank you very much for using the ShineMaster-X data collector developed and produced by Shenzhen Growatt New Energy Co., Ltd. (hereinafter referred to as Growatt). More comments on performance and functionality. The purpose of this manual is to provide users with detailed product information and installation, operation and maintenance instructions.

1.2 Copyright Notice

The copyright of this user manual is owned by Growatt. Without the written permission of the company, no unit or individual may excerpt, copy part or all of the content of this user manual, and shall not spread it in any form, including materials and publications., infringement must be investigated.

The version number of this manual is V1.0. Growatt has the final right to interpret this user manual. If there are changes in product parameters, appearance, packaging, etc., the latest information of the company shall prevail without prior notice.

1.3 Applicable personnel

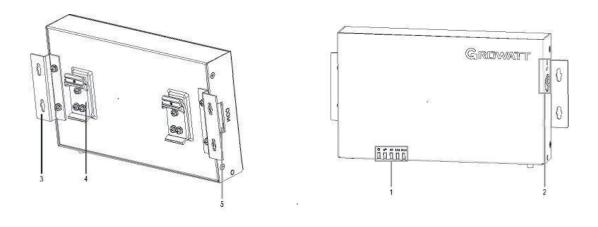
This manual is suitable for professional technicians who install, debug and maintain ShineMaster—X data collectors and users who perform daily operations. If necessary, please refer to the corresponding user information of Growatt.

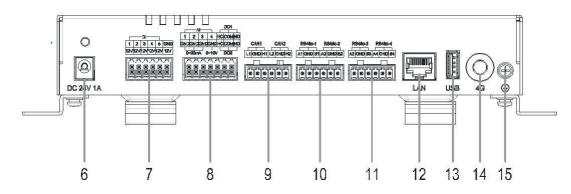
1.4 Manual usage

Please read this manual carefully before installing and using the ShineMaster—X data collector. At the same time, please keep this manual in a safe place so that the operation and maintenance personnel can find it easily. The content of the manual will be continuously updated and corrected, and there will inevitably be slight discrepancies or errors with the actual product. Users are advised to refer to the actual product purchased, and download the latest user manual through oss.growatt.com, or obtain the latest user manual through Growatt's sales or service channels

2 product introduction

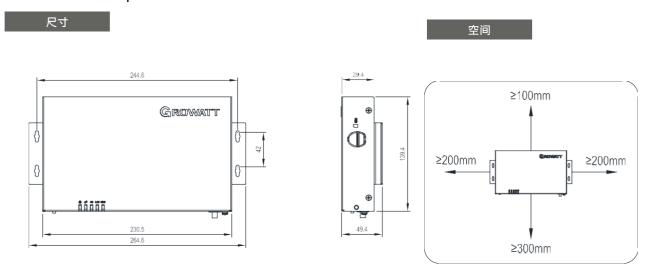
- Before installing the device, please read the user manual in detail to understand product information and safety precautions.
- Insulated tools must be used when installing the device. For personal safety, please wear personal protective equipment.





(1) LED indicators (POWER, BLE, 4G, LAN, RUN) (2) SIM card socket (SIM)		
(3) Install the mounting ear	(4) Guide rail clips	
(5) COM port	(6) 24 V power input port (DC IN 24V , 1 A)	
(7) D I port	(8) AI (DO) port	
(9) CAN port	(10) RS 485-1 , RS485-2	
(11) RS 485-3, RS485-4	(12) GE port (LAN)	
(13) USB port (USB)	(14) 4G antenna	
(15) Protective grounding point		

3 installation requirements



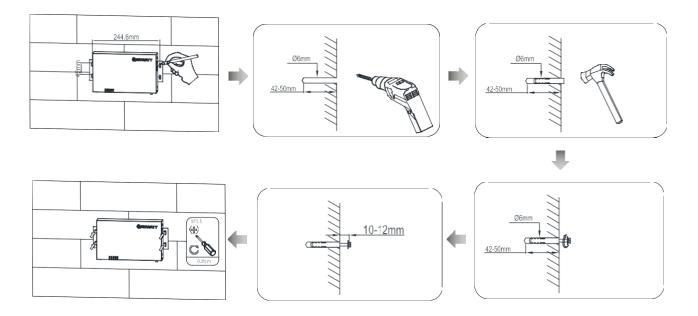
4 device installation

4.1 Install ShineMaster-X

4.1.1 wall mount

Explanation

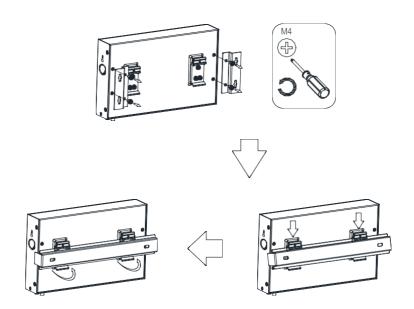
- Please choose a flat and firm indoor wall for installation.
- When installing the ShineMaster-X on the wall, make sure that the cable connection area is facing downwards, which is convenient for cable connection and maintenance.
- It is recommended to use the selftapping screws and expansion tubes provided with the box for inst allation.



