FunsionSolarDG
V100R002C00

Upgrade Guides

Issue	01
Date	2024-10-22

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Change History

Issue	Date	Description
01	2024-10-22	This is the first release.

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1 Before You Start

1.1 Application Scope

This document applies to the upgrade of live-network FusionSolarDG versions.

1.2 Version Requirements

Version Requirements

This document applies to the upgrade of live-network FusionSolarDG versions. Before the upgrade, ensure that the corresponding upgrade package for the FusionSolarDG model has been obtained to prevent upgrade failure from occurring after this upgrade.

Impact on Services

- During the upgrade, the FusionSolarDG turn to ready mode. After the upgrade is complete, the FusionSolarDG automatically starts and run.

1.3 Upgrade Precautions

When upgrading the FusionSolarDG remotely, do not perform local operations on the FusionSolarDG.

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2 Upgrade Procedure

Table 2-1 Upgrade schedule

Step	Duration
Preparing for the upgrade	About 10 minutes
Performing the upgrade	Upgrade over the mobile app: about 30 minutes Upgrade over the NMS: about 45 minutes
Verifying the upgrade	About 10 minutes

3 Preparing for the Upgrade

3.1 Preparing Software and Documentation

3.1.1 Obtaining Upgrade Software and Tools

If you upgrade the FusionSolarDG over the mobile app, obtain the upgrade package from **https://support.huawei.com/enterprise/**.

Table 3-1 Basic information about the upgrade package

Type	File	Available At
Upgrading the FusionSolarDG over the mobile phone app	FusionSolarDGV100R002C00SPC629_package.zip (Note: Please use the one that actually needs to be upgraded. Target version upgrade package, subsequent guidance version. The number is an example, the specific version is based on the actual upgrade.)	Support > Digital Energy > Fusion Solar PV > FusionSolarDG

3.1.2 Checking the Upgrade Package Integrity

Check the package name and the number of files contained in the package after obtaining it to determine whether the upgrade package is tampered or damaged during transmission. The upgrade package can be used only after it passes the verification. The upgrade package verifies itself during the upgrade. The following describes the composition of an upgrade package.

Table 3-2 Files in the upgrade package

FusionSolarDG	Version	Files in the Upgrade Package
LUNA2000-5KW-C0 LUNA2000-5-E0	V100R002C00	• bms.bin • buck.bin • llc.bin • m4.bin • m4_hc.bin • signaturelist.cms • vercfg.xml • config.txt • signaturelist • signaturelist.crl

3.2 Performing Pre-upgrade Check

During the upgrade, the inverters must be connected to the grid or have PV power supply to ensure that the FusionSolarDG is not powered off to reduce the upgrade risks.

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4 Performing the Upgrade

4.1 Upgrading the FusionSolarDG over the Mobile Phone App

1. You can connect the mobile phone app to a FusionSolarDGof any model over WiFi and log in to the app to perform the upgrade.

   NOTE

   This section uses FusionSolarDG V100R002C00 as the source version. Before the upgrade, apply for and download the upgrade package of the corresponding target version from **https://support.huawei.com/enterprise/**.

2. When the upgrade progress reaches 100%, wait for the FusionSolarDG to automatically restart.

4.1.1 Environment Setup

[Required device] A mobile phone

[Device requirements]

- Mobile phone operating system: Android 4.0 or later, iOS 8.0 or later
- Recommended phone brands: Huawei, Samsung, and iPhone
- The mobile phone supports the access to the Internet over a web browser.
- The mobile phone supports WiFi.
- The router supports WiFi (IEEE 802.11 b/g/n, 2.4 GHz) and the WiFi signal reaches the SUN2000MA.

NOTE

The Android app and the iOS app are basically the same in terms of operation methods with slight differences in interfaces. The actual version prevails. This document uses the iOS app as an example to describe how to upgrade the inverter.

4.1.2 Upgrade Procedure

Step 1 Download and install the app.

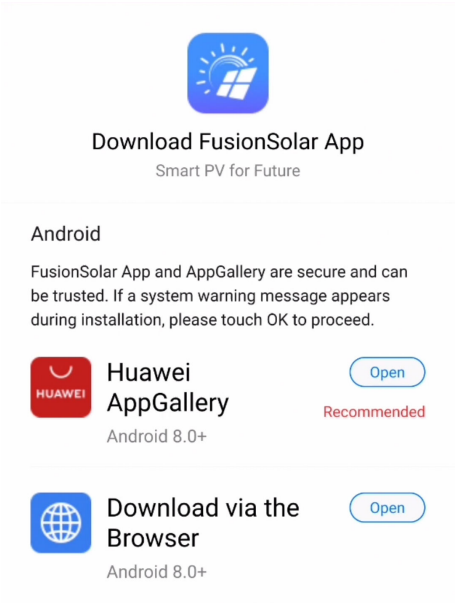
Method 1: Download and install the app from the app store.

- Huawei mobile phone users: Search for "FusionSolar" at Huawei AppStore.
- iPhone users: Search for "FusionSolar" in the App Store.
- Other mobile phone users: Select method 2.

Method 2: Scan the QR code and download and install it.

NOTE

1. If you select mode 2, you can select a download path based on the mobile phone type.
   - For Huawei mobile phone users, choose Huawei AppGallery.
   - For non-Huawei mobile phone users, choose Browser to download.
2. Select Browser to download. If a message such as "This app is from an unofficial app store..." is displayed during the installation, click Continue.



