GROWATT

Installation Guide

for dataloggers and monitoring

04/05/2023

Introduction

This installation guide is intended to help you configure the Growatt data logger. In this guide you will find the configuration of the Shinewifi-X, Shinelink-X and Shinelan-X.

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1 Types of dataloggers

It is important to first find out which data logger you have. Each data logger only supports one connection method and can therefore only be used for this purpose. The easiest way to recognize the data logger is to look at the sticker that is on the data logger, which always shows the model.

Shinewifi-X

Only supports a wi-fi connection.

Shinelink-X

The Shinelink-X consists of several parts, namely; the Shinelanbox (base station) and the RFstick (dongle). The Shinelink-X only supports a wireless connection via radio frequency, so it cannot connect to a WiFi network.

Shinelan-X

Supports a wired (LAN) connection, so the Shinelan-X cannot connect to the Shinelanbox or a WiFi network.

2 Shinewifi-X

3 Supplies and preparation

Supplies:

- Shinewifi-X
- Smartphone with the Shinephone app
- A Wi-Fi network on 2.4Ghz frequency

Preparations:

It is important that the inverter is switched on. Most Growatt inverters only turn on when the solar panels are connected and they provide sufficient power. This means that the configuration can only be done in sufficient daylight.

The configuration must be carried out close to the inverter, so make sure you are in the same room where the inverter is located.

To connect the Shinewifi-X module to your wifi network you need to know the network name (SSID) and password of your wifi network. Often this information is on a sticker at the bottom of your modem or router.

Of course, it is also important that there is sufficient WiFi range at the location of the inverter. Optionally you can test this with a 'Wifi analyzer app' on your smartphone, the signal should be lower -66dBm.

4 Installation

The new generation data loggers are connected to the USB port of the inverter, the port on the inverter is indicated as 'USB'.

Before you can connect the data logger to the inverter, you must first loosen the cap on the inverter, you do this by turning the cap counterclockwise. Then insert the Shinewifi-X into the USB port and turn the ring clockwise until the arrow on the ring is on the front.

Turn the triangle up and center, then turn the lock clockwise
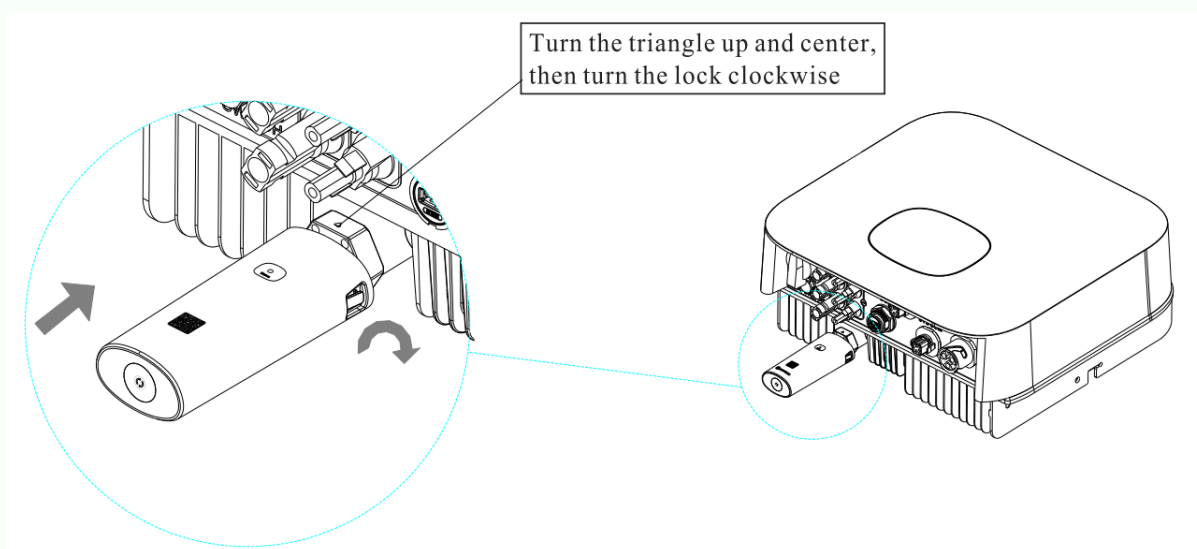
Configuration

