

Replacing the SmartLogger1000A with the SmartLogger3000 Quick Guide

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NOTE

1. The information in this document is subject to change due to version upgrade or other reasons. Every effort has been made in the preparation of this document to ensure accuracy of the contents, but all statements, information, and recommendations in this document do not constitute a warranty of any kind, express or implied.
2. Before replacing the device, carefully read the *SmartLogger3000 User Manual* to get familiar with the product information and precautions.
3. Before replacing the device, check whether the SmartLogger1000A settings can be viewed. If yes, record them for setting or checking parameters after the replacement.
4. Before replacing the device, check whether the cables are long enough for replacement. If not, prepare appropriate cables.



1 Exporting All Files/All Configuration Files

NOTE

- You can export all files or all configuration files in either of the following methods: SUN2000 app and SmartLogger WebUI. The difference is that the files exported by the SUN2000 app are more comprehensive and contain performance files such as energy yield data. The files exported by the SmartLogger WebUI do not contain performance files. The export takes 5 to 30 minutes, depending on the device running time.
- You are advised to prepare a USB flash drive of SanDisk, Netac, or Kingston. Other brands may be incompatible.

Method 1: SUN2000 App (All Files)

1. Run the SUN2000, scan the QR code on the SmartLogger1000A or connect to the WLAN of the SmartLogger1000A, and log in as **Advanced User**.
 - The initial WLAN hotspot name of the SmartLogger1000A is **Logger_SN** and the initial password is **Changeme**. The SN can be viewed from the SmartLogger1000A label.
 - Log in as **Advanced User**. The initial password is **00000a**.
 - Use the initial password upon first power-on and change it immediately after login. To ensure account security, change the password periodically and keep the new password in mind. Not changing the initial password may cause password disclosure. A password left unchanged for a long period of time may be stolen or cracked. If a password is lost, devices cannot be accessed. In these cases, the user is liable for any loss caused to the PV plant.
2. Insert a USB flash drive into the USB port on the SmartLogger1000A.
3. Choose **More > System Maintenance > Export all files** to export all configuration files.
4. After the export is complete, tap **Confirm** and remove the USB flash drive.

NOTICE

Do not power off the SmartLogger1000A when exporting all configuration files.

Method 2: SmartLogger1000A WebUI (All Configuration Files)

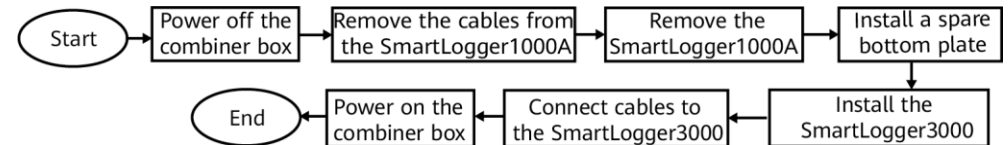
1. In the address box of a browser, enter **https://XX.XX.XX.XX** (XX.XX.XX.XX is the IP address of the SmartLogger) and press **Enter**. The login page is displayed.
 - Log in as **Advanced User**. The initial password is **Changeme**.
 - Use the initial password upon first power-on and change it immediately after login. To ensure account security, change the password periodically and keep the new password in mind. Not changing the initial password may cause password disclosure. A password left unchanged for a long period of time may be stolen or cracked. If a password is lost, devices cannot be accessed. In these cases, the user is liable for any loss caused to the PV plant.
2. Choose **Maintenance > System Maint.** and click **Export** under **Full profile export**. A dialog box is displayed, prompting you to export all configuration files.
3. Click **Confirm**, enter the password again, and click **Submit**. The **Exporting** progress bar is displayed.
4. After the export is successful, click **Confirm**.
5. Click **Save** under **Full profile export** to save the files.

2 Replacing the SmartLogger

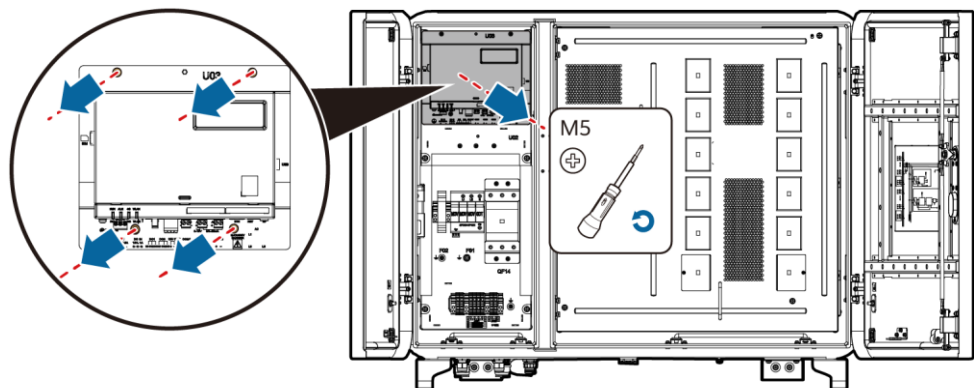
NOTE

All cables are routed through the cable trough. After the deployment is complete, close the cable trough in time.

