GROWATT

ShineRFStick-X2

User Manual
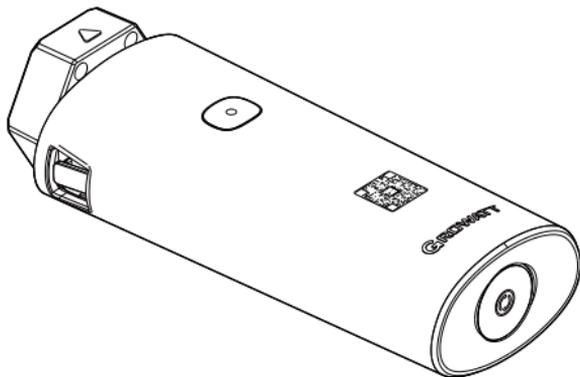
1. Product Overview

ShineRFStick-X2 is compatible with all Growatt photovoltaic inverters with USB interfaces, it connects to the host via RF to achieve remote monitoring and maintenance of the photovoltaic system.

➢ Support RF wireless communication connection
➢ Support remote parameter setting and firmware upgrade
➢ Support local data saving and continuation

2. Product Appearance

USB Port

Indicator

Button

3. System Diagram

Inverter
Power grid
PV Panel
GROWATT
Cloud Server

ShineRFStick-X2

ShineServer Web

RF

RF Host

ShinePhone APP
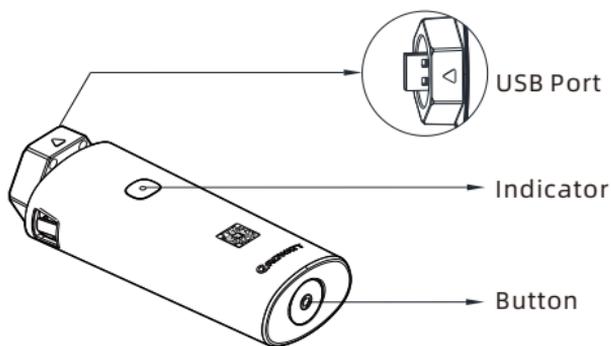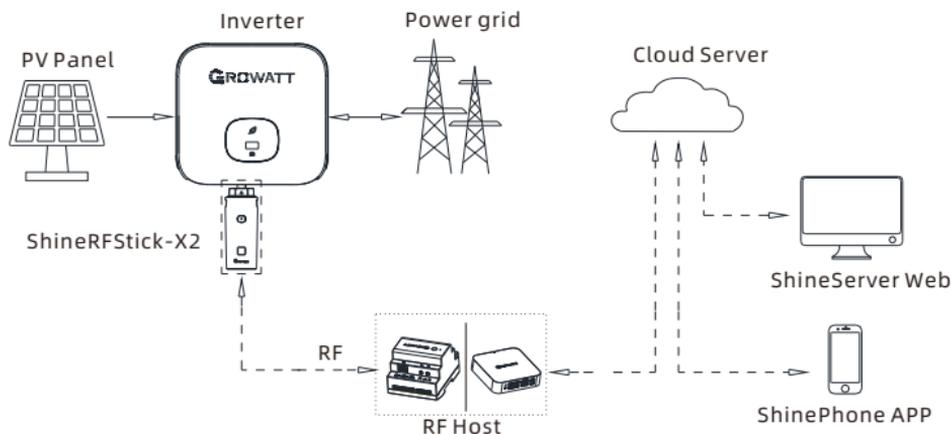
4. Installation and Configuration

## 4.1 Installation instructions

1. Rotate and twist the USB interface cover of the photovoltaic device counterclockwise.
2. Rotate the lock at the top of the collector to ensure that the triangle mark is on the front and centered.
3. Connect the interface of the collector to the USB interface of the photovoltaic device, ensure that the triangle mark is on the front, press the lock and rotate clockwise until the lock is tightened.

Ensure that the triangle icon is facing upward and centered, then turn the lock clockwise
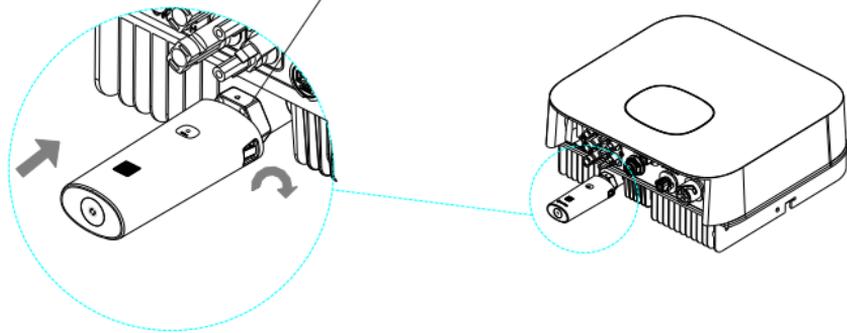
Warning	• This product can only be powered by the USB port of Growatt inverters. Do not connect it to other USB ports or adapters. • If the inverter displays a low insulation resistance alarm, it indicates that a ground fault might have occurred in the chassis. Do not connect the datalogger to the inverter or perform other operations to avoid personal injury. • Do not use this product in places where the use of wireless devices is not allowed. • Do not try to repair or modify the equipment by yourself. If you need any support, please contact us.