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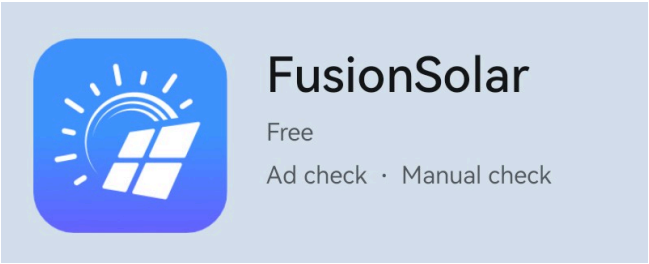
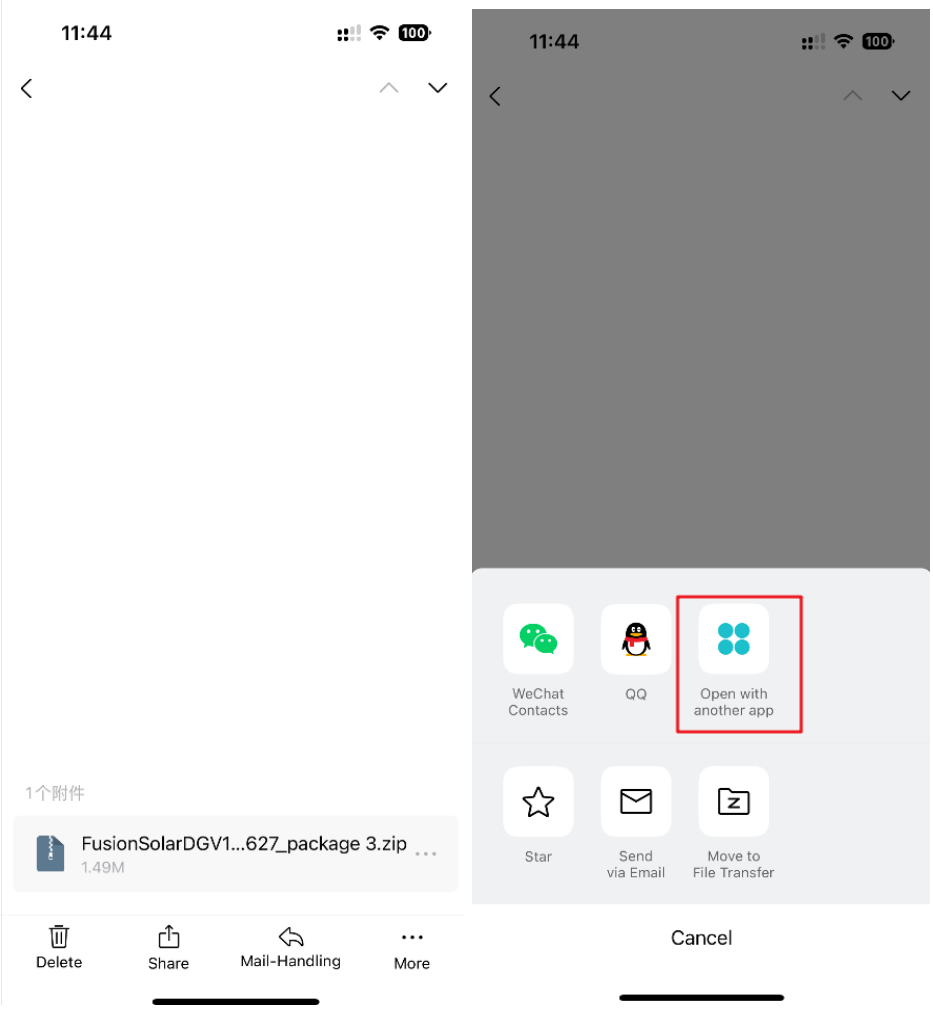
After the app is installed, the FusionSolar icon is displayed on the home screen.



Step 2 Download the upgrade package.

Download the upgrade package from **https://support.huawei.com/enterprise/** , and copy the upgrade package (not decompressed) to the root directory on the memory of the mobile phone.For the iOS operating system, you need to send the downloaded upgrade package to the FusionSolar app through an email, open the attached upgrade package file, and import it to the FusionSolar app through another application.



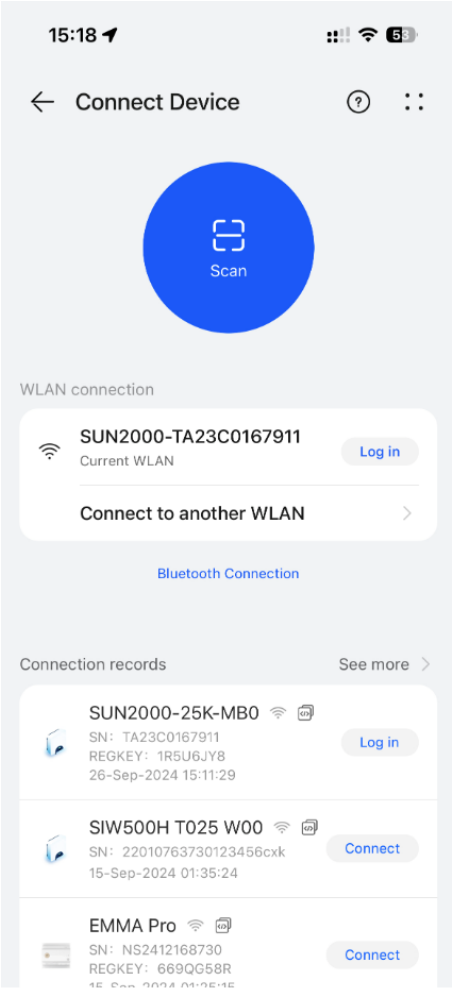
CAUTION

Ensure that the upgrade package (not decompressed) has been saved to the root directory on the memory of the mobile phone. Otherwise, the upgrade will fail.