4.1.2 rail installation

Explanatio

- Before installation, please prepare the 35mm standard guide rail and install it firmly.
- It is recommended that the effective length of the guide rail is ≥ 260mm.



4 electrical connection

5 Electrical connections

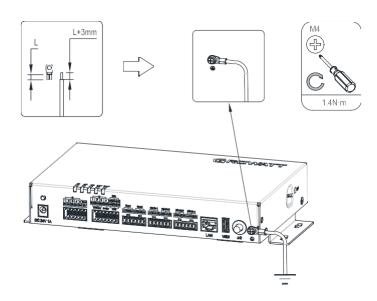
5.1 Cable preparation

type	Recommended Specifications
protective earth	Cross-sectional area 4mm² ~ 6 mm² or 1 2 AWG ~ 10 AWG outdoor copper
	core cables.
RS 485 communication line	-core or multi-core cables with a cross-sectional area of 0.2 mm ² to 2.5
	mm ² or 2.4 AWG to 14 AWG.
MBUS cable (optional)	Distributed in the box
DI signal line	-core or multi-core cables with a cross- sectional area of 0.2 mm ² to 1.5
power output line	mm ² or 2.4 AWG to 16 AWG.
Al signal line	
DO signal line	
cable	Delivery in box

5.2 Install the ground wire

Explanation

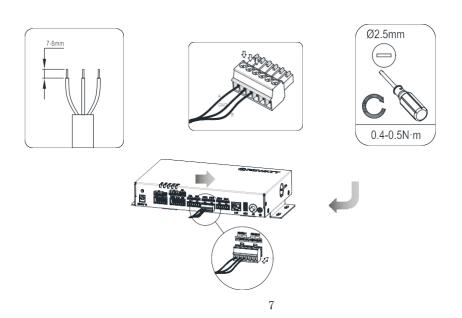
• To improve the anti-corrosion performance of the ground terminal, it is recommended to apply silicone or paint to the outside of the ground terminal for protection after the ground cable is



5.3 Install RS 485 communication line

Explanatio

- It is recommended that the RS485 communication distance not exceed 1000m.
- ShineMaster—X can be connected to RS485 communication devices such as inverters, environmental monitors, and electric meters through the RS485 port.
- Please make sure that RS485+ is connected to RS485A of ShineMaster-X, and RS485- is connected to RS485B of ShineMaster-X.

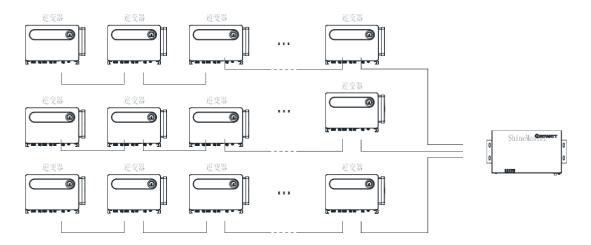


port	logo	illustrate
	+	RS 485 A, RS 485 differential line
RS4851, RS4852, RS4853,		nu m ber +
RS485 4	-	RS 485 B, RS 485 differential
		signal-

5.3.1 cascade connection

Explanatio

- It is recommended that the number of devices connected to each RS485 is less than 32.
- The baud rate, communication protocol and verification method of all devices on each RS485 cascade link must be consistent with the RS485 communication parameters of the corresponding RS485 port of ShineMaster–X.

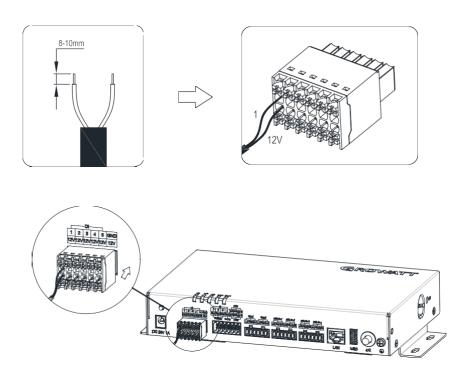


5.4 Install DI signal cable

Explanatio

- ShineMaster—X can access DI signals such as remote grid dispatching commands and alarms through the DI port, and only supports passive dry contact signal access.
- It is recommended that the signal transmission distance not exceed 10m.