Scenario 1: Inside a Combiner Box



1. Switch off the switch between the combiner box and upper-level and lower-level devices.
2. Remove cables connected to the SmartLogger1000A and label them.
3. Remove the four screws from the SmartLogger1000A backplane.
4. Remove the SmartLogger1000A. Remove the SIM card (if any) from the SmartLogger1000A and install it in the SmartLogger3000.

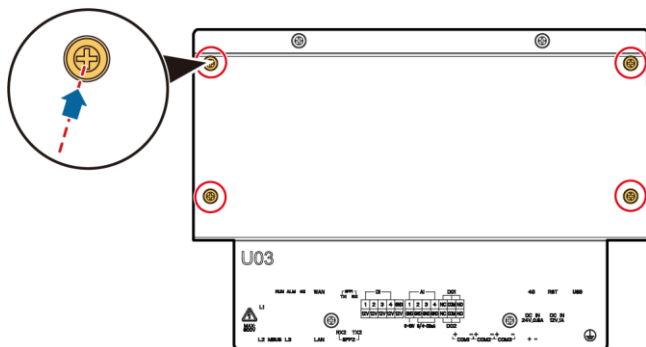


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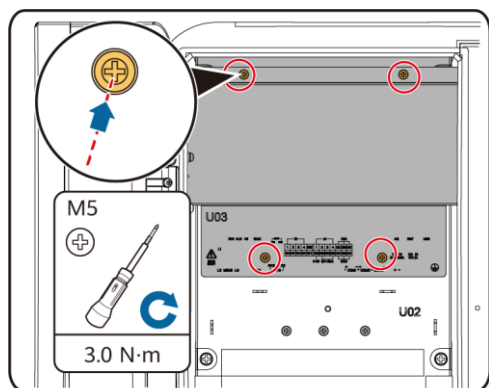
5. Install the screws to be used for securing the SmartLogger3000 to the spare bottom plate.

NOTE

Use the screws delivered with the SmartLogger3000. Do not fully tighten the screws to facilitate the installation of the SmartLogger3000.

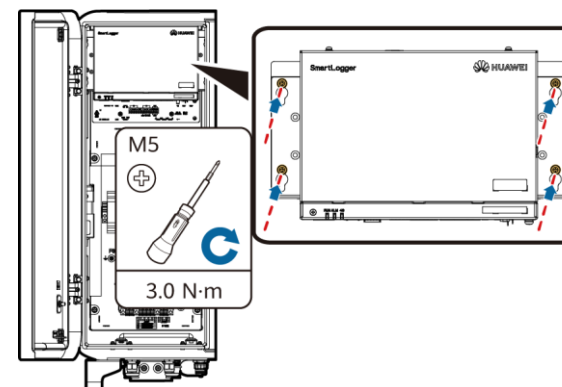


6. Install the spare bottom plate in the combiner box.



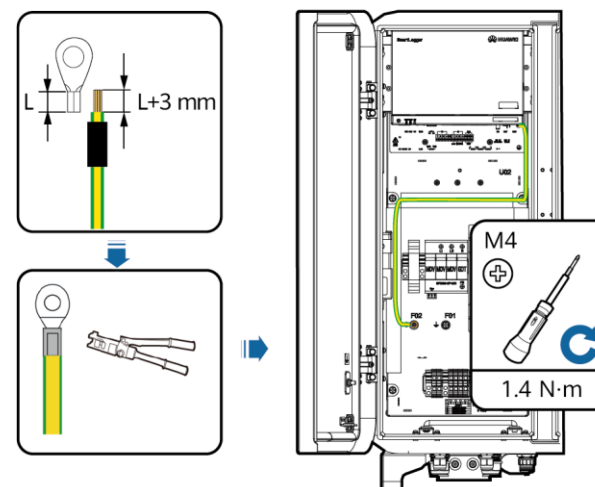
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7. Mount the SmartLogger3000 to the spare board using mounting ears and tighten the screws.



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8. Connect the PE cable to the SmartLogger3000.



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NOTE

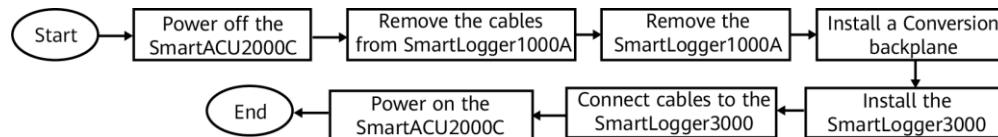
Use the spare PE cable of the SmartLogger3000.