Step 1

Open the Shinephone app on your smartphone, if you don't already have it you can download it in the Apple App S tore or the Google Play Store.
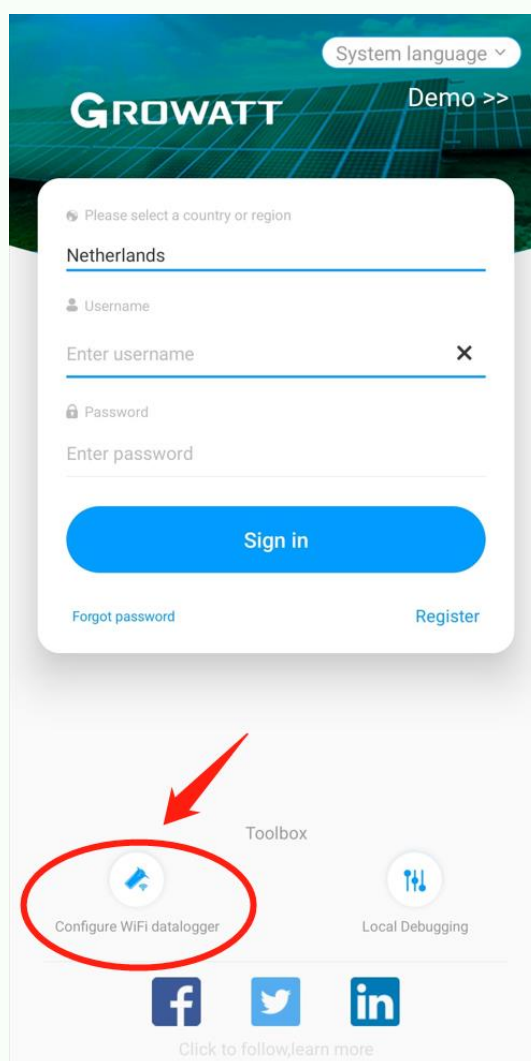
Apple app store: ShinePhone on the App Store

Google play store: ShinePhone on the Google Play Store

Step 2

On the login screen, choose 'Configure data logger'.

Step 3

Scan the QR code of the data log with the camera of your smartphone. The QR code can be found on the front of the Shinewifi-X.

If it is not possible to scan the QR code with the camera, you can also choose to enter it manually. In that case, choose 'Manual' and enter the serial number and check code on the back of the Shinewifi-X.

In the next step you can checkthe serial number and the check code (CC), which must match the serial number and check code (CC) of the Shinewifi-X.
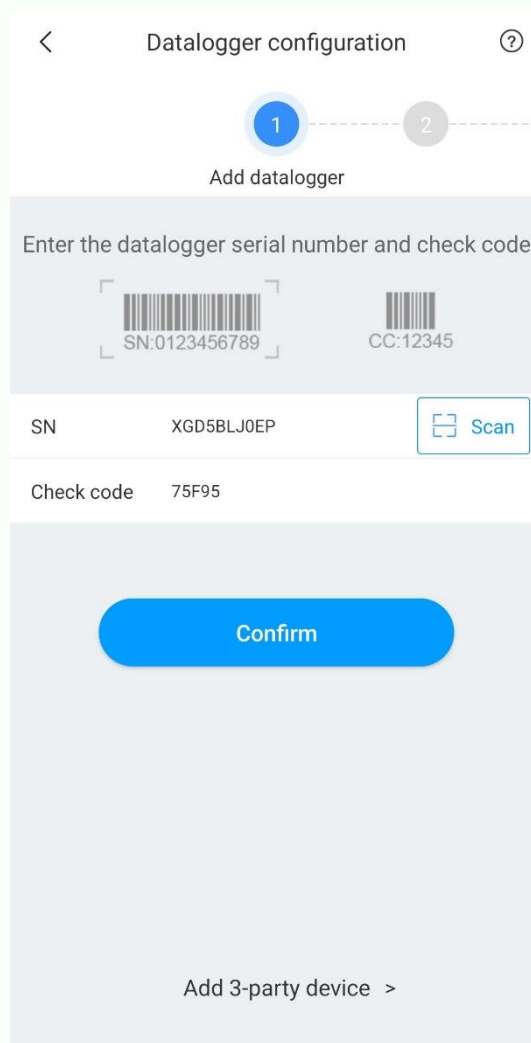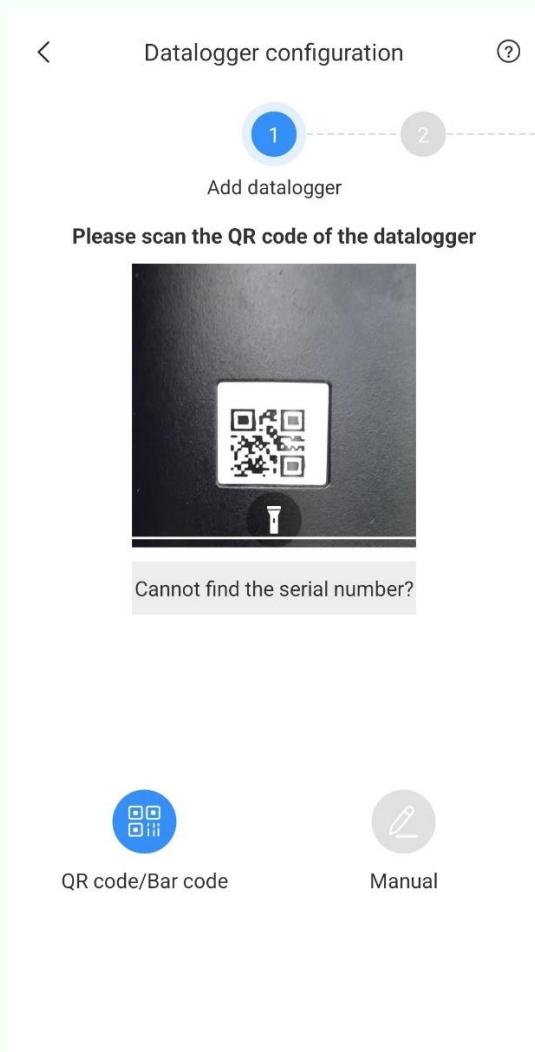
Step 4