Step 3 Open the app and connect to the inverter Wi-Fi. After the connection is successful, the inverter list page is displayed.

- Method 1: Connect to the inverter directly over the mobile phone.

  Run the app, tap the WiFi name of the corresponding inverter, and enter the WiFi password. Use the initial password **Changeme** upon first login. To ensure account security, change the password immediately after login.



- Method 2: Scan the QR code.

  If you log in for the first time and the initial WiFi password has not been changed, you can scan the WiFi login QR code on the side of the inverter to connect to the WiFi network.

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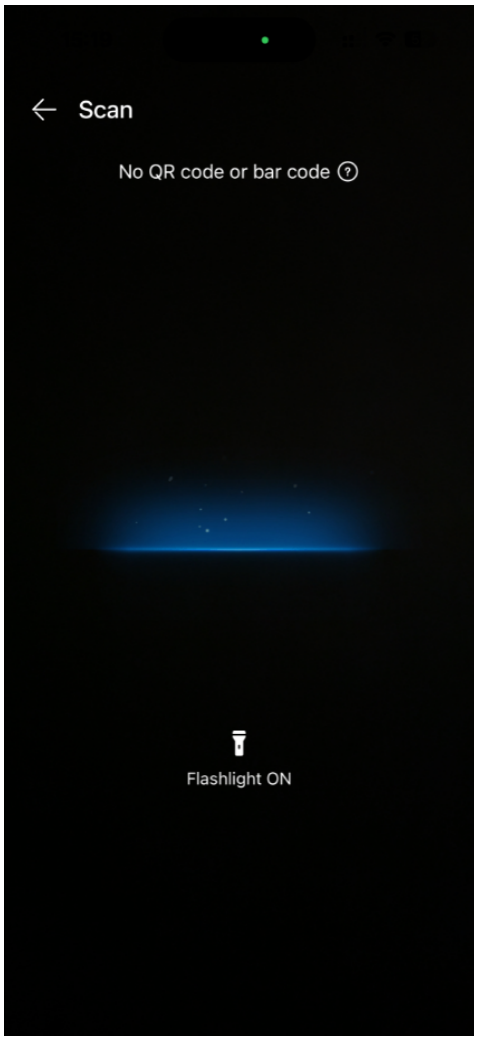
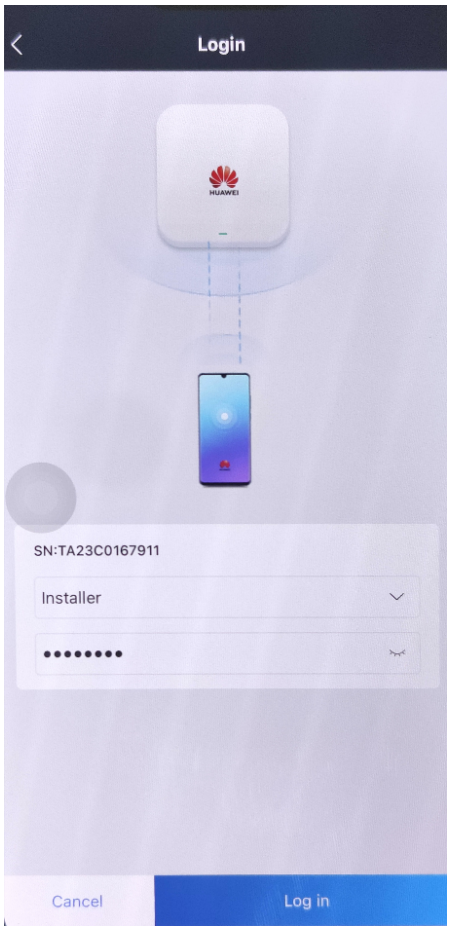
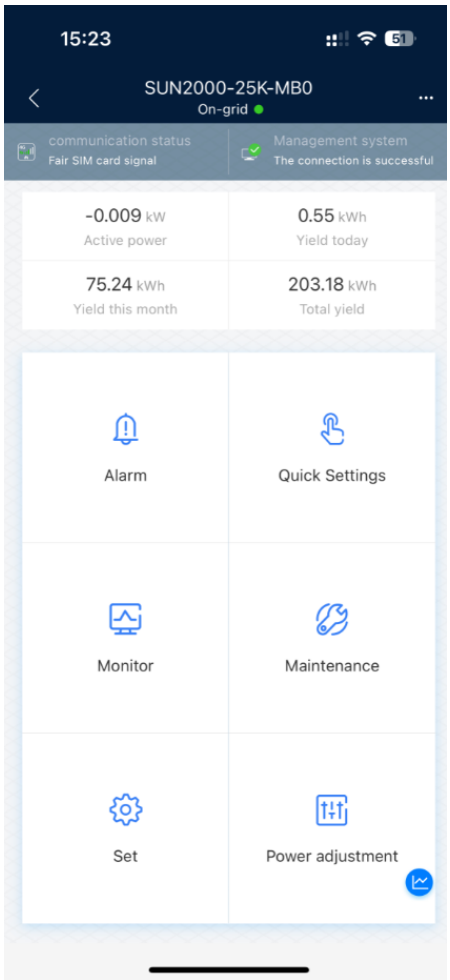