9. Connect other cables to the SmartLogger3000.

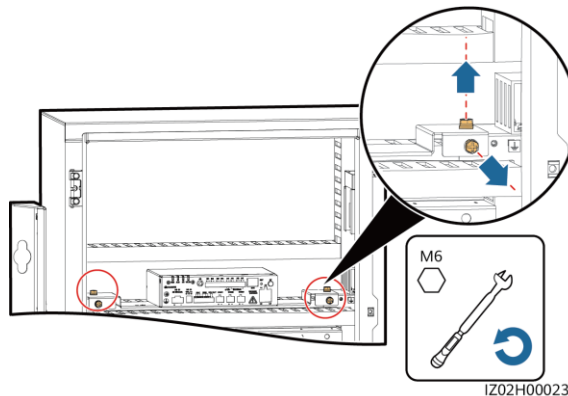
SmartLogger 1000A Port	SmartLogger 3000 Port	Description
DC IN 12V,1A	DC IN 12V,1A	12 V DC power input. Replan the power cable route based on the position of the power port on the SmartLogger3000.
ETH	WAN	Connects to an Ethernet switch, a router, or a PC. Replan the network cable route based on the position of the WAN port on the SmartLogger3000.
COM1-COM3	COM1-COM3	Supports three RS485 ports that can connect to devices such as the solar inverter and environmental monitoring instrument (EMI). Replan the RS485 communications cable route based on the position of the COM ports on the SmartLogger3000.
4G	4G	Antenna cable port. Replan the antenna cable route based on the position of the 4G port on the SmartLogger3000.

10. Switch on the switch between the combiner box and upper-level and lower-level devices.

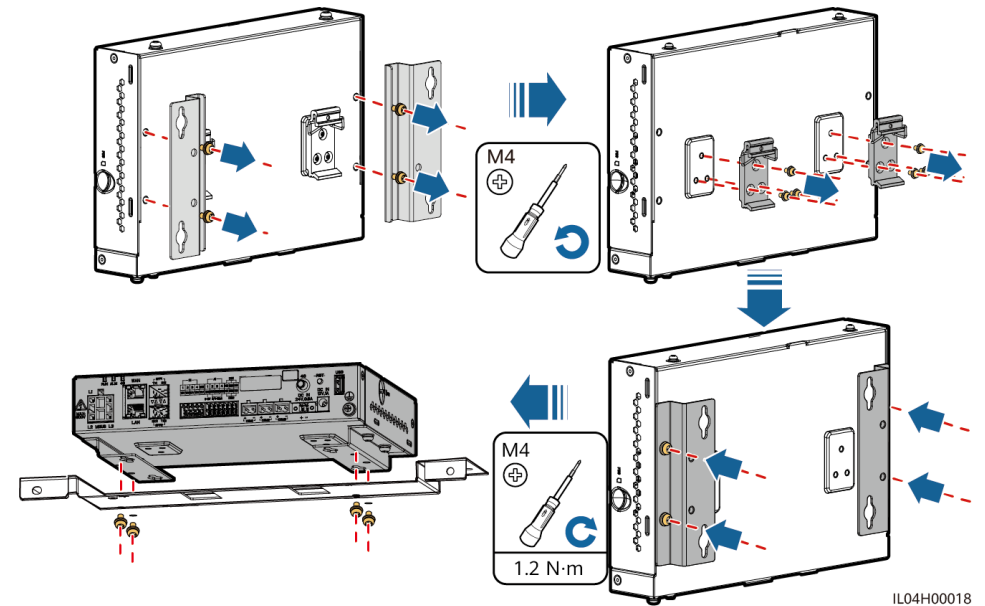
Scenario 2: In a SmartACU2000C



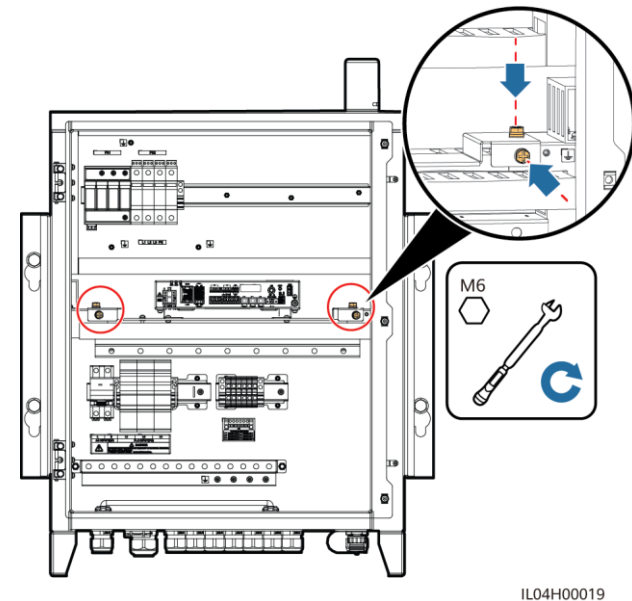
1. Turn off the single-phase power switch, three-phase power switch that control the power supply from the remote box-type transformer to the smart array controller in sequence. Turn off the single-phase power switch on the smart array controller. Turn off the knife fuse switch in the smart array controller in sequence.
2. Remove cables connected to the SmartLogger1000A and label them.
3. Remove the four screws from the backplane of the SmartLogger1000A in the SmartACU2000C, and then remove the SmartLogger1000A. Remove the SIM card (if any) from the SmartLogger1000A and install it in the SmartLogger3000.