In the next step, **always** choose the 'Hotspot Mode'.
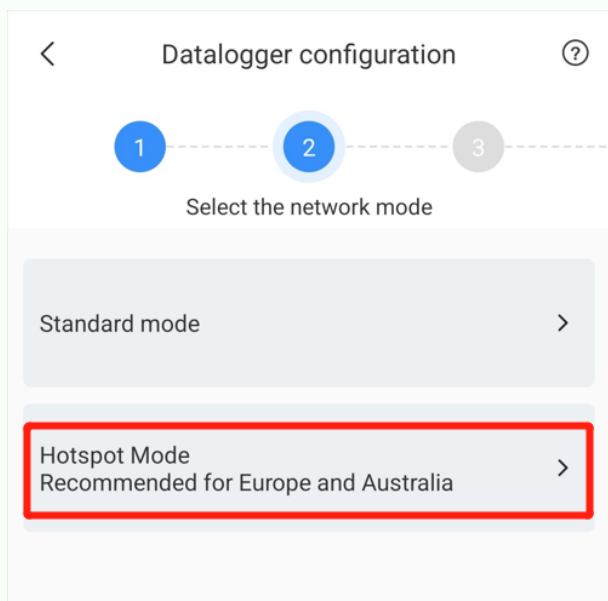
Step 5

Activate the hotspot modus on the Shinewifi-X by briefly pressing the button once (do not hold down), at the bottom of the Shinewifi-X. After a few seconds the light turns solid blue, this means that the hotspot mode is on and ready to connect. Press 'Next' to continue.

Step 6

Connect to the hotspot by pressing 'Go to set', the app will now go to your Wi-Fi settings on your smartphone. Here you can see all available networks in the vicinity. Choose the network with the name of the serial number of the Shinewifi-X, in most cases it starts with XGD.