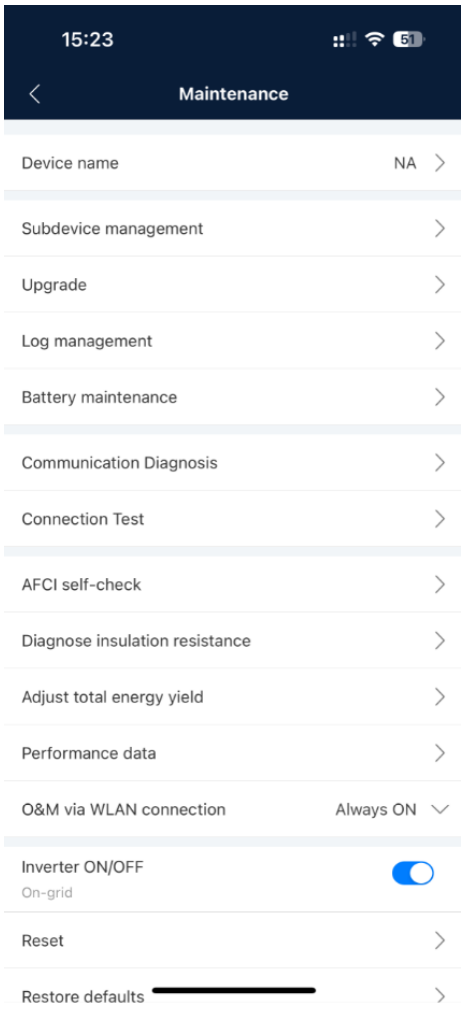
Step 4 Select the user name **installer** and enter the password, and then tap **LOGIN** to access the **Home** screen.



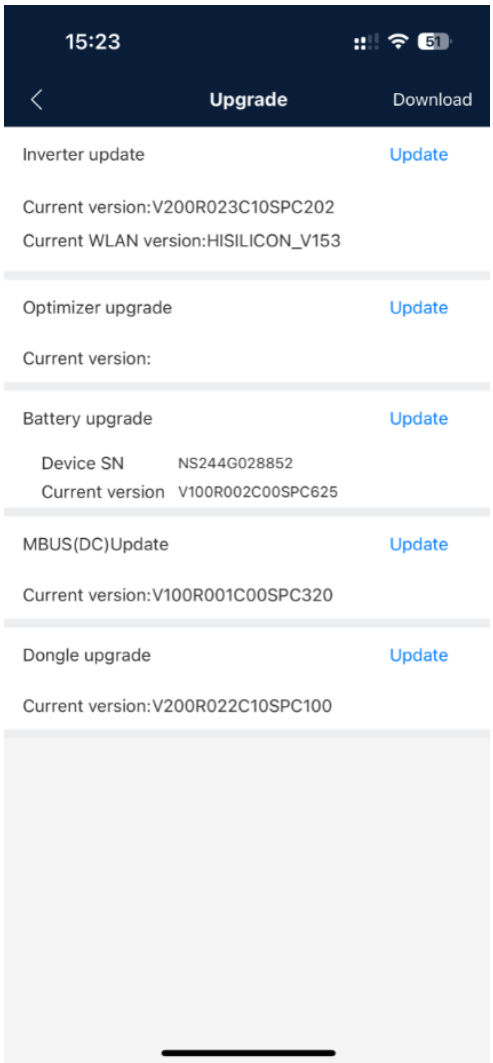
Step 5 On the **Home** screen, tap **Device maintenance**.



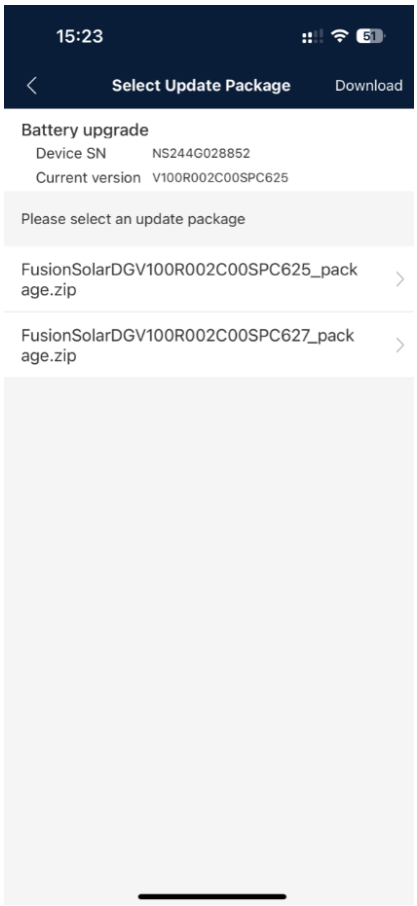
Step 6 On the **maintenance** screen, tap **Upgrade device**.