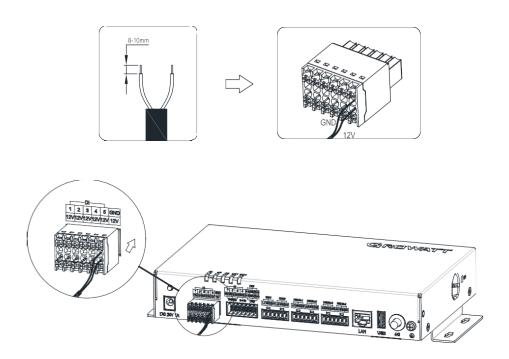
port	illustrate
DI 1	
DI 2	Support passive
DI 3	dry contact
DI 4	signal access
DI 5	



5.5 Install the power output line

Explanatio

- In the scenario of limited power grid connection or sound and light alarm, Shine Master—X can drive the coil of the intermediate relay through the 12V power output port.
- It is recommended that the transmission distance not exceed 10m.



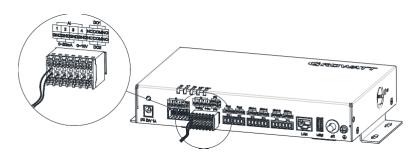
5.6 Install Al signal cable

Explanation

- ShineMaster-X can access the Al signal of the environmental monitoring sensor through the Al port.
- It is recommended that the transmission distance not exceed 10m.
- 1,2,3,and 4 of the Al port are connected to the Al signal +, and GND is connected to the Al signal -.



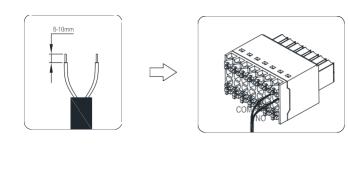
port	illustrate
A I 1	Support 4mA ² 20
A I 2	mA, 0mA [~] 20 mA current input
A I 3	current input
A I 4	Support OV~10V
	voltage input

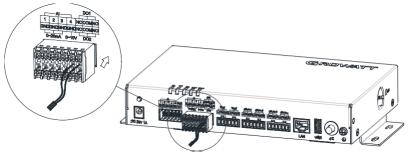


5.7 Installing the DO signal line

Explanation

- The DO port supports a maximum signal voltage of 12V.
- It is recommended that the transmission distance not exceed 10m.



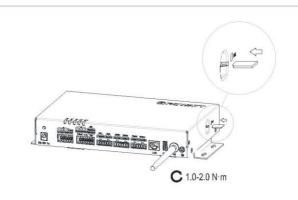


5.8 Install SIM card and 4G antenna

Explanation

- Please bring your own standard SIM card (maximum size: 15mm×225mm). To install the SIM card, you can judge the installation method of the SIM card according to the silk screen on the SIM card socket.
- When the SIM card is pressed to the limit position, the SIM card will be locked. At this time, the SIM card has been installed correctly.
- When removing the SIM card, push the SIM card inward, and the SIM card will pop out automatically.

Install the SIM card according to the silkscreen on the SIM card socket :

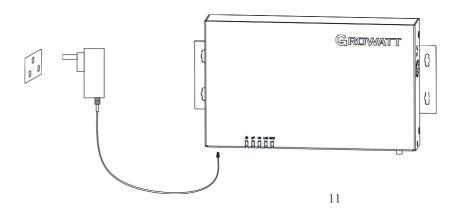


SIM card monthly traffic requirements		traf	ffic baseline
inverter	10MB+4MB x number of inverters	•	Support device performance data
electric m eter	3MB x number of meters		refresh every 5 minutes
Environmental	3MB x number of environmental	•	Support monthly inverter log and IV
detector	monitors		diagnostic data export , and inverter
			upgrade once a month.

6 Power on the system

1. Connect the power

• Connect the power adapter cable and turn on the switch on the side of the AC outlet.



说明

- 电源适配器的额定输入电 压为 100V AC² 240V AC, 额定输入频率为 50Hz/60Hz。
- 请选择与电源适配器匹配的交流插座。

2. Observe the LED indicator to check the running status of ShineMaster-X.

indicator light	meaning
Power Indicator	Always off: The power supply is working abnormally;
	Steady on: The power supply is working normally.
bluetooth light	Always off: Bluetooth is not enabled;
(not currently	1S blinks 1 time, off 1 time: Bluetooth is enabled, but not
supported)	connected to the mobile APP;
	Steady on: Bluetooth works normally and is connected to
	the mobile APP normally.
4G indicator light	Always off: does not support 4G function;
	1S blinks 2 times, off 1 time: no SIM card inserted
	1S blinks 1 time, off 1 time: 4G network is abnormal or
	SIM has no traffic;
	Steady on: The 4G network is normal.
LAN indicator	Always off: the network is not connected;
	1S blinks 1 time, off 1 time: Obtained a valid IP, no
	network data interaction. That is, the connection with the
	server is abnor m al.
Status Indicator	Steady off: The system is working normally without any
	alar m or failure;
	Blinking blue light: the system has an alarm; for example:
	abnormal connection to the server, abnormal
	communication of monitoring equipment, etc.
	Steady red light: There is a system failure. For example:
	The SD card is not working properly. The MMC memory
	chip is not working properly. The anti-backflow function
	fails. Lightning protection alarm, third-party alarm signal,
	etc.