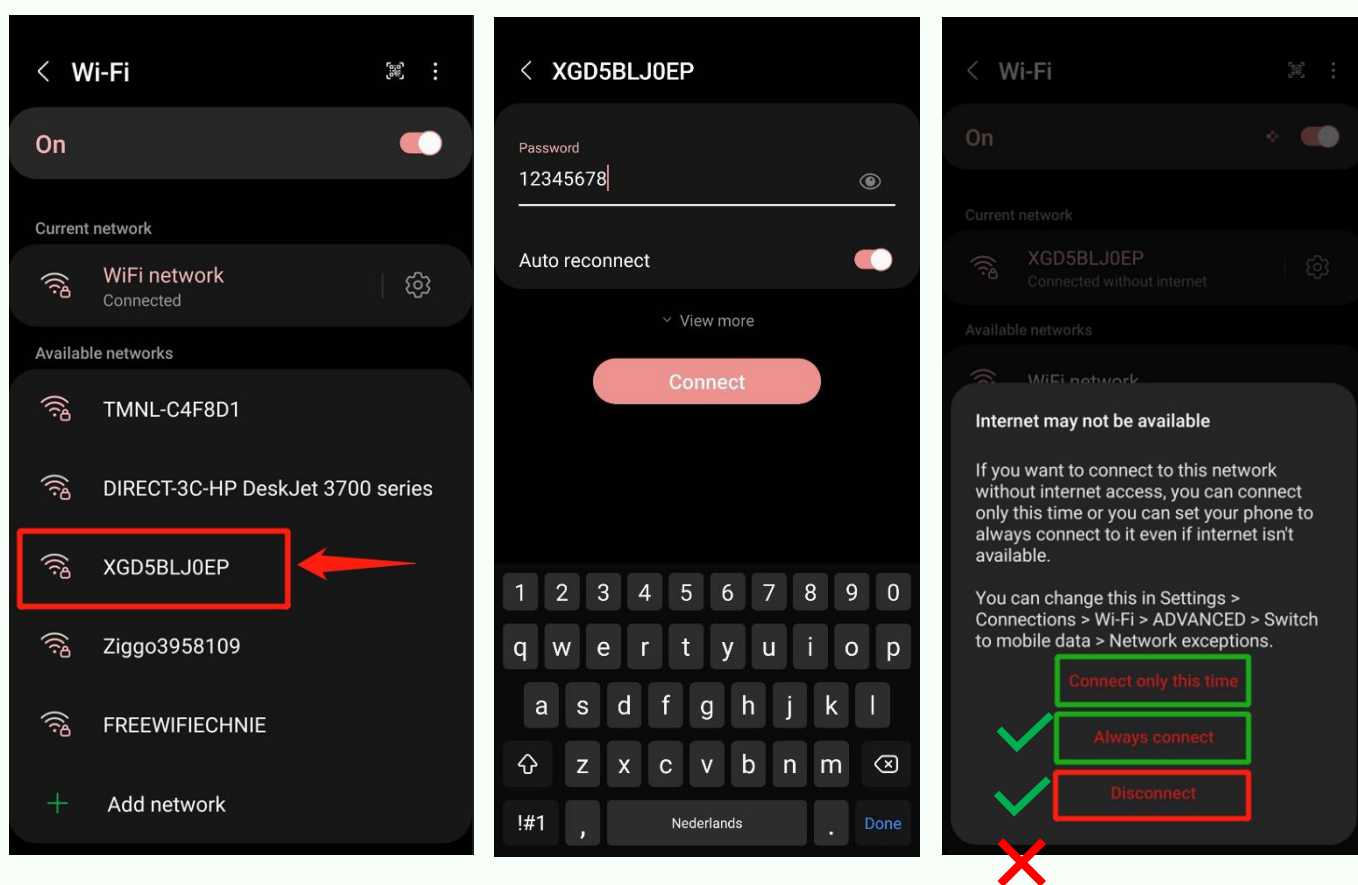To connect to the hotspot, you will be asked for a password, which is: 12345678

You may get the message that there is no internet available, that's right, you can ignore that message or click away. Don't choose 'disconnect'.

Once you are connected to the hotspot you can go back to the ShinePhone app.
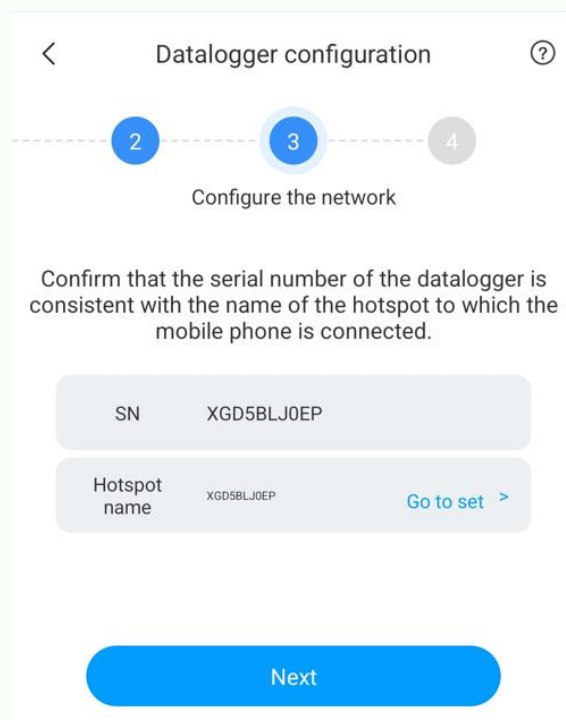
<center>1   2   3</center>