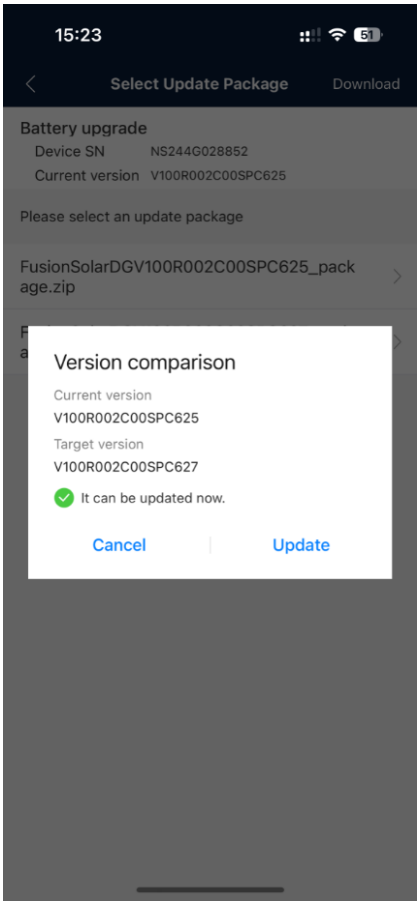


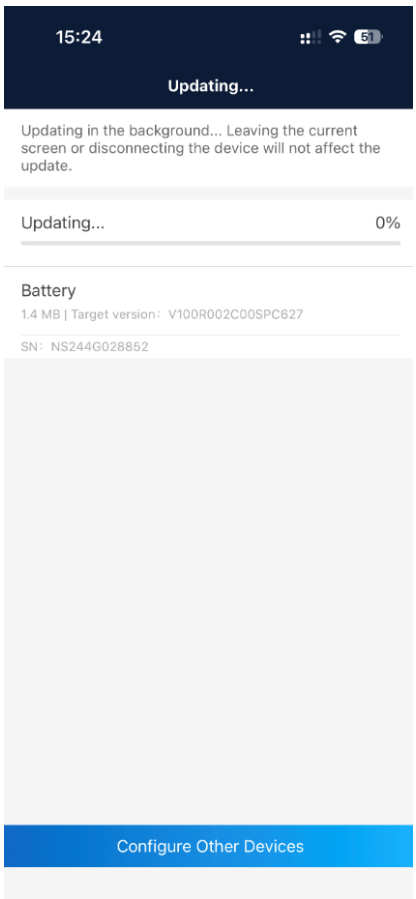
Step 7 Tap **Upgrade** under **Battery upgrade** to access the **Select upgrade package** screen. The app automatically scans the FusionSolarDG upgrade package. You can also manually select the path of the inverter upgrade package by tapping **Manually select**.



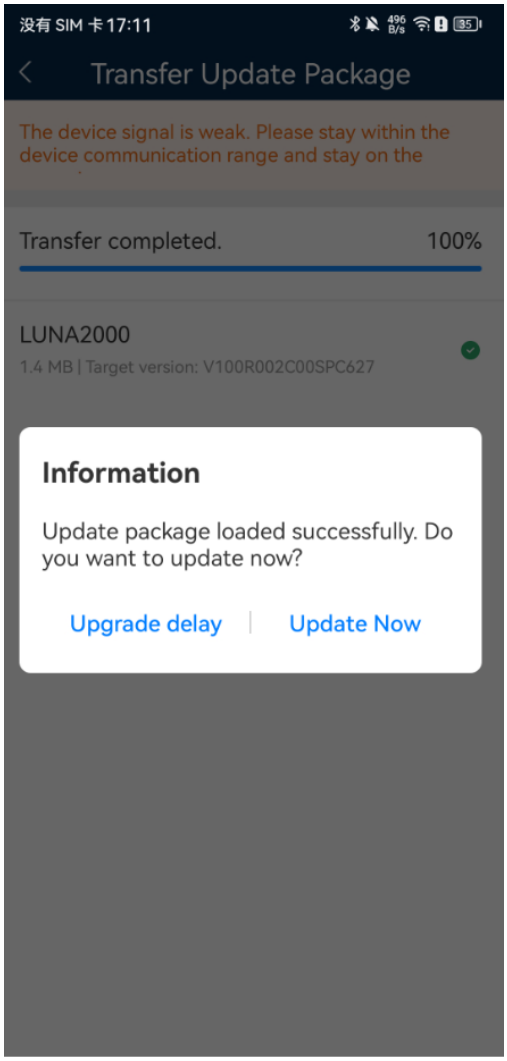
Step 8 Select the upgrade package. Tap the upgrade package of the target version. In the displayed **Version comparison** dialog box, tap **Upgrade**.


15:23
Select Update Package
Download
Battery upgrade
Device SN NS244G028852
Current version V100R002C00SPC625
Please select an update package
FusionSolarDGV100R002C00SPC625_package.zip
FusionSolarDGV100R002C00SPC627_package.zip

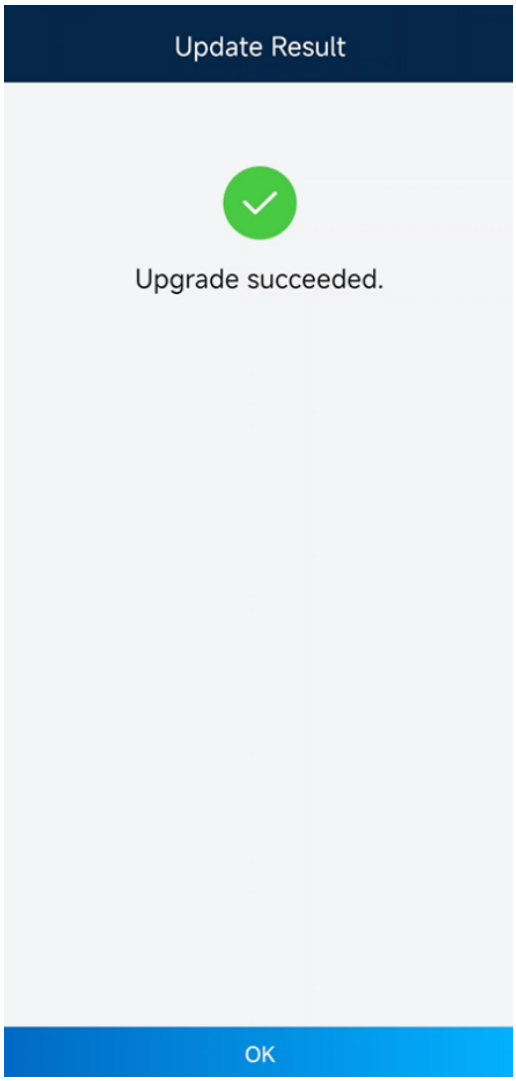

15:23
Select Update Package
Download
Battery upgrade
Device SN NS244G028852
Current version V100R002C00SPC625
Please select an update package
FusionSolarDGV100R002C00SPC625_package.zip
Version comparison
Current version
V100R002C00SPC625
Target version
V100R002C00SPC627
It can be updated now.
Cancel
Update


15:24
Updating...
Updating in the background... Leaving the current screen or disconnecting the device will not affect the update.
Updating...
0%
Battery
1.4 MB | Target version: V100R002C00SPC627
SN: NS244G028852
Configure Other Devices

In the scenario where the EMMA is directly connected, select Upgrade Immediately after the package is uploaded.