7 Shinemaster-X built-in page operation

7.1 Built-in page login method

Explanation

• ShineMatser-X defaults to disable DHCP inside the factory, and the default access IP is: 192.168.0.254, so when using ShineMaster-X for the first time, please connect ShineMaster-X to a computer through a network cable to access the built-in page.

7.1.1 Method 1: Access the built-in login page by directly connecting to the computer through a network cable

- Connect the PC and ShineMaster –X directly through a network cable, and change the IP of the computer to 192.168.0.XXX (XXX ranges from 2 to 253). (For computer IP modification, please refer to 7.1.3 "Computer IP Setting Reference")
- ShineMaster -X is: 192.168.0.254, enter 192.168.0.254 on the webpage to access the built-in page.



Figure 7- 1 default login IP



Figure 7- 2 login interface

• The user name is "admin" and the password is "admin". After entering, click Login, and enter the built-in page after the prompt is successful.

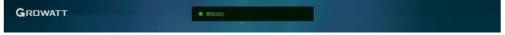


Figure 7- 3Successful login prompt



Figure 7- 4 built-in pages

7.1.2 Method 2: Access the built-in login page through a router



Figure 7- 5 Login password



Figure 7- 6 DHCP settings

- Check to make sure that Shine Master-X has enabled the DHCP function, and connect the PC and Shine Master-X to the same router so that they are in the same LAN.
- Check the network segment where the router is located.

Take TP_LINK router as an example:

Click win + R on the PC, and enter cmd to enter the command line interface, and enter ipconfig to view the IP assigned to the computer by the router.



Figure 7- 7 cmd command

```
C:\Users\Administrator>ipconfig
Windows IP 配置
```

Figure 7-8 Query IP command

```
无线局域网适配器 WLAN:

连接特定的 DNS 后缀 . . . . . : 1an

本地链接 IPv6 地址. . . . . : fe80::c577:45a2:4fee:7cdc%15

IPv4 地址 . . . . . . : 192.168.10.220

子网掩码 . . . . . . . . : 255.255.255.0

默认网关. . . . . . . . . : 192.168.10.1
```

Figure 7-9 Query the IP field

• It can be seen that the IP address assigned to the computer by the router is 1 92.168.10.220. It can be confirmed that the network segment of the router is 1 92.168.10. X, just enter 1 92.168.10.254 in the browser to log in to the built-in interface.



Figure 7- 10 Login IP field



Figure 7- 11 Login interface

• The user name is "admin" and the password is "admin". After entering, click Login, and enter the built-in page after the prompt is successful.



Figure 7- 13 built-in pages

7.1.3 Computer IP setting reference

(1) Click Start → Control Panel → Network and Sharing Center in the lower left corner of the desktop



Figure 7- 14Computer Network and Sharing Center

(2) Click the "Change Adapter Settings" function button in the upper left corner of the function bar



Figure 7- 15 Change Adapter Settings Options

(3) Find the "Local Area Connection" icon. After selecting "Local Area Connection", double-click the left mouse button or right-click Properties



Figure 7- 16 Locally Attached Ethernet

(4) Select Internet Protocol Version 4, and then click the "Properties" button in the lower right corner



Figure 7- 17 Ethernet properties

(5) In the pop-up Internet Protocol Version 4 Properties dialog box, click "Use the following IP address", and then enter the IP in the blank column below: 192.168.0.X (XX ranges from 2 to 253 Any value), subnet mask: 2 55.255.255.0, default gateway: 1 92.168.0.1,

DNS server does not need to be set.

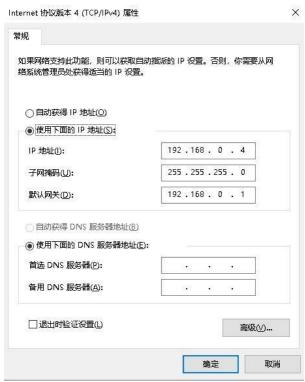


Figure 7- 18 IP address modification

(6) After the setting is complete, click OK to save the modification.

7.2 Introduction to built-in pages

7.2.1 Layout Introduction



Figure 7-19 Built - in page layout

A	main menu		
В	Submenu		
С	current menu	ite m na m e	
D.	Information	area a	nd
	operating area	L	
E.	language swite	eh	
f	Accounts and	Logging Out	

There are four option columns in area A directly above the built-in page as the main menu, which are system information, product maintenance, system settings, and equipment monitoring. Each has its own operating area.