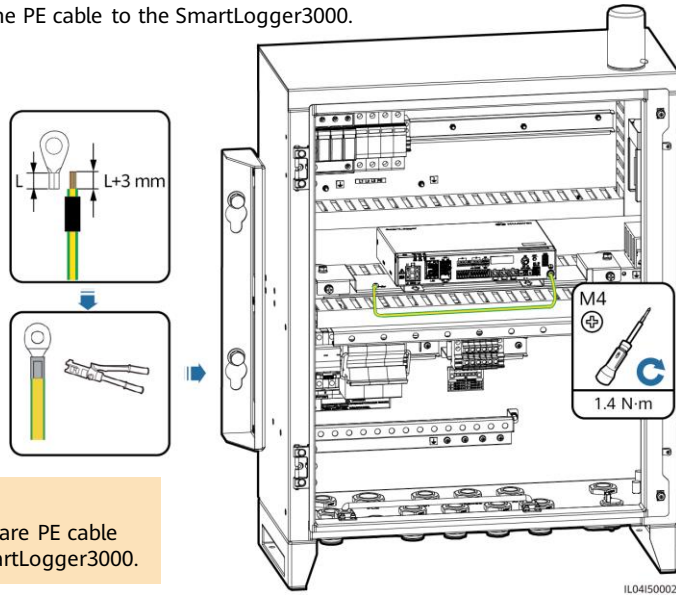
4. Remove the mounting ears on both sides of the SmartLogger3000 and the guide rail clamps. Turn the mounting ears and reinstall them on the SmartLogger3000. Then, install the conversion backplane on the SmartLogger3000.



5. Install the SmartLogger3000 in the SmartACU2000C.



6. Connect the PE cable to the SmartLogger3000.



NOTE

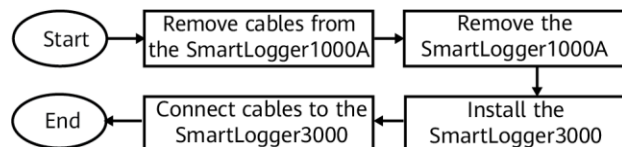
Use the spare PE cable of the SmartLogger3000.

7. Connect cables to the SmartLogger3000.

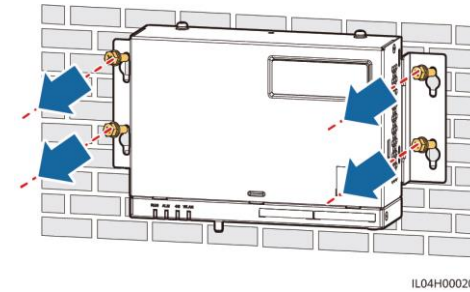
SmartLogger 1000A Port	SmartLogger 3000 Port	Description
DC IN 12V,1A	DC IN 12V,1A	12 V DC power input. Replan the power cable route based on the position of the power port on the SmartLogger3000.
ETH	WAN	Connects to an Ethernet switch, a router, or a PC. Replan the network cable route based on the position of the WAN port on the SmartLogger3000.
COM1-COM3	COM1-COM3	Supports three RS485 ports that can connect to devices such as the solar inverter and environmental monitoring instrument (EMI). Replan the RS485 communications cable route based on the position of the COM ports on the SmartLogger3000.
4G	4G	Antenna cable port. Replan the antenna cable route based on the position of the 4G port on the SmartLogger3000.

8. Turn on the single-phase power switch, three-phase power switch that control the power supply from the remote box-type transformer to the smart array controller in sequence. Turn on the single-phase power switch on the smart array controller. Turn on the knife fuse switch in the smart array controller in sequence.

