SDongleA-05

MODBUS TCP Guide

Issue 01

Date 2021-11-07

HUAWEI

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Huawei Technologies Co., Ltd.

Address: Huawei Industrial Base
Bantian, Longgang
Shenzhen 518129
People's Republic of China

Website: https://e.huawei.com

Preface

Purpose

This document describes how to enable/disable Modbus TCP and provides the common-fault rectification methods, operations, and tool use guide.

Intended Audience

This document is intended for Modbus TCP personnel. Operator must:

- Be familiar with the product networking and related NEs' versions.
- Have device maintenance experience and be familiar with device operation and maintenance.

Symbol Conventions

The symbols that may be found in this document are defined as follows.

Symbol	Description
DANGER	Indicates a hazard with a high level of risk which, if not avoided, will result in death or serious injury.
WARNING	Indicates a hazard with a medium level of risk which, if not avoided, could result in death or serious injury.
CAUTION	Indicates a hazard with a low level of risk which, if not avoided, could result in minor or moderate injury.
NOTICE	Indicates a potentially hazardous situation which, if not avoided, could result in equipment damage, data loss, performance deterioration, or unanticipated results. NOTICE is used to address practices not related to personal injury.
NOTE	Supplements the important information in the main text. NOTE is used to address information not related to personal injury, equipment damage, and environment deterioration.

Change History

Issue	Date	Description
01	2021-11-07	This issue is the first official release.

Contents

1 Before You Start

1.1 Software of Device

To properly use the Modbus TCP function, each device subcomponent has a minimum version number. The following table lists the minimum version number requirements

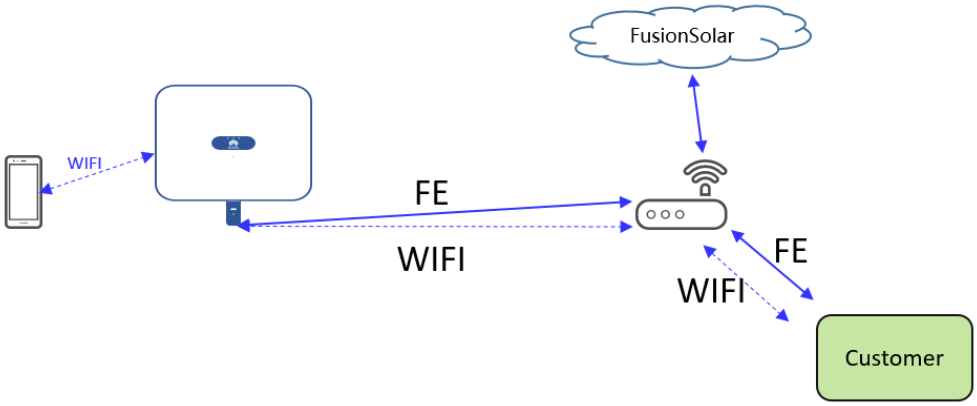
Device	Minimum version number
SDongleA-05	V100R001C00SPC124
SUN2000L	V200R001C00SPC115
SUN2000MA	V100R001C00SPC139

1.2 Precautions

Before enable/disable Modbus TCP, pay attention to the following:

- During the configuration, ensure that the Dongle is not powered off.
- After the configuration is complete, you do not need to perform the configuration again after the device is powered off and then powered on.
- After the inverter is replaced, reconfigure the inverter.
- After the Dongle is replaced, you do not need to reconfigure the inverter.

2 Networking Diagram



NOTE

The Dongle and the customer's device must be in the same LAN. The access mode is not limited (either network cable or Wi-Fi).

3 Operations

3.1 Enable/Disable MODBUS TCP

3.1.1 Environment Setup

[Required Devices]

- Mobile phone
- The Dongle is powered on and running properly.

[Device requirements]

- Mobile phone operating system: Android 4.0 or later.
- Recommended mobile phones: Huawei and Samsung.
- The mobile phone supports the web browser and can connect to the Internet.
- The mobile phone supports the Wi-Fi function.