7.2.2 ShineMaster-X system information

• Click ShineMaster—X system information to view "product information", "device list", "communication information" and other information;



Figure 20 Product information bar

product	ShineMaster-X serial number, software version and other information
information	
Device List	Registered device information and online information
Internet	Details of wired and wireless networks
Information	
RS 485	Setting information for RS 485-1 , RS 485-2 , RS 485-3 , RS 485-4
CAN	CAN communication information

7.2.3 ShineMaster-X product maintenance



Figure 21 Product maintenance bar

system	Serial number setting and time setting of Shinemaster -X
settings	
software	Online upgrade and local upgrade function of ShineMaster-X software
upgrade	

7.2.4 ShineMaster-X system settings



Figure 22 System Settings Bar

wired	Parameter settings for ShineMaster—X connecting to the server through the network port
communication	
Wireless	ShineMatser - X parameter settings for connecting to the server through a 4G network
communication	card
RS 485	Communication parameter setting of RS 485-1, RS 485-2, RS 485-3, RS 485-4
CAN	Parameter setting of CAN communication
server	Domain name setting and upload interval setting of the connected server

7.2.5 ShineMaster-X equipment monitoring



Figure 23 Equipment monitoring bar

running	View the specific information of running inverters, meters, environmental monitors, and PID
information	devices
history	View historical data of running inverters, electricity meters, environmental monitors, and PID
information	devices
equip m ent	View, add, delete inverters, meters, environmental monitors, PID devices
maintenance	

7.3 ShineMaster–X communication settings

7.3.1 Shien Matser-X RS 485 communication settings

• Shine Matser-X factory default RS485-1, RS485-2, RS485-3, RS485-4 four-way 485 baud rate is 9600, in actual use, set the corresponding baud rate for four-way 485 according to different installation environments.

(1) Refer to "7.1" "Login method of built-in page" to log in the built-in page, the login account is "admin", the password is "admin", and select "RS485" in the list on the left side of "System Settings";

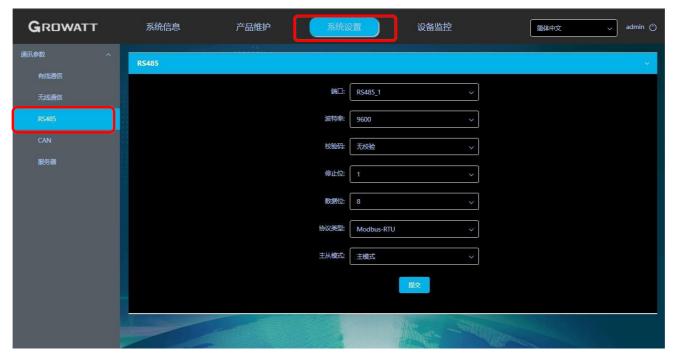


Figure 24 RS485 setting _

(2) Select the corresponding RS485 channel in the "Port" drop-down list, there are four channels of RS 485-1, RS485-2, RS485-3, and RS485-4 to choose from

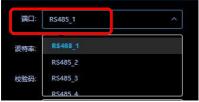


Figure 25 RS 485 channel setting

(3) Select the baud rate in the "Baud rate" drop-down list, there are "4800", " $9\,600$ ", " $1\,9200$ ", " $3\,8400$ ", "115200" to choose from



Figure 26 RS 485 baud rate setting

(4) Select the verification method in the "Check code" drop-down list, there are "No check", "Odd check" and "Even check" to choose from;



Figure 27 RS 485 check code setting

(5) Select the number of stop bits in the "Stop bit" drop-down list, and you can choose 1-2 bits.



Figure 28 RS 485 stop bit setting

(6) In the "Data Bits" drop-down list, select the number of data bits, you can choose 6-8 bits.



Figure 29 RS 485 data bit setting

(6) In the "Protocol Type" drop-down list, select the Modbus protocol to be used



Figure 30

(8) In the "Master-Slave Mode" drop-down list, select whether to communicate as a master or collect communication.



