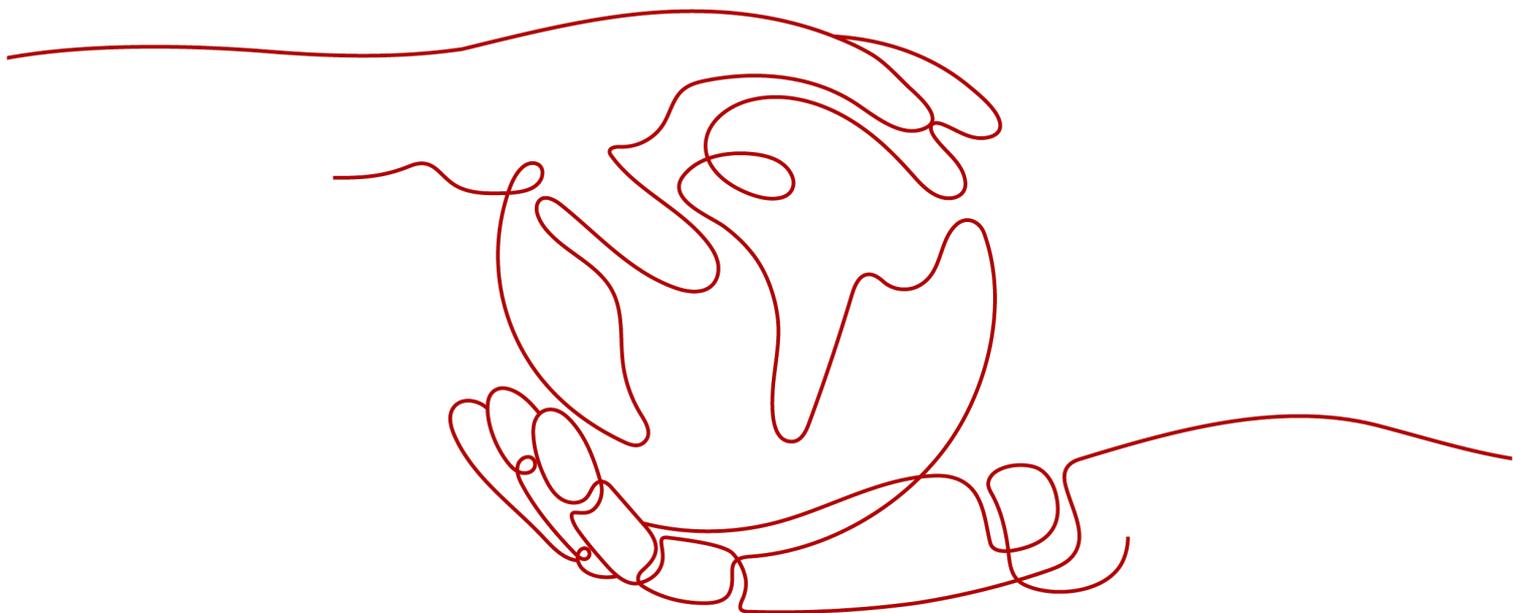


Optimizer Upgrade Guide for Grid-Connected Scenarios

Issue 01
Date 2023-03-06



Copyright © Huawei Digital Power Technologies Co., Ltd. 2023. All rights reserved.

No part of this document may be reproduced or transmitted in any form or by any means without prior written consent of Huawei Digital Power Technologies Co., Ltd.

Trademarks and Permissions



HUAWEI and other Huawei trademarks are the property of Huawei Technologies Co., Ltd.

All other trademarks and trade names mentioned in this document are the property of their respective holders.

Notice

The purchased products, services and features are stipulated by the contract made between Huawei Digital Power Technologies Co., Ltd. and the customer. All or part of the products, services and features described in this document may not be within the purchase scope or the usage scope. Unless otherwise specified in the contract, all statements, information, and recommendations in this document are provided "AS IS" without warranties, guarantees or representations of any kind, either express or implied. The information in this document is subject to change without notice. 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.

Huawei Digital Power Technologies Co., Ltd.

Address: Huawei Digital Power Antuoshan Headquarters
Futian, Shenzhen 518043
People's Republic of China

Website: <https://e.huawei.com>

Contents

1 Preparations Before Plant Visit.....	1
2 Upgrading Devices on the App.....	4
3 FusionSolar Management System Operation Guide.....	9
4 FAQ.....	11
4.1 How Do I Locate and Handle an Offline Optimizer?.....	11

1 Preparations Before Plant Visit

Updating the FusionSolar App Version

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

Huawei mobile phone users: Search for **FusionSolar** in Huawei AppGallery.

iPhone users: Search for **FusionSolar** in App Store.

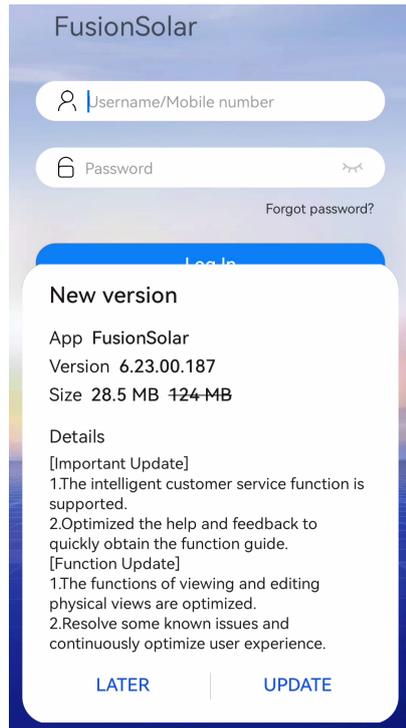
Other mobile users: Select another method.