3.1.2 Procedure

Step 1 Downloading and Installing the App

Search for SUN2000 in the following app market, download the app installation package (the version number must be 3.2.00.015 or later), and install the app by following the instructions.

- Baidu Mobile Assistant (Android)
- Huawei AppGallery (Android)

After the installation is complete, the SUN2000 icon is displayed.

Step 2 Downloading the Inverter Upgrade Package

Download the update package from http://e.huawei.com and copy the update package to the root directory of your phone's internal storage or microSD card.

Step 3 Connects to the inverter. The app supports the following connection mode.

- **Method 1: Connect the mobile phone to the inverter through the inverter Wi-Fi hotspot.**

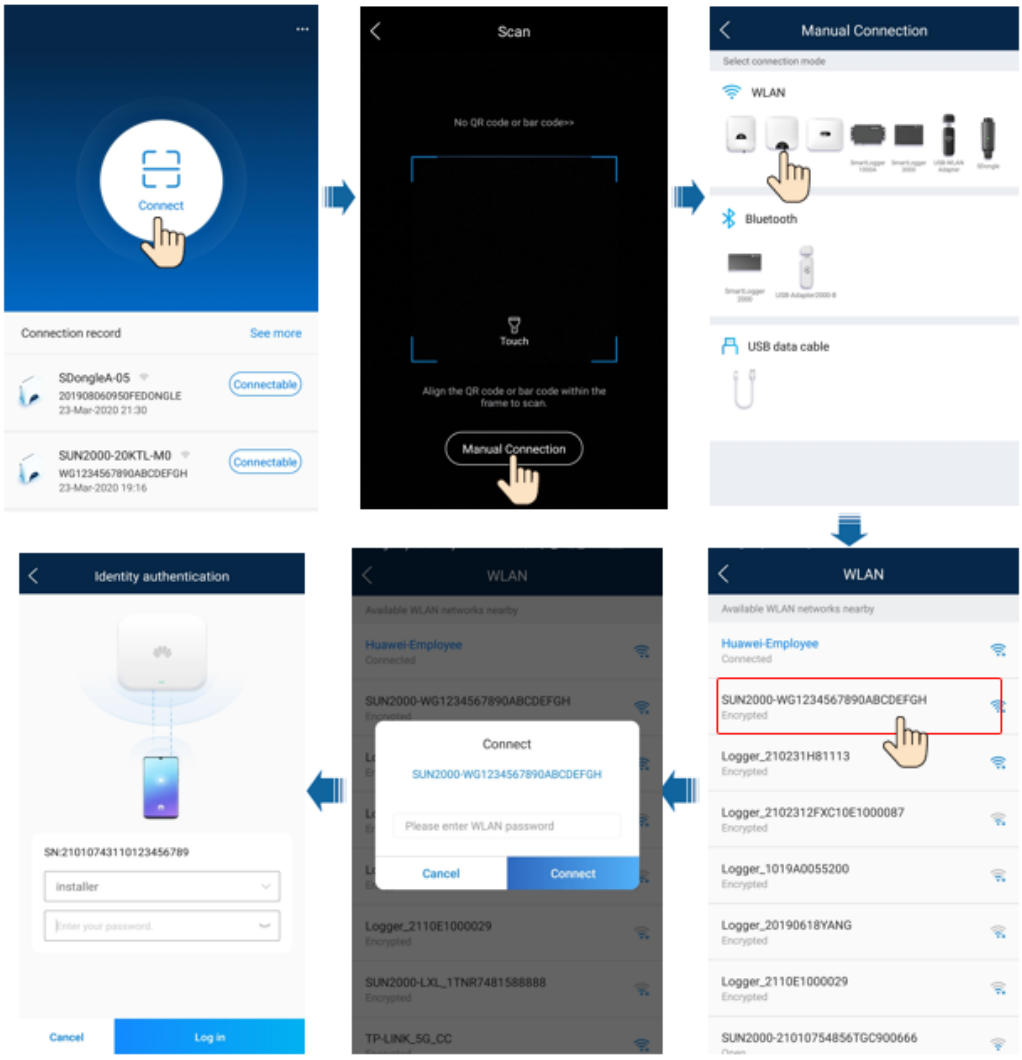
  Open the SUN2000 APP, touch Connect, and select the device type you want to connect. Here, select WLAN.