Step 9 Wait until the "Upgrade succeeded" message is displayed, indicating that the upgrade has completed.



NOTE

- If the communication times out, the activation progress will stay unchanged for a long time, and the system shows that the upgrade fails.
- Ensure that the WiFi communication is stable during the upgrade. If the inverter connects to the app directly, keep the mobile phone within 5 meters of the inverter to ensure the communication quality.
- After the upgrade succeeds, the inverter resets. Connect the mobile phone app to the inverter and log in to the inverter over the app again.

----End

4.1.3 Verification

Log in to the app and tap **Device maintenance** on the main menu screen. Then tap **Upgrade device** and check that the current version is the target version.

4.1.4 Troubleshooting

If the operation fails, repeat **Step 7** to **Step 9** in **4.1.2 Upgrade Procedure**and verify the upgrade.

4.2 Upgrading the FusionSolarDG over the NMS

1. All the live-network FusionSolarDG versions can be upgraded over the NMS.

   NOTE

   When you upgrade the FusionSolarDG over the NMS, the latest upgrade package is stored on the NMS. You do not need to obtain the upgrade package.

2. When the upgrade progress reaches 100%, wait for the FusionSolarDG to automatically restart.

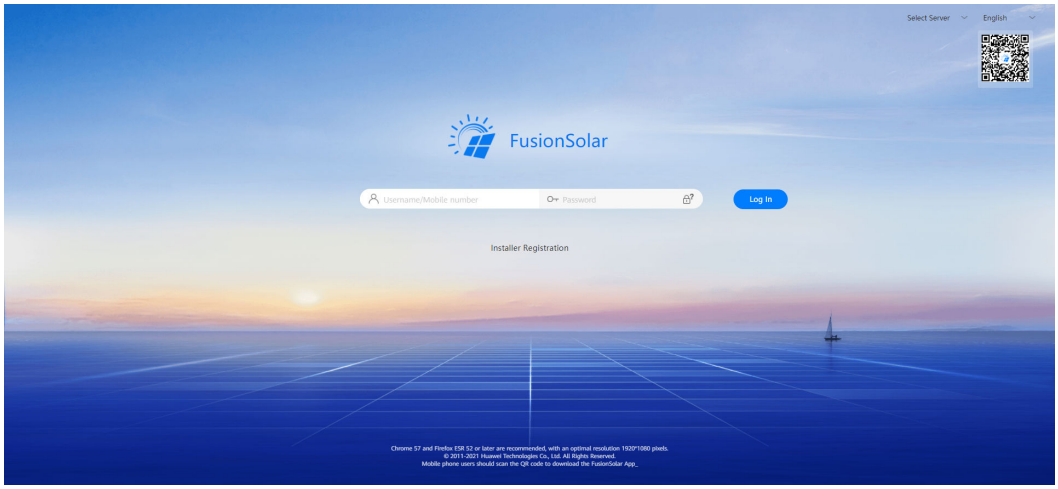
4.2.1 Environment Setup

[Required devices] A PC, a Dongle, a Inverter, FusionSolarDG, a power cable, and a network cable

[Device requirements] The FusionSolarDG, Inverter and the Dongle are powered on normally and are connected to the network. The communication between them is normal.

4.2.2 Procedure

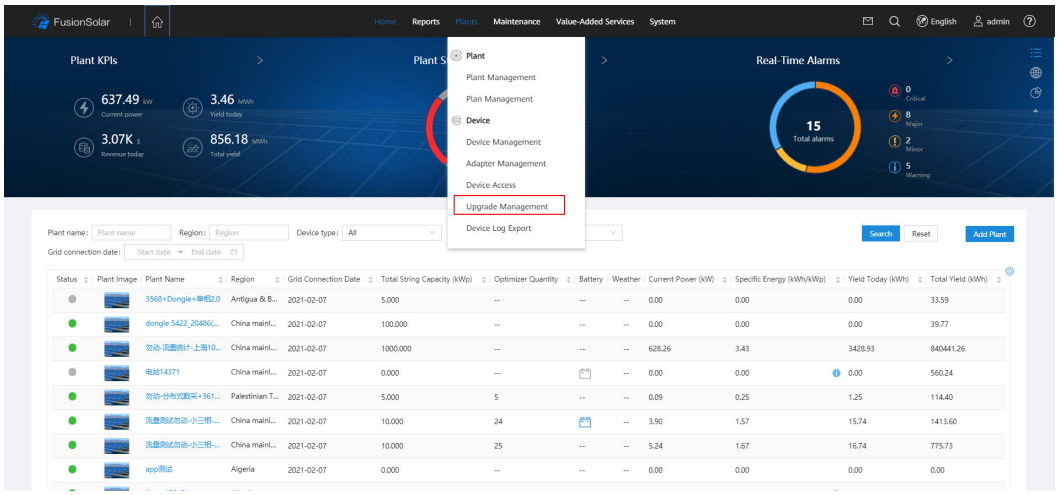
Step 1 Open a browser, enter **https://cn.fusionsolar.huawei.com** (Mainland China) or **intl.fusionsolar.huawei.com** (Hong Kong, Taiwan, and other areas) to access the NMS. Enter the user name and password to log in.