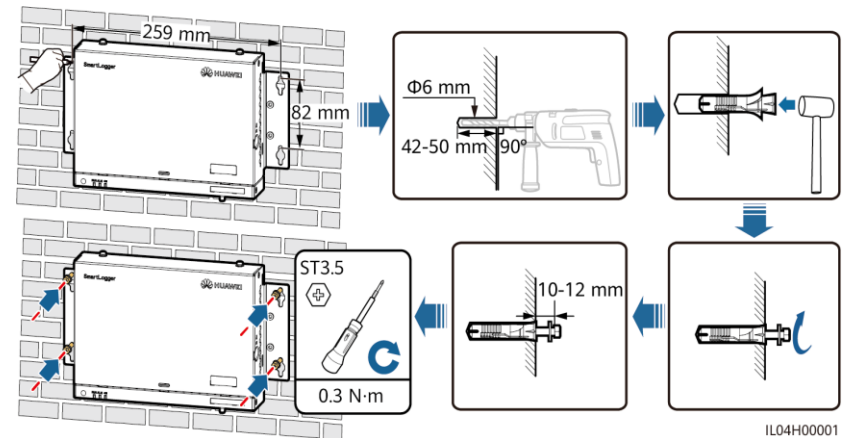
Scenario 3: On a Wall



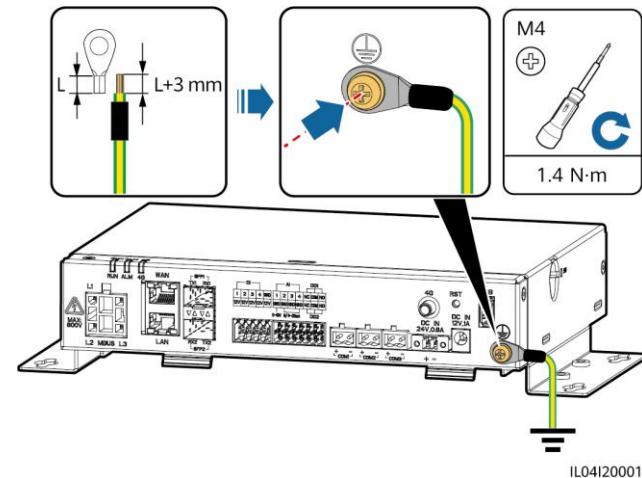
1. Remove cables connected to the SmartLogger1000A and label them.
2. Remove the SmartLogger1000A by removing the four screws from the mounting ears on both sides of the SmartLogger1000A. Remove the SIM card (if any) from the SmartLogger1000A and install it in the SmartLogger3000.



3. Drill holes on the wall and install the SmartLogger3000.



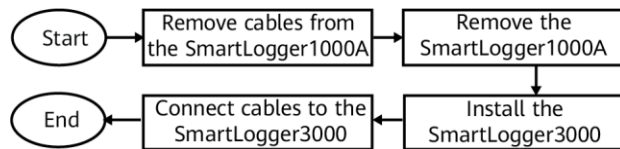
4. Connect the PE cable to the SmartLogger3000. Connect the other end of the PE cable to the nearest ground point.



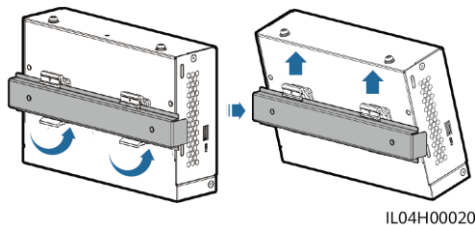
5. Connect cables to the SmartLogger3000.

SmartLogger1000A Port	SmartLogger3000 Port	Description
DC IN 12V,1A	DC IN 12V,1A	12 V DC power input
ETH	WAN	Connects to an Ethernet switch, router, or PC through the WAN port.
DI1-DI4	DI1-DI4	Connects to a dry contact input.
DO1-DO2	DO1-DO2	Relay output. The NO/COM is a normally open contact, and the NC/COM is a normally closed contact. The maximum signal voltage of 12 V is supported.
COM1-COM3	COM1-COM3	Supports three RS485 ports that can connect to devices such as the solar inverter and EMI.

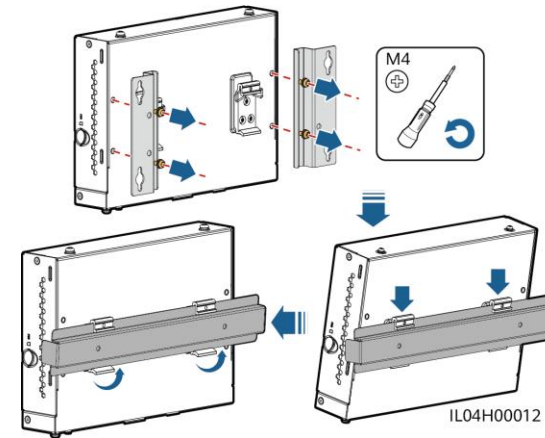
Scenario 4: On a Guide Rail



1. Remove cables connected to the SmartLogger1000A and label them.
2. Remove the SmartLogger1000A. Remove the SIM card (if any) from the SmartLogger1000A and install it in the SmartLogger3000.

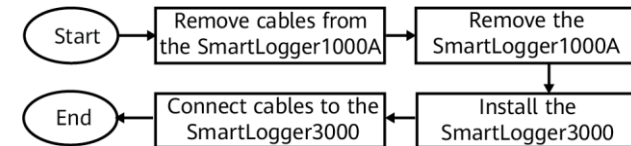


3. Install the SmartLogger3000.



4. For details about cable connections, see "On a Wall."

Scenario 5: On a Desktop



1. Remove cables connected to the SmartLogger1000A and label them. Remove the SIM card (if any) from the SmartLogger1000A and install it in the SmartLogger3000.
2. Replace the SmartLogger1000A with the SmartLogger3000 and place the latter on a horizontal desktop.
3. For details about cable connections, see "On a Wall."

3 Setting Parameters for the SmartLogger3000

After **Full profile export** is complete, import the files to finish setting parameters. Otherwise, see the *SmartLogger3000 User Manual*.

NOTE

- When the SmartLogger WLAN is **OFF in idle state**, hold down the RST button for 1s to 3s to power on the WLAN module. The alarm/maintenance indicator (ALM) then blinks green fast for 2 minutes (other indicators are off) and the SmartLogger waits for connecting to the SUN2000 app. If the SUN2000 app is not connected, the WLAN module is automatically powered off after it is powered on for 4 hours.
- The import takes 5 to 30 minutes, depending on the device running time.