  Select the WiFi name of the inverter and enter the WiFi password of the inverter. Use the initial password Changeme for the first login and change the password as soon as possible to ensure account security.

NOTE

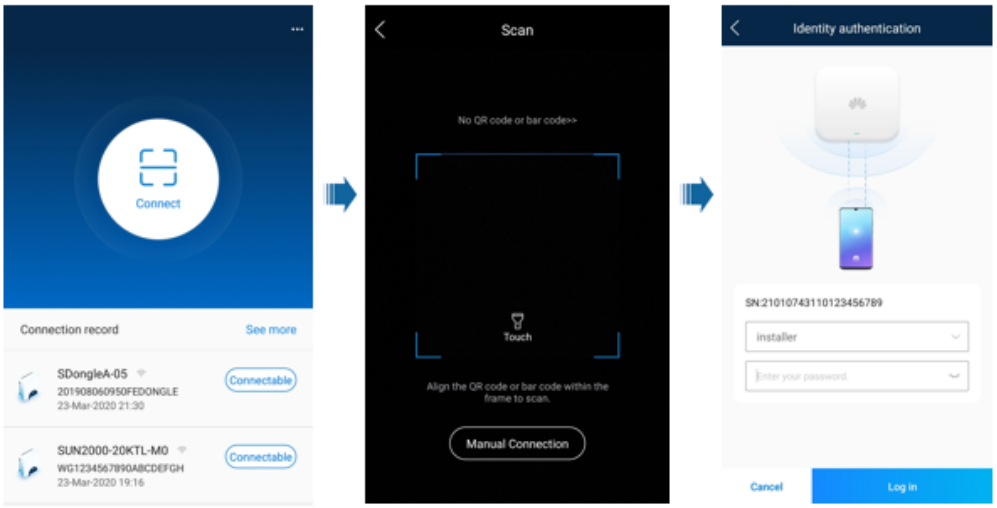
The WiFi name of the connected inverter is SUN2000-SN, which can be obtained from the inverter label.

Figure 3-1 Connect to inventor



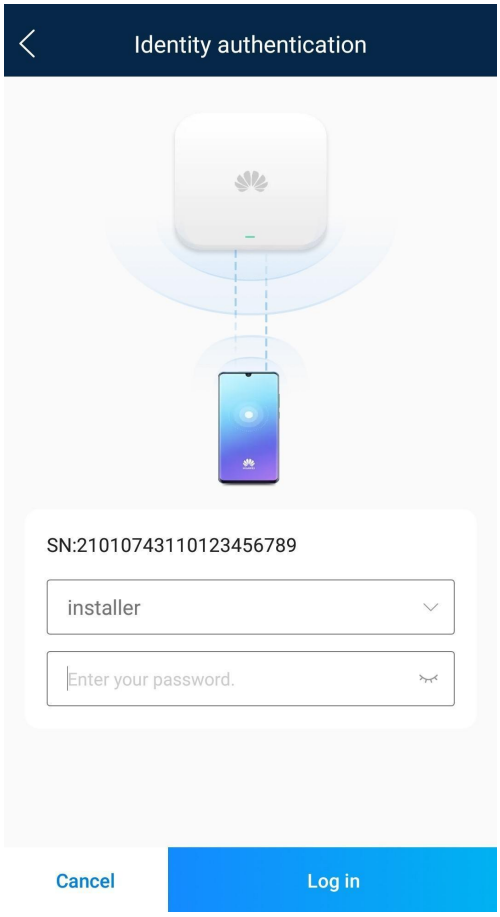
If you log in to the SUN2000 for the first time and do not change the WiFi password, you can scan the WiFi QR code of the SUN2000 to connect to the WiFi network.