NOTE

- This document uses https://cn.fusionsolar.huawei.com/ as an example to describe related operations. The operation is subject to the NMS to which the inverter connects.
- If you do not have an account, you need to register an installer account before logging in to the system.
- Use Internet Explorer 11, Chrome 67, Safari 9.0, or a later version. Otherwise, exceptions may occur.

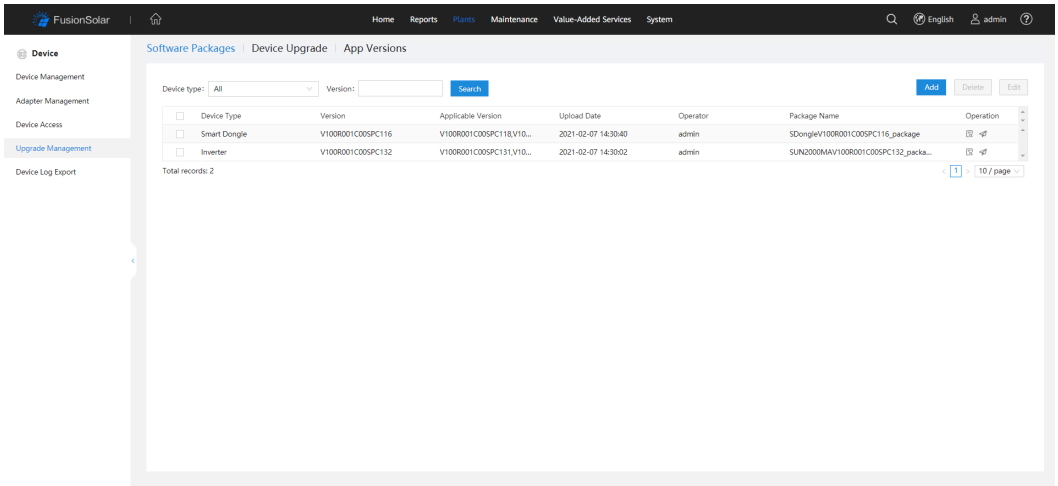
Step 2 On the home page of the NMS, click **Upgrade Management** which is sub-menu of the **Plants** at top-bar.



NOTE

Before upgrading the inverter, ensure that the PV plant is created successfully and you can find the corresponding device on the **Device Management** tab page.

Step 3 On the **Upgrade Management** Page.



Step 4 On the upgrade page, click **Device Upgrade** to query the upgrade information about devices of the PV plant.

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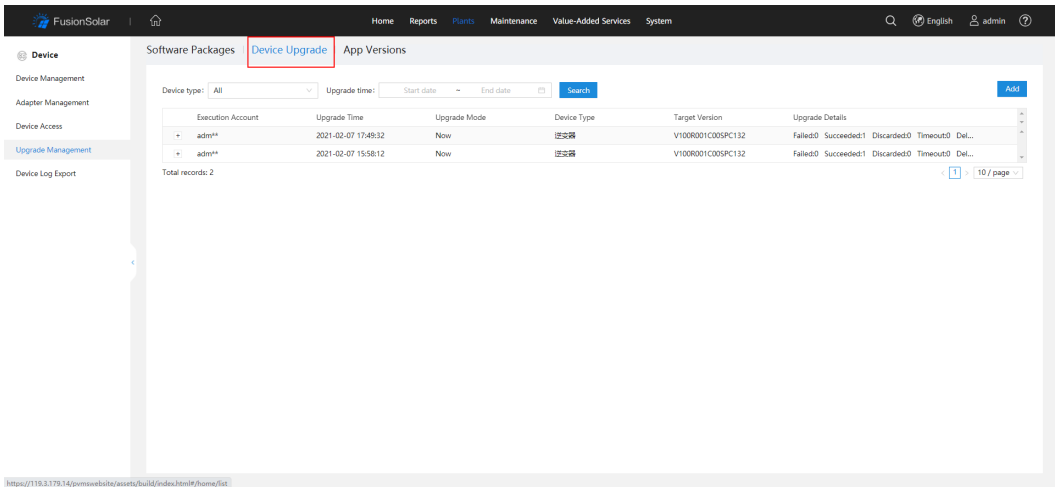
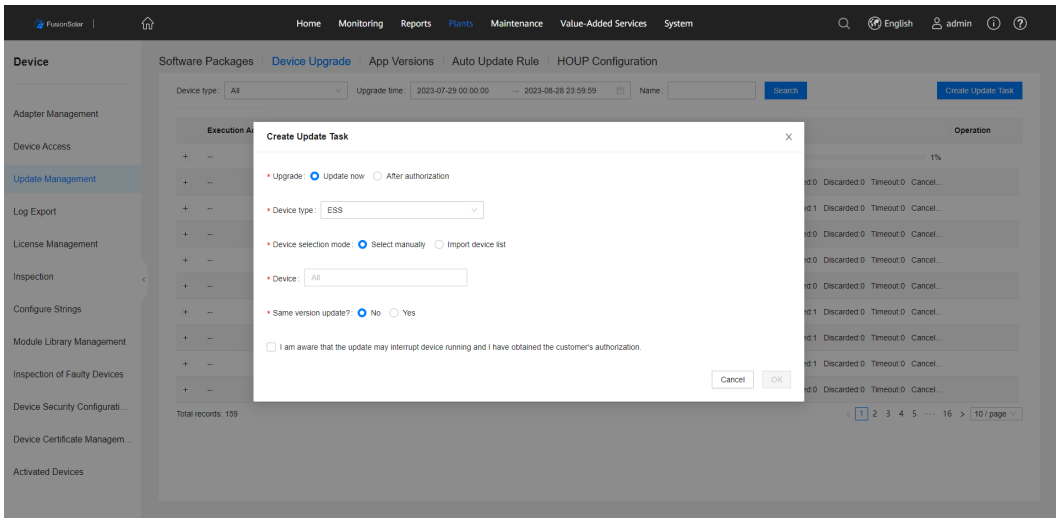