Step 7

Check that the serial number of the Shinewifi-X and the name of the hotspot match, if so, press 'Next'. Is this the case? Then go back to the Wi-Fi settings of your smartphone and check if you are connected to the Wi-Fi network of the Shinewifi-X hotspot.
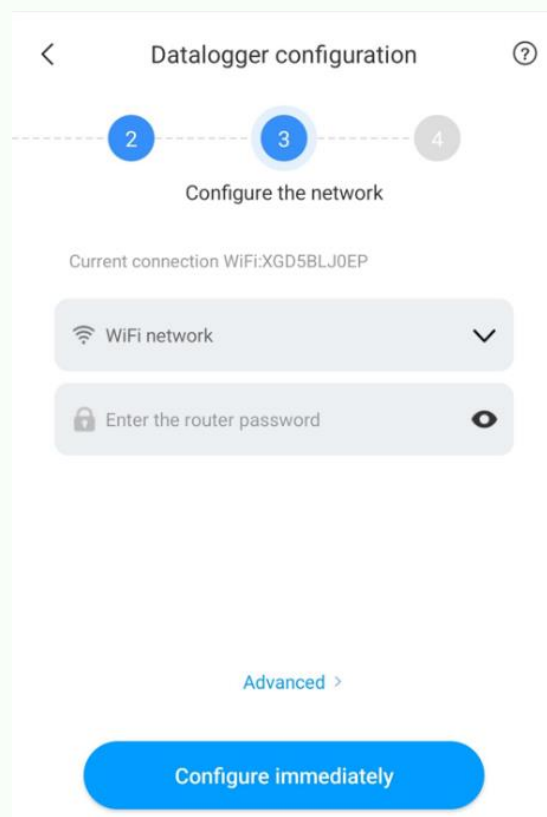

< Datalogger configuration ⑦

② ③ ④

Configure the network

Confirm that the serial number of the datalogger is consistent with the name of the hotspot to which the mobile phone is connected.

| SN | XGD5BLJ0EP |

| Hotspot name | XGD5BLJ0EP | Go to set > |

Next

Step 8

Open all available wi-fi network and by pressing the ∨ arrow ( ) and choose your own wi-fi network from the list. Is your Wi-Fi network not listed? Then check whether your Wi-Fi network has sufficient range.

In the second field, enter the password of your own Wi-Fi network. Please note that this should not contain special punctuation marks. For example, an @ or # is not recognized by the Shinewifi-X.

Make sure you've selected the correct Wi-Fi network and entered thecorrect password. If so, choose 'Configure immediately' to establish the connection.

< Datalogger configuration ⑦

② ③ ④

Configure the network

Current connection WiFi:XGD5BLJ0EP

🛜 WiFi network ∨

🔒 Enter the router password 👁

Advanced >

Configure immediately

Step 9

The Shinewifi-X will now try to connect to your Wi-Fi network. Once the percentage has reached 100%, the app will notify you whether the connection was successful or not. If the message 'Configuration success' appears, then the configuration is successful and the Shinewifi-X is connected to your Wi-Fi network.

Are you getting a 'Configuration failed' error? Then check the light on the Shinewifi-X a minute after completing the setup, is it flashing blue? Then the configuration is still successful and the Shinewifi-X is connected to your WiFi network.

5   Data logger status and malfunctions

On the Shinewifi-X there are a total of 3 LED lights that provide information about the status of the Shinewifi-X.

🔴 (flashing red)	The Shinewifi-X is connected to the inverter but still needs to be configured.
🔵 (solid blue)	The hotspot mode of the Shinewifi-X is active.
🔵 (flashing blue)	The Shinewifi-X is connected to the WiFi network and to the Growatt server.
🟢 (solid green)	The Shinewifi-X cannot connect to the Wi-Fi network, possibly due to a wrong password of your Wi-Fi network. Check the password and run the configuration again.
🟢 (flashing green)	The Shinewifi-X is successfully connected to the WiFi network, but cannot connect to the Growatt server. An active firewall may be blocking the connection to the server. Turn off the firewall or open ports 5279 and 5280 on your modem/router.
🔴 (solid red)	The Shinewifi-X may be defective. Reset the Shinewifi-X by pressing the button at the bottom for 8 seconds and restart the Shinewifi-X by disconnecting it and plugging it back in after a few seconds. If the light remains solid red, the Shinewifi-X must be replaced.
🔴🟢🔵 (all lights)	If all the lights are on at the same time and constantly, the Shinewifi-X may be defective. Reset the Shinewifi-X by pressing the button at the bottom for 8 seconds and restart the Shinewifi-X by disconnecting it and plugging it back in after a few seconds. If all lights remain on at the same time and constantly, the Shinewifi-X must be replaced.