Figure 3-2 Scan to upgrade



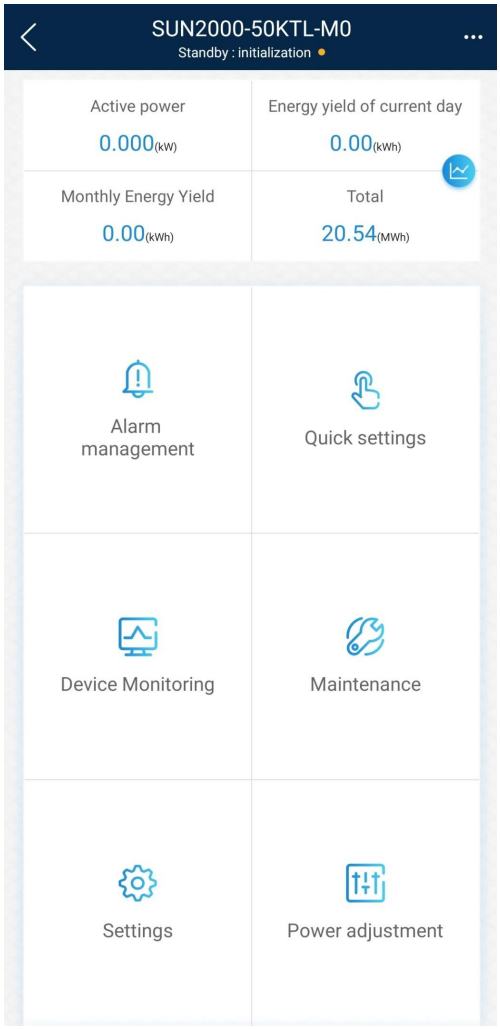
Step 4 Select a user name and enter the password (select **installer,** and enter the correct password, which is 00000a by default) to log in to the operation console.

Figure 3-3 Log in



Step 5 On the home page, select **Settings**.

Figure 3-4 Home page



Step 6 On the Settings page, click **Communication configuration**. The Communication configuration page is displayed.