4.2 Turning on the PV Device and Checking the Connection Status

After installing the ShineRFStick-X2 datalogger, turn on the inverter.If the indicator is steady blue, it indicates that the communication between the inverter and ShineRFStick-X2 is normal. The LED status meanings are shown below:

Indicator light status	Working state
Steady White	1. Initializing, please wait patiently for 30S. 2. Restore factory default settings (long press button 6S to take effect).
Steady Red	If the RF host is not connected and the photovoltaic device is not connected, please continue to follow the APP instructions of the RF host to add the device
Steady Green	If the photovoltaic equipment is not connected, please check whether the collector and inverter are connected normally. If the phenomenon persists after repeated plugging and unplugging, please contact Growatt customer service
Steady Blue	If no RF host is configured, perform RF pairing according to the host RF pairing process

4.3 Datalogger configuration

ShineRFStick-X2 serves as an RF wireless slave. For the detailed RF pairing process, please refer to the corresponding RF host manual. Double-click the bottom button of ShineRFStick-X2, and the yellow indicator light will flash slowly to activate the RF pairing mode.

4.4 ShineRFStick-X2 Button Description

Button interaction behavior	Working state
Click	Enter Bluetooth mode, please follow the APP instructions to set up the process, if you do not need to set, please click the button to exit this mode
Double click	Enter RF pairing mode, please follow the instructions of the RF host APP to add devices
Long press	Long press 6S until the indicator light white light is always on, restore the factory default settings

4.5 Troubleshooting

LED status	Indication	Troubleshooting
Steady White	Initialized or in the state of restoring factory default settings	Wait for 30S initialization to complete
Steady Yellow	In Bluetooth mode	Please click the button to exit this mode
Yellow Flashing Slowly	RF pairing mode	Please follow the APP instructions of the RF host to add the device, no pairing is required, double-click the bottom button to exit pairing mode
Yellow Flashing	It is in upgrade mode	Please wait patiently for the upgrade to complete
Steady Red	The RF host is not connected and the photovoltaic device is not connected	Please continue to follow the APP instructions of the RF host to add the device

LED status	Indication	Troubleshooting
Steady Green	The photovoltaic equipment is not connected	Please check whether the Datalogger and inverter are connected normally. If the phenomenon persists after repeated plugging and unplugging, please contact Growatt customer service
Steady Blue	No RF host is configured	Perform RF pairing according to the host RF pairing process
Blue Flashing	Unable to connect to RF host, connected photovoltaic equipment /RF equipment	1. Please check if the host is powered on/online 2. Please check whether the leader /follower is within the recommended distance range 3. Please check whether the host antenna is damaged 4. If it appears repeatedly, please contact Growatt customer service
Blue Flashing Slowly	Connected to RF host, connected to photovoltaic equipment /RF equipment	In normal working mode
Attention: Slow flash frequency 1S, flash frequency 0.5S		

5. Specification

Type	Item		Parameter
Common parameters	Appearance (length/ width/height)		122mm/47mm/32mm
	Weight		65g
	User manual language		English
	Protection level		IP65
	Installation		USB straight plug
	Certification		CE/ROHS
Electrical parameters	Working voltage		5V(+/-5%)
	Working current		500mA
	Typical power consumption		2.5W
	Elevation		≤3000m
	Working environment	Working temperature	-30~60℃
		Working humidity	< 85% RH (No condensation)
		Storage temperature	-40~70℃
Common parameters	RF Description		1. Frequency range: 860~930MHz (868/915MHz RF) 2. Maximum transmit power: 868MHz 14dBm/915MHz 17dBm 3. Maximum transmission distance: 120m (depending on the installation environment)

Type	Item	Parameter
Common parameters	User configuration interface	APP configuration
	Data upload cycle	5Min
	Communication protocol with photovoltaic equipment	ModBus RTU

6. Declaration of conformity

This product complies with the following regulations and requirements:
- Electromagnetic Compatibility Directive: 2014/30/EU (EMC)
- Radio Equipment Directive: 2014/53/EU (RED)
- Electrical Equipment (Safety) Regulations 2016: 2014/35/EU(LVD)
- Restriction of Hazardous Substances Directive: 2011/65/EU (EU) and 2015/863 (RoHS)

You can download the Declaration of Compliance at
https://en.growatt.com

7. Contact

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For local customer support, please visit
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