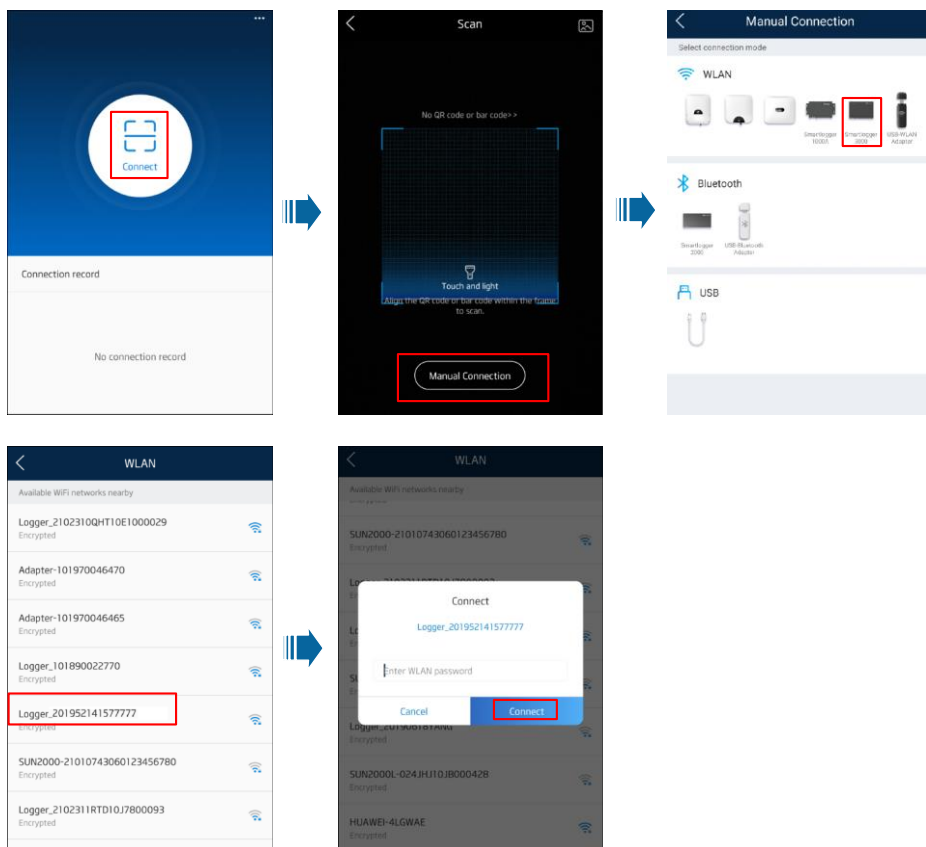
Method 1: SUN2000 App

NOTE

- The SUN2000 app whose version is 3.2.00.008 or earlier does not support the import of encrypted full files.
- Mobile phone operating system: Android 4.4 or later.
- Access Huawei app store (<http://appstore.huawei.com>), search for **SUN2000**, and download the app installation package. You can scan the QR code to obtain it.

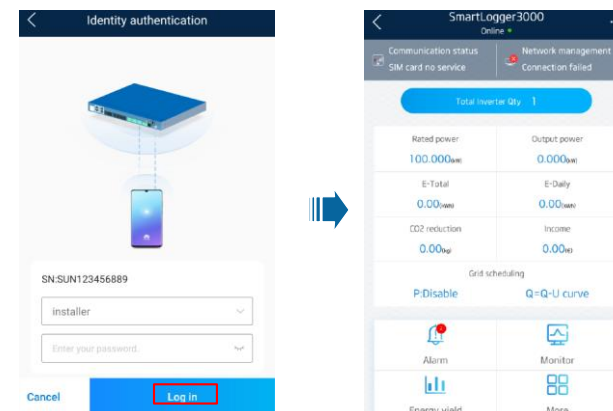


- Run the SUN2000 app, scan the QR code on the SmartLogger3000 or connect to the WLAN of the SmartLogger3000.
 - The initial WLAN hotspot name of the SmartLogger3000 is **Logger_SW** and the initial password is **Changeme**. The device SN can be viewed on the SmartLogger3000 label.
 - Use the initial password upon first power-on and change it immediately after login. To ensure account security, change the password periodically and keep the new password in mind. Not changing the initial password may cause password disclosure. A password left unchanged for a long period of time may be stolen or cracked. If a password is lost, devices cannot be accessed. In these cases, the user is liable for any loss caused to the PV plant.



- Select a user to log in.