6   Shinelink-X

7   Supplies and preparation

Supplies:

- Shinelink-X
- A modem or router with a free network port

Preparations:

It is important that the inverter is switched on. Most Growatt inverters only turn on when the solar panels are connected and they provide sufficient power. This means that the configuration can only be done in sufficient daylight.

When linking the Shinelink-X to the account, the serial number of the Shinelanbox must be used, do **not** use the serial number of the RFstick.

8   Installation

The new generation dataloggers are connected to the USB port of the inverter, the port on the inverter is indicated as 'USB'.

Before you can connect the data logger to the inverter, you must first loosen the cap on the inverter, you do this by turning the cap counterclockwise. Then insert the RF-stick into the USB port and turn the ring clockwise until the arrow on the ring is on the front.

Turn the triangle up and center, then turn the lock clockwise
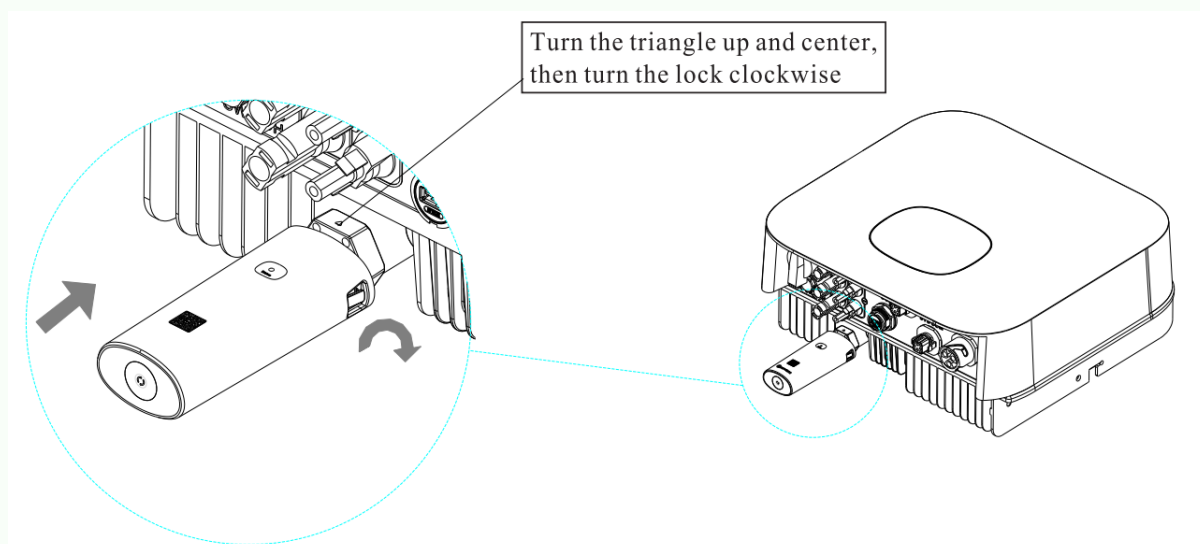
Connect the Shinelanbox to your internet modem with the supplied network cable and plug the supplied power adapter into a power outlet.

If everything is connected correctly, the lights will light up as follows:

🏠 ▪   Constant

☁ ▪   Constant

💻 ☀   Flashes 1 time every 3 seconds (when connected to 1 inverter)

ⓘ ▫   Off

9   Data logger status and recordings

If you cannot monitor the inverter in the Shinephone app, it may have different characteristics. First, check the status lights on the Shinelanbox. Below are the status of the LEDs and the solutions for the most common problems.

🏠	▪	Shinelanbox is on	
	▫	Shinelanbox is off	Make sure the power adapter is plugged into a working power outlet.
☁	▪	Shinelanbox is connected to the Internet and the server	

	☐	The network cable is not connected	Make sure the network cable is connected directly to a modem or router. Do not connect the network cable to a network switch or powerline adapters.
	☀ Blink	Shinelanbox is not connected to the server	The connection to the server is blocked. This may be caused by a firewall setting on the Internet modem. Turn off the firewall or open ports 5279 and 5280.
🖳	☐	There is no connection to the RF-stick in the inverter	Restore the connection between the Shinelanbox and the RF-stick by pressing the reset button once on both devices (do not press and hold). See also Chapter 3.3.1
	☀ Blink	There is a connection to the RFstick in the inverter	
ⓘ	☐	Pairing mode is off	
	☀ Blink	Pairing mode is on	The info light will flash quickly when pairing mode is started by pressing the reset button once. The Shinelanbox is now looking for an RF-stick.