Figure 3-5 Settings

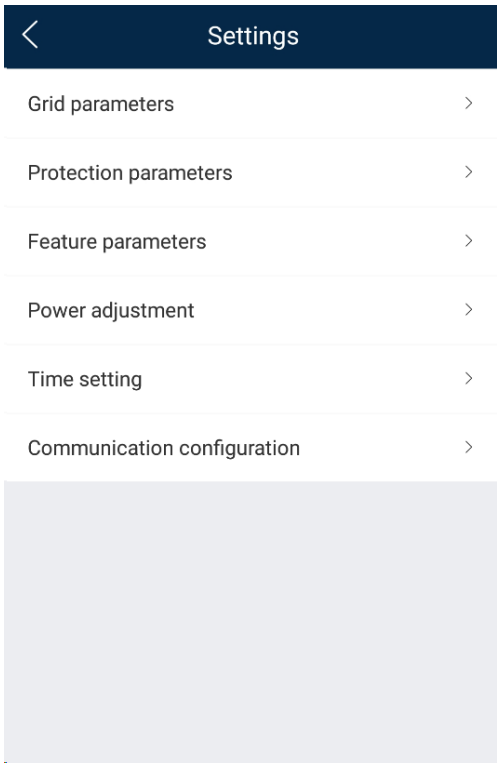
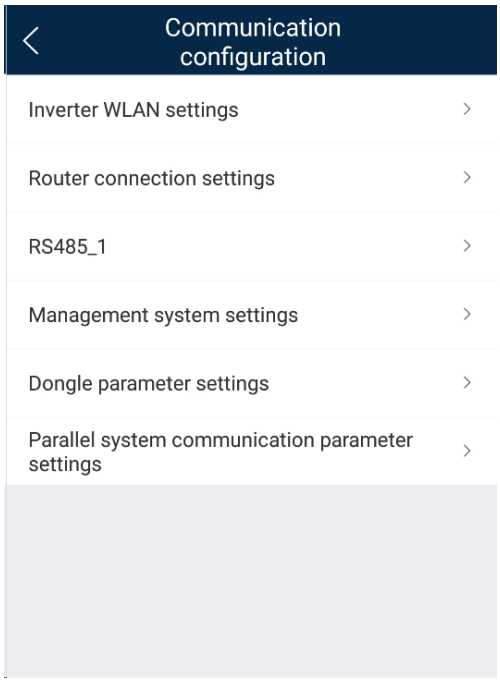
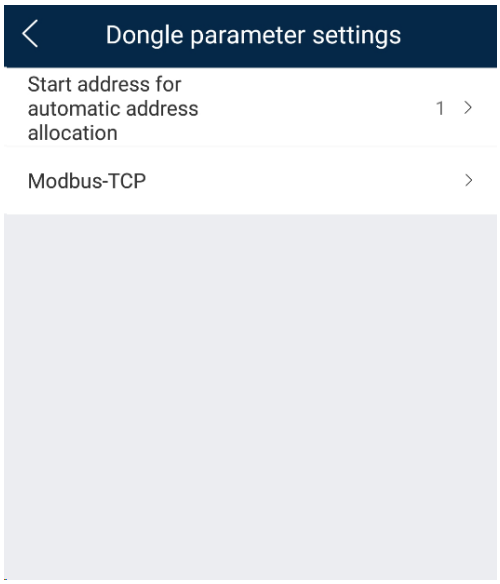


Figure 3-6 Communication configuration



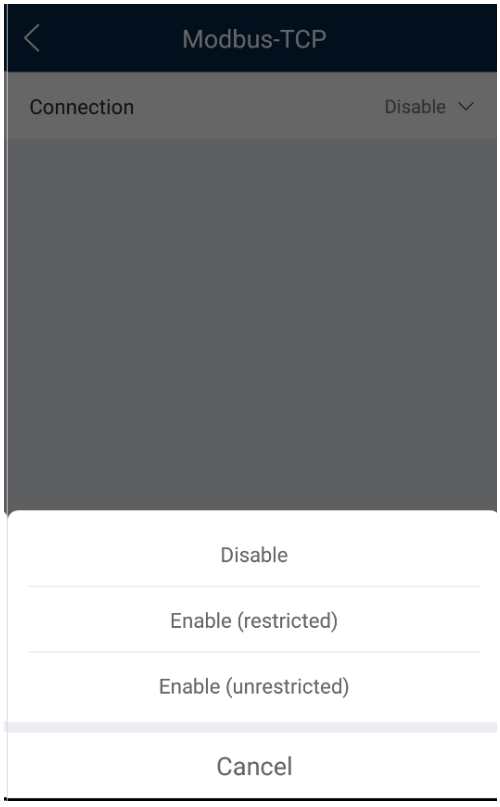
Step 7 On the Communication configuration page, click **Dongle parameter settings**. The Dongle parameter settings page is displayed.

Figure 3-7 Dongle parameter settings



Step 8 On the Dongle parameter settings page, click **Modbus-TCP.**

Figure 3-8 Modbus TCP



NOTE

If the MODBUS TCP function is disabled, customer devices cannot access the network.

If the restriction function is enabled, you must configure a trustlist IP address (currently, only one trustlist IP address is supported) so that only the client devices with the trustlist IP address can access the network.

If unrestricted is enabled, all client devices on the same LAN can access the network, but only one client device can access the network at a time.

----End

3.1.3 Troubleshooting

If Modbus TCP is not found in step 6, check whether the inverter version and app version meet requirements.

If MODBUS TCP still cannot be used after the configuration is complete, check whether the SDongle version meets the requirements.

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