Figure 31 RS 485 master-slave mode setting

(9) After the setting is complete, click "Submit" and it will prompt "Setting succeeded";

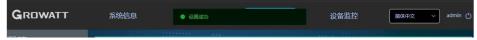


Figure 32 Setup success prompt

(10) Check "RS 485" in the left list of "System Information" to check whether the corresponding RS485 channel setting information has been changed successfully;



Figure 33 RS485 configuration _

7.3.2 Shine Matser-X CAN communication settings

(1) Refer to "7.1" "Built-in page login method" to log in to the built-in page, the login account is "admin", the password is "admin", and select "CAN" in the list on the left side of "System Settings";



Figure 34 CAN settings

CAN channel in the "Port" drop-down list, there are CAN1 and CAN 2 channels to choose from



Figure 35 CAN port settings

(3) Select the baud rate in the "Baud rate" drop-down list, there are "125 K " , " 250 K", and " 500 K" to

choose from



Figure 36 C a n baud rate setting

(4) In the "Protocol Type" drop-down list, select the Modbus protocol to be used



Figure 37 CAN, communication protocol settings

(5) After the setting is complete, click "Submit" and it will prompt "Setting succeeded";

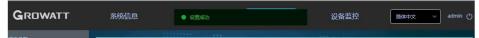


Figure 38 Setup success prompt

(6) Check "CAN" in the left list of "System Information" to check whether the corresponding CAN channel setting information has been changed successfully;



Figure 39 CAN configuration

7.4 ShineMaster-X monitoring device addition, deletion and query

illustrate

- Before ShineMatser-X monitors photovoltaic equipment, you need to enter the built-in page "ShineMaster-X Data Collector Settings" page to add equipment.
- The ShineMaster-X built-in page supports the display of equipment data information, including "inverter", "electric meter", "environmental monitor", "PID equipment", and supports historical data viewing.
- The address of the device is divided into device address and system address. The device address is the RS485 communication address of the device itself. The system address is a management address allocated by ShineMaster-X itself for the device. The system address follows the principle of priority, starting from the 01st bit. The device added first will be given priority.

7.4.1 Addition and deletion of equipment

1. Add an inverter

(1) Refer to "7.1" "login method of built-in page" to log in to the built-in page, the login account is "admin", the password is "admin", select "device monitoring" in the first-level menu, and select "inverter" in the second-level menu, Select "Device Maintenance" from the third-level menu.



Figure 40 Inverter equipment maintenance interface

(2) Click "Add", and the "Add Data" window will pop up.



Figure 41 Inverter add interface

485 channel where the device is located in the drop-down list of "Channel", there are four channels of RS 485-1, RS485-2, RS485-3 and RS485-4.



Figure 42 channel selection

(4) Select the inverter type in the drop-down list of "Type".



Figure 43 Inverter Type Selection

(5) "Start address" writes the start address of the added device, for example: suppose the address of the photovoltaic inverter to be monitored is "1", then the start address is 1.

Note: There are only 32 devices that can be added to each RS 485 channel, and the address of the photovoltaic device is 1–254. The same address cannot be connected to the same 485 channel, and the device addresses of different channels can be repeated;



Figure 44 start address

(6) Number of addresses: ShineMaster supports adding multiple devices of the same type with consecutive addresses at one time. For example: Suppose there are four photovoltaic inverter addresses to be monitored, and the addresses are 1, 2, 3, and 4 respectively, then write "1" for "start address" and "4" for "number of addresses"

Note: There are only 32 devices that can be added to each RS 485 channel. Assuming that starting from address 1, only 32 devices can be added continuously at a time;



Figure 45 Number of addresses added

(6) Then click Submit. After the prompt is successful, select "System Information" in the first-level menu, and select "Device List" in the second-level menu to check whether the inverter is added successfully.



Figure 46 Add success prompt



Figure 47 Device list view

2. Add a meter

(1) Refer to "7.1" "Login method of built-in page" to log in to the built-in page, the login account is "admin", the password is "admin", select "device monitoring" in the first-level menu, select "electric meter" in the second-level menu, and select "electricity meter" in the third-level menu Select "Device Maintenance" from the menu.



Figure 48 Meter device maintenance interface

(2) Click "Add", and the "Add Data" window will pop up.



Figure 49 Meter add interface

485 channel where the device is located in the drop–down list of "Channel" , there are four channels of RS $485\!-\!1$, RS485–2 , RS485–3 and RS485–4 .

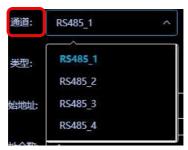


Figure 50 channel selection

(4) Select the meter type in the drop-down list of "Type", including "Donghong One-way Meter", "Donghong Three-way Meter", "Chint One-way Meter", "Chint Three-way Meter", "Ankerui Meter", "GRT-Meter".



Figure 51 Meter type selection

(5) "Start address" writes the start address of the added device, for example: suppose the address of the meter to be monitored is "1", then the start address is 1.

Note: Only 32 devices can be added to each RS 485 channel, and the address of the photovoltaic device can only be 1-32;



Figure 52 start address

(6) Number of addresses: ShineMaster supports adding multiple devices of the same type with consecutive addresses at one time. For example: Assume that there are four electric meter addresses to be monitored, and the addresses are 1, 2, 3, and 4 respectively, then write "1" for "Start Address" and "4" for "Number of Addresses".