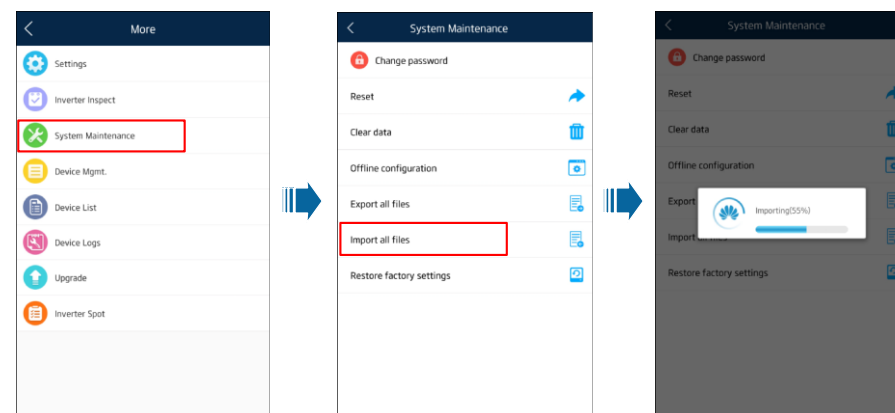
- Log in as **installer**. The initial password is **00000a**.
- Use the initial password upon first login and change it immediately after login. To ensure account security, change the password periodically and keep the new password in mind. Not changing the initial password may cause password disclosure. A password left unchanged for a long period of time may be stolen or cracked. If a password is lost, devices cannot be accessed. In these cases, the user is liable for any loss caused to the PV plant.



- Insert the USB flash drive that stores all files.
- Choose **System Maintenance** > **Import all files**. The Importing progress bar is displayed.

NOTICE

Do not power off the SmartLogger3000 when importing all configuration files.



- After the import is complete, click **OK**. The SmartLogger3000 restarts automatically.

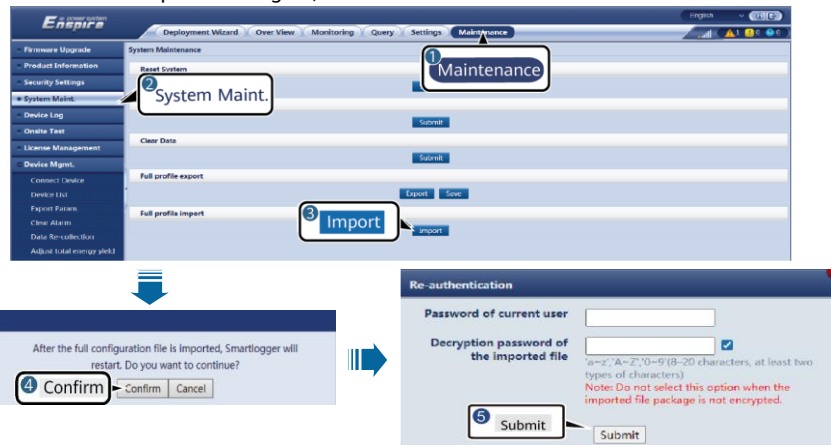
NOTICE

After the import is successful, the SmartLogger restarts for the configuration files to take effect. Ensure that the parameters on the **Settings** tab page and the parameters for the built-in MBUS are correctly set. After the configuration files take effect, the WLAN, SSID, and password are changed.

- Remove the USB flash drive. All configuration files are imported.

Method 2: SmartLogger3000 WebUI

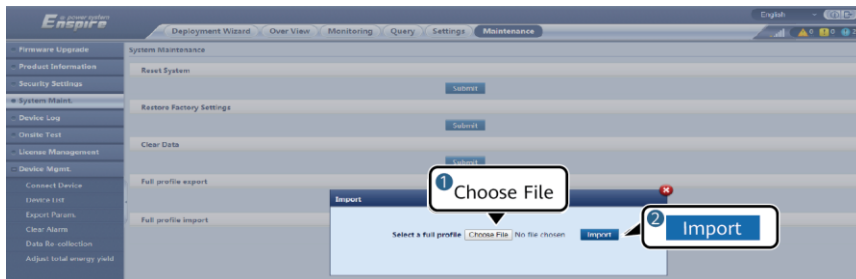
- In the address box of a browser, enter **https://XX.XX.XX.XX** (XX.XX.XX.XX is the IP address of the SmartLogger) and press **Enter**. The login page is displayed.
 - Log in as **admin**. The initial password is **Changeme**. When you log in to the WebUI for the first time, you are forced to change the password.
 - Use the initial password upon first power-on and change it immediately after login. To ensure account security, change the password periodically and keep the new password in mind. Not changing the initial password may cause password disclosure. A password left unchanged for a long period of time may be stolen or cracked. If a password is lost, devices cannot be accessed. In these cases, the user is liable for any loss caused to the PV plant.
- Choose **Maintenance > System Maint.** and click **Import** under **Full profile Import**. A dialog box is displayed, indicating that the SmartLogger3000 will restart after the import. Click **Confirm**. Enter the password again, and click **Submit**.



NOTICE

If the exported full configuration file is not encrypted (not the user login password), deselect **Decryption password of the imported file** in **Re-authentication** during import.

- Click **Choose File**, select the exported full configuration files, and click **Import**. A dialog box is displayed, indicating that the SmartLogger3000 will restart after the import. Click **Confirm**. The **Importing** progress bar is displayed.



- After the import is complete, click **Confirm**. The SmartLogger3000 restarts automatically. The configuration files are successfully imported.
- Choose **Maintenance > Device Mgmt. > Collect Perf. Data**.
- Select the type of the data to be collected and set the collection period.
- Select the name of the device whose data is to be collected and click **Collect Data**.
- Wait until all data is gathered. On the **Monitoring** page, query the collection result.