■ Constant

☀ Blink

☐ Off

10   Shinelink-X pairing

If the 3rd light on the Shinelanbox does not flash, then there is no connection between the Shinelanbox and RF-stick. First check whether the inverter is on (Note: in case of little or no daylight, the inverter automatically turns off and the inverter is offline).

The distance between   the Shinelanbox and RF-stick may not exceed 20 meters as the crow flies, depending on objects such as walls and/or other jammers.

You can easily restore the pairing by briefly pressing the reset button once on both devices. Do **not** press and hold the button, this will reset the device.

Step 1

Press the reset button on the RF-stick once,
The light will now flash very quickly.

Step 2

Press the reset button on the Shinelanbox once,
the 4th (ⓘ) light will now flash .
If the pairing is successful, the 3rd   (🖳) light will
flash 1 time every 3 seconds.

11 Shinelink-X lights correct, but inverter offline

Are all the lights on correctly, but is the inverter still offline? Then check that the correct serial number is associated with the account. With the Shinelink-X, the serial number of the Shinelanbox (base station) must be linked and not that of the RF-stick (dongle).

12 Shinelan-X

13 Requirements and preparation

Supplies:

- Shinelan-X
- A modem or router with a free network port

Preparations:

It is important that the inverter is switched on. Most Growatt inverters only turn on when the solar panels are connected and they provide sufficient power. This means that the configuration can only be done in sufficient daylight.

14 Data logger status and malfunctions

		The Shine lan-X is connected to the inverter.	Connect the network cable .
		The Shinelan-X is connected to the inverter, but is not connected to the router.	Make sure network cable is connected. The Shinelan-X has a 10Mb ps connection, check if your equipment is compatible with that.
		The Shinelan-X is connected to the inverter and connected to the router, but is not connected to the server.	The connection to the server is blocked. This may be caused by a firewall setting on the Internet modem. Turn off the firewall or open ports 5279 and 5280.
		The Shinelan-X is connected to the inverter and connected to the router and server.	The Shinelan-X is configured correctly.

15 Link data logger to account

If the data logger has not previously been linked to your account, you can perform the link via the website https://server.growatt.com/. If you do not yet have an account, you can register, see sections 6.2 and 6.3.

Linking the data viewer via the website:

16 Account

If you don't have an account yet, you'll need to create one via the Shinephone app or the website https://server.growatt.com/

17 Installers code

To create an account you need an installer code. You can request this from the installer who installed the system with you . If the installer is not known, you can use the general code:

ALMY7 - Netherlands
AMYK4 - Belgium
BHMRC - France
EBNZGC - Denmark
EBRXW8 - Finland

Note! For warranty purposes, it is important that you use the code of the relevant installer. Only use the general code if the installer cannot be traced or if the installer is no longer active.

18 Registration via the Shinephone app

Step 1

Open the Shinephone app and click on 'Register' in the login screen of the Shinephone app to create a new account register.
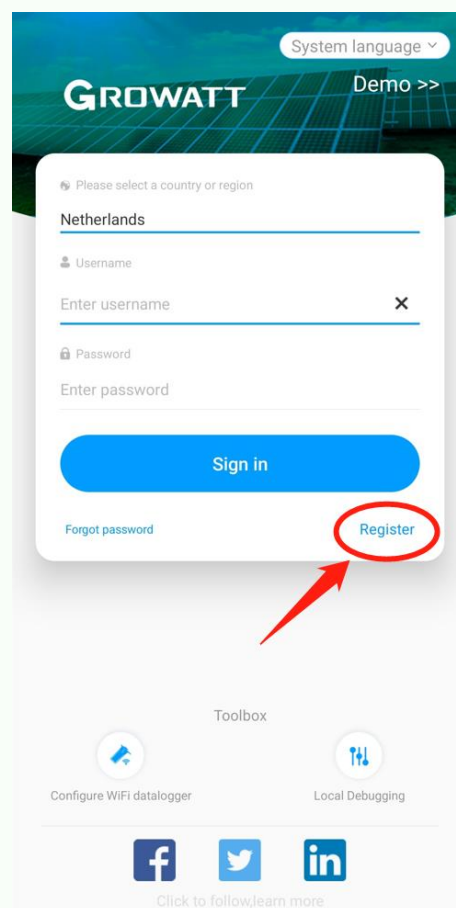
Step 2 – Create account

Fill in your personal details.