Step 5 Click **Add** on the **Device Upgrade** page. In the **New device upgrade** dialog box, set **Upgrade Method** to **Upgrade now** and set **Device Type** to **Battery**. Choose the target version and the device to be upgraded. After selecting the device, click **Confirm** to upgrade the device.



Step 6 Query upgrade details. After the upgrade task is added, you can query the upgrade details on the **Device Upgrade** page, including the upgrade progress, number of devices to be upgraded, and upgrade result.

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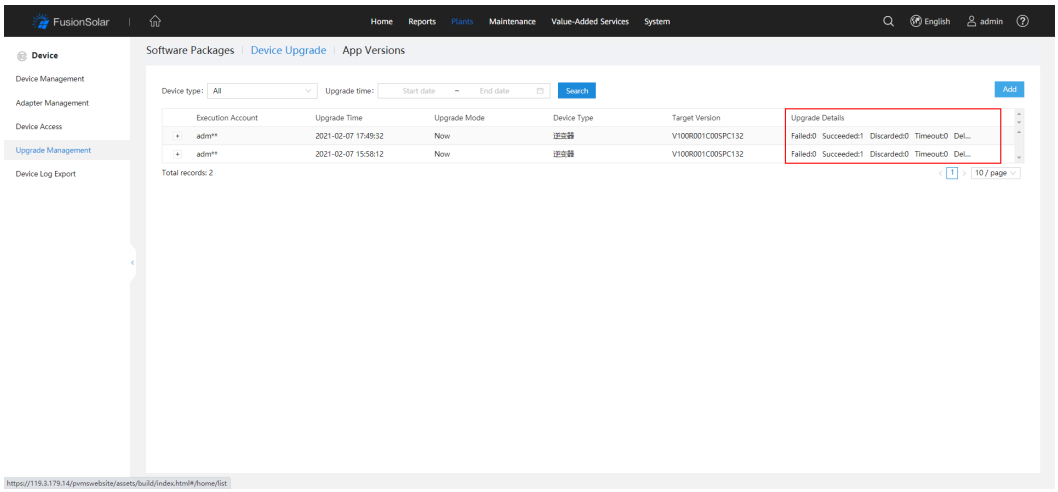
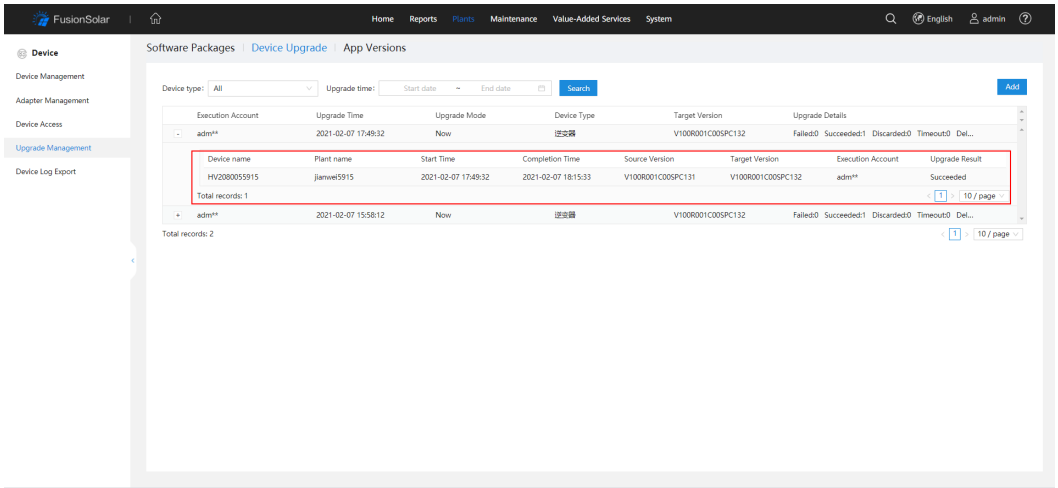


Step 7 Check the upgrade result. After the upgrade is complete, the inverter restarts and the upgrade result is displayed in the upgrade details. Click the icon on the left to view the detailed upgrade information.



----End

4.2.3 Verification

On the **Upgrade Management** page of the NMS, check whether the FusionSolarDG is upgraded to the specified target version.

4.2.4 Troubleshooting

If the operation fails, repeat **Step 5** to **Step 7** in **4.2.2 Procedure**"**4.2.2 Procedure**" and verify the upgrade.

5 Verifying the Upgrade

5.1 Verifying Basic Features

Table 5-1 Basic features

No.	Feature	Acceptance Criteria	Remarks
1	Viewing the running version of the inverter on the app or the NMS.	The version in use is the same as the target version.	None
2	Viewing the running status of the inverter on the app or the NMS.	The device status is normal.	None
3	Viewing the real-time running information on the app or the NMS.	All device data is collected and set normally.	None

After the upgrade, check the running parameters and configured parameters.

5.2 Verifying Modified and New Features

For details, see the corresponding release notes.