Note: There are only 32 devices that can be added to each RS 485 channel. Assuming that starting from address 1, only 32 devices can be added continuously at a time;



Figure 53 Number of addresses added

(6) After completing the filling, click Submit. After the prompt is successful, select "System Information" in the first-level menu, and select "Device List" in the second-level menu to check whether the meter is added successfully.



Figure 54 Add success prompt

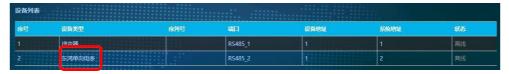


Figure 55 Device List

3. Add an environmental monitor

(1) Refer to "7.1" "Login method of built-in page" to log in the built-in page, the login account is "admin", the password is "admin", select "device monitoring" in the first-level menu, and select "environmental monitor" in the second-level menu, Select "Device Maintenance" from the third-level menu.



Figure 56 Environmental monitoring instrument equipment maintenance interface

(2) Click "Add", and the "Add Data" window will pop up.



Figure 57 Environment monitor add interface

485 channel where the device is located in the drop-down list of "Channel", there are four channels of RS 485-1, RS485-2, RS485-3 and RS485-4.



Figure 58 channel selection

(4) Select the type of environmental monitor in the drop-down list of "Type".



Figure 59 Device Type Selection

(5) "Start address" writes the start address of the added device, for example: suppose the address of the environmental monitor to be monitored is "1", then the start address is 1.

Note: Only 32 devices can be added to each RS 485 channel, and the address of the photovoltaic device can

only be 1-32;



Figure 60 start address

(6) Number of addresses: ShineMaster supports adding multiple devices of the same type with consecutive addresses at one time. For example: Assuming that there are four environmental monitors that need to be monitored, the addresses are 1, 2, 3, and 4 respectively, then write "1" for "start address" and "4" for "number of addresses".

Note: There are only 32 devices that can be added to each RS 485 channel. Assuming that starting from address 1, only 32 devices can be added continuously at a time;



Figure 61 Add the number of environmental monitoring addresses

(7) After completing the filling, click Submit. After the prompt is successful, select "System Information" in the first-level menu, and select "Device List" in the second-level menu to check whether the environmental monitor is added successfully.



Figure 62 Add success prompt

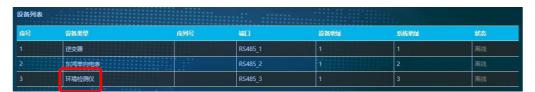


Figure 63 Device List

4. Add PID device

(1) Refer to "7.1" "login method of built-in page" to log in the built-in page, the login account is "admin", the password is "admin", select "device monitoring" in the first-level menu, select "PID device" in the second-level menu, three Select "Device Maintenance" from the super menu.



Figure 64 PID device maintenance interface

(2) Click "Add", and the "Add Data" window will pop up.



Figure 65 PID device adding interface

485 channel where the device is located in the drop-down list of "Channel", there are four channels of RS 485-1, RS485-2, RS485-3 and RS485-4.



Figure 66 channel selection

(4) Select the PID device type in the drop-down list of "Type".



Figure 67 PID device type selection

(5) "Start address" writes the start address of the added device, for example: if the PID device address to be monitored is "1", then the start address is 1.

Note: Only 32 devices can be added to each RS 485 channel, and the address of the photovoltaic device can

only be 1-32;



Figure 68 start address

(6) Number of addresses: ShineMaster supports adding multiple devices of the same type with consecutive addresses at one time. For example: suppose there are four PID device addresses to be monitored, and the addresses are 1, 2, 3, and 4 respectively, then write "1" for "start address" and "4" for "number of addresses". Note: There are only 32 devices that can be added to each RS 485 channel. Assuming that starting from address 1, only 32 devices can be added continuously at a time;



Figure 69 Add the number of addresses

(7) After completing the filling, click Submit. After the prompt is successful, select "System Information" in the first-level menu, and select "Device List" in the second-level menu to check whether the PID device is added successfully.

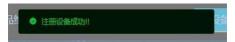


Figure 70 Add success prompt

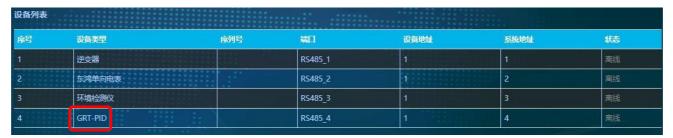


Figure 71 Device list

7.4.2 Delete device

The deletion of equipment includes "inverter", "electric meter", "environmental monitoring instrument", and "PID equipment". The method of deleting devices is the same, taking the inverter as an example:

(1) Refer to "7.1" "login method of built-in page" to log in to the built-in page, the login account is "admin", the password is "admin", select "device monitoring" in the first-level menu, and select "inverter" in the second-level menu, Select "Device Maintenance" from the third-level menu.