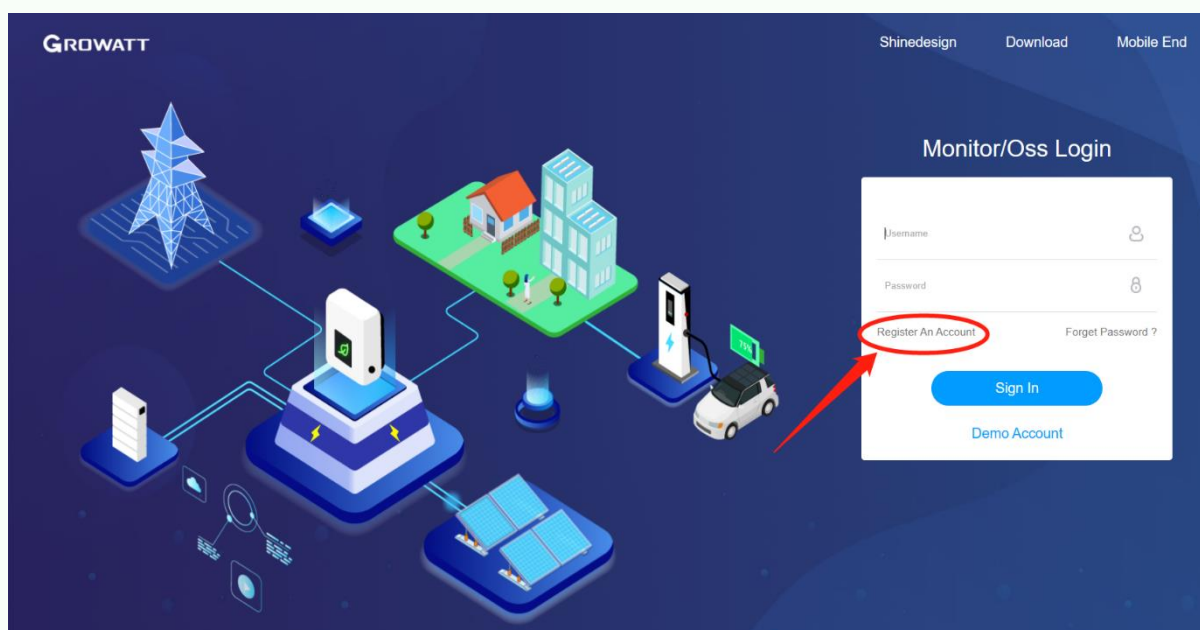| Country of region	The country in which you live
Username	Think of a unique username (tip: use your email address)
Password	Come up with a password
Repeat password	Repeat the password
Phone number	Your phone number
Email address	Your e-mail address
Verification code	First choose 'Send verification code'. You will receive a verification code in the mail, enter this code.
Install code	Enter the installer code you received from your installer

Step 3 – Create plant

Fill in details of your system.

Plant name	Come up with a name for your installation
Installation date	Date the system was installed in
Plant address	Address where the system is installed
Time zone	Time zone
PV capacity	The power of your inverter (in watts)
Plant type	Residential = Private system Commercial = Commercial system Ground mounted = Industrial system
Fund revenue	Currency
PV plant picture	Photo of the system (optional)

19   Registration via the website

Go to: https://server.growatt.com/
Choose 'Register an account' to register a new account.

Step 2 – Create account

Fill in your personal details.

Country	The country in which you live
Username	Think of a unique username (tip: use your email address)
Password	Come up with a password
Password confirm	Repeat the password
Language	Language
Phone number	Your phone number
Email	Your e-mail address
Install code	Enter the installer code you received from your installer

Step 3 – Create plant

Fill in details of your system.

Plant name	Come up with a name for your installation
Installation date	Date the system was installed in
Time zone	Time zone
Plant address	Address where the system is installed
PV capacity	The power of your inverter (in watts)
Plant type	Residential = Private system Commercial = Commercial system Ground mounted = Industrial system
Selling price	The price per kWh of your network operator and the currency

Step 4 – Link data logger to account (optional)

Attach the data logger to your account by entering the serial number and the check code (CC). Do you want to link it at a later time? Then choose 'Jump over'.

20   Troubleshooting

Are you still experiencing problems with your data logger? Then we advise you to contact an installer. Unfortunately, Growatt does not employ installers to assist you with this.

21   Datalogger already exist

If you receive the message 'Datalogger already exist', the data logger may already be linked to your account.

Do you suspect that the data logger is linked to another account, for example to the account of a previous occupant of the house? Then send an e-mail to Growatt (service.nl@ginverter.com) with the request to disconnect the data logger. Clearly state the serial number and the check code (CC) of the data logger with the request to disconnect it.