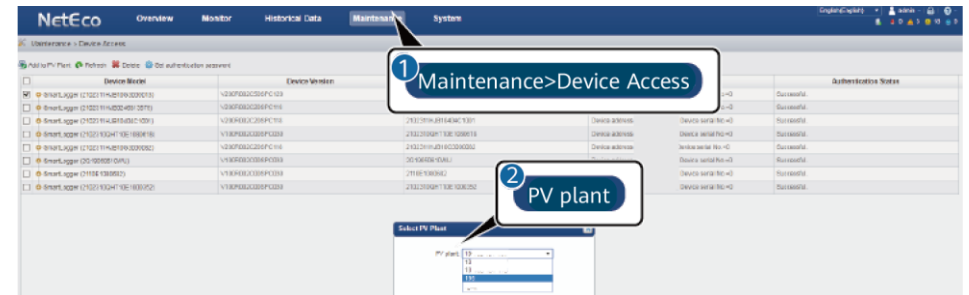
4 Parameter Settings in Management Systems

Scenario 1: Huawei Hosting Cloud

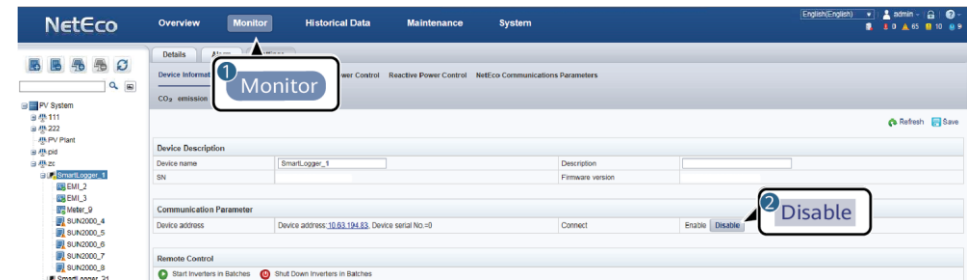
The SmartLogger3000 automatically connects to the hosting cloud. Log in to the Huawei hosting cloud, choose **Device Management**, and verify that the SmartLogger3000 has been connected properly. No manual replacement is required.

Scenario 2: NetEco 1000S

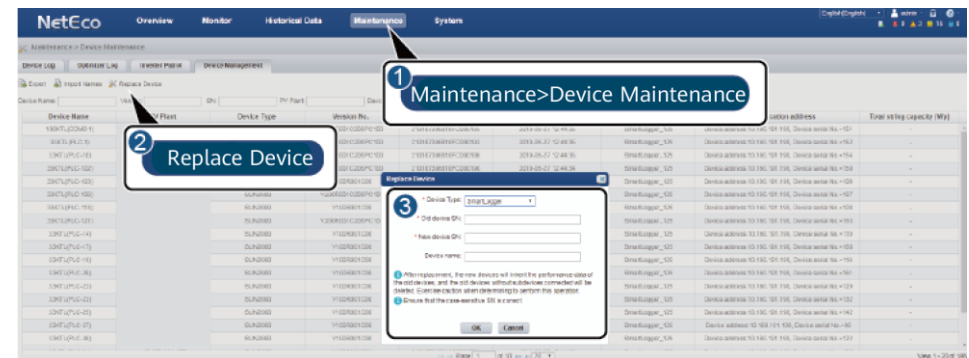
- Choose **Maintenance > Device access**, and add the SmartLogger3000 to the PV plant where the SmartLogger1000A is located.




- Set the communication parameter **Connect** of the SmartLogger1000A to **Disable**.

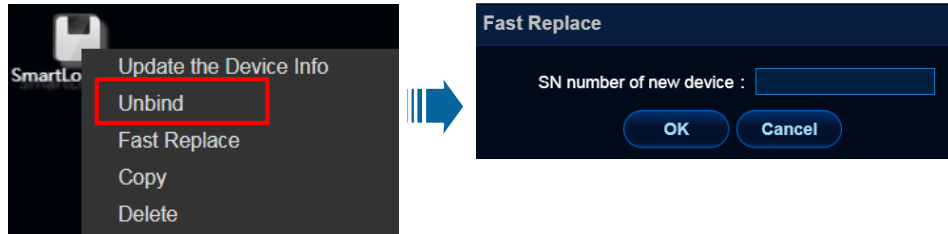


- Replace the SmartLogger1000A.



Scenario 3: FusionSolar Smart PV Management System

1. Log in to the FusionSolar smart PV management system and click , the plant digitalization page is displayed. In the lower right corner of the page, check that the SmartLogger3000 is properly connected in the **Device Self-Discovering** area.
2. Right-click the SmartLogger1000A diagram element, click **Fast Replace**, and enter the SN of the SmartLogger3000.



Scenario 4: Third-Party Management System

Replace the SmartLogger1000A with the SmartLogger3000 based on the guide of the third-party management system.

Scenario 5: Master/Slave SmartLogger

When the SmartLogger3000 replaces the slave SmartLogger1000A, choose **Maintenance** > **Connect Device** on the master SmartLogger WebUI, and click **Remove Devices** to delete the SmartLogger1000A. Click **Add Devices** to add the SmartLogger3000.