Figure 72 Device maintenance interface

(2) Select the RS 485 channel of the photovoltaic inverter in the "Channel" drop-down list, and then click "Query", and the photovoltaic equipment added under the RS 485 channel will be displayed;



Figure 73 Device List

(3) Check the photovoltaic equipment that needs to be deleted, click "Delete", and click "Confirm";



Figure 74 Tick the device



Figure 75 Delete operation confirmation

(4) After the prompt is successful, click "Query" again to check whether the deletion is successful;



Figure 76 Tips for successful deletion



Figure 77 Device List

7.4.3 View device operation information

说明

- The ShineMaster—X built—in page supports the display of equipment data information, including "inverter", "electric meter", "environmental monitor", "PID equipment", and supports historical data viewing. Take the inverter as an example to check the equipment operation information
- (1) Refer to "7.1" "login method of built-in page" to log in to the built-in page, the login account is "admin", the password is "admin", select "device monitoring" in the first-level menu, and select "inverter" in the second-level menu, Select "Running Information" from the third-level menu



Figure 78

7.5 ShineMaster-X server communication settings

7.5.1 ShineMaster-X network setting

说明

- Shine Matser-X defaults to disable DHCP when leaving the factory. If you use a router to connect to the network, you need to enable the DHCP function.
- ShineMatser-X supports connecting to the server through a wired network and supports connecting to the server through a 4G network.

One: Connect to the server by connecting the router

(1) The first step is to check whether the DHCP function is enabled on ShineMaster-X. Refer to "7.1.1 Accessing the built-in page through a direct connection to the computer through a network cable", log in to the built-in page, and the login account is "admin" and the password is "admin". Select "Wired Communication" from the left list of "System Settings"



Figure 79 Wired communication settings

(2) The DHCP function is turned off by default at the factory, and the DHCP function needs to be turned on to automatically obtain an IP address from the router.



Figure 80 Diagram of enabling DHCP

(3) After the setting is successful, it needs to be restarted to take effect.

Two: Connect to the server through 4G

(1) Refer to "7.1" "Built-in page login method" to log in to the built-in page. The login account is "admin" and the password is "admin". enable;



Figure 81 wireless communication settings



Figure 82 Schematic diagram of enabling network mode

- (2) "APN Mode" defaults to "Automatic Matching". If manual setting is required, set "APN Mode" to "Manual Setting". "Username" and "Password" are optional and can be left blank;
- (3) After the setting is successful, it needs to be restarted to take effect.

3. If you need to set ShineMaster- X to a fixed IP during use, you need to set as follows:

(3.1) Refer to "7.1.1 Accessing the built-in page through direct connection with the computer through a network cable", log in to the built-in page, the login account is "admin", the password is "admin", and in the left list of "system settings", select "wired communication", turn off DHCP on the "Wired Communication" interface;



Figure 83 Schematic diagram of DHCP shutdown

(3.2) Enter the user's own IP, gateway, subnet mask, DNS and other parameters, and click "Submit". As shown below



Figure 84 Schematic diagram of fixed IP setting

(3.3) After the setting is successful, it needs to be restarted to take effect.

7.5.2 ShineMaster-X server address setting

method of server address domain name resolution "

(1) Refer to "7.1" "Built-in page login method" to log in to the built-in page, the login account is "admin", the password is "admin", select "Server" in the left list of "System Settings", select "Enable", and enter the corresponding The port number of the server, the domain name of the server, such as server-cn.growatt.com/server.growatt.com, and the time interval for data upload



Figure 85 Schematic diagram of server setup

(2) Click Submit, and the interface will be successfully refreshed to check whether the modification is successful.



Figure 86 Schematic diagram of successful setting

(3) After the setting is successful, it needs to be restarted to take effect.

8 technical specifications

General Specifications

Dimensions (width/height/depth)	139.5 mm* 232.0 mm* 40.0 mm
weight	1.20kg
degree of protection	IP20

operating environment

Operating temperature	30° C \sim 60° C $(-22^{\circ}$ F \sim 140° F)
storage te m perature	$-40^{\circ} \mathrm{C} \sim 70^{\circ} \mathrm{C} \left(-40^{\circ} \mathrm{F} \sim 158^{\circ} \mathrm{F}\right)$
Placement	indoor

communication method

RS 485	The maximum communication distance is 1000 Ω, and a maximum of 124 devices can be
	connected
CAN bus	100K, 250K, 500K

9 contact us

Growatt New Energy provides customers with comprehensive technical support. Users can contact the nearest Growatt New Energy office or customer service point, or directly contact the company's customer service center.

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