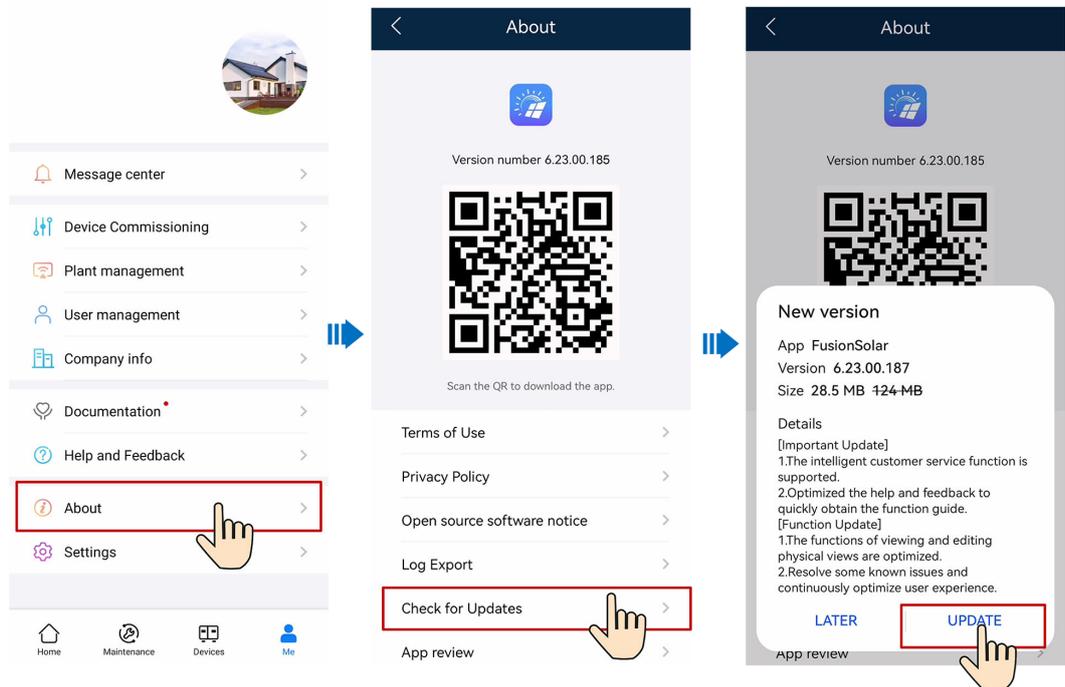
Method 2: Scan the QR code to download, install, and update the app.



Method 3: Open the FusionSolar app. A message will be displayed, indicating that a new version is available. Tap **UPDATE** to update your app.

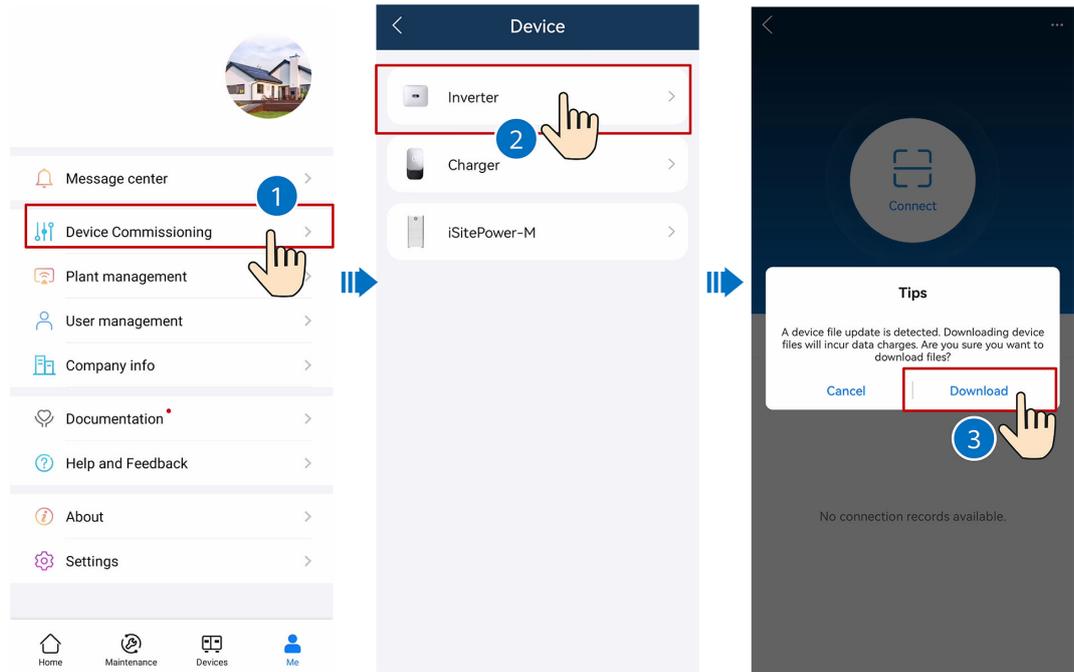


Method 4: Log in to the FusionSolar app and tap **Me > About > Check for Updates** to update the app to the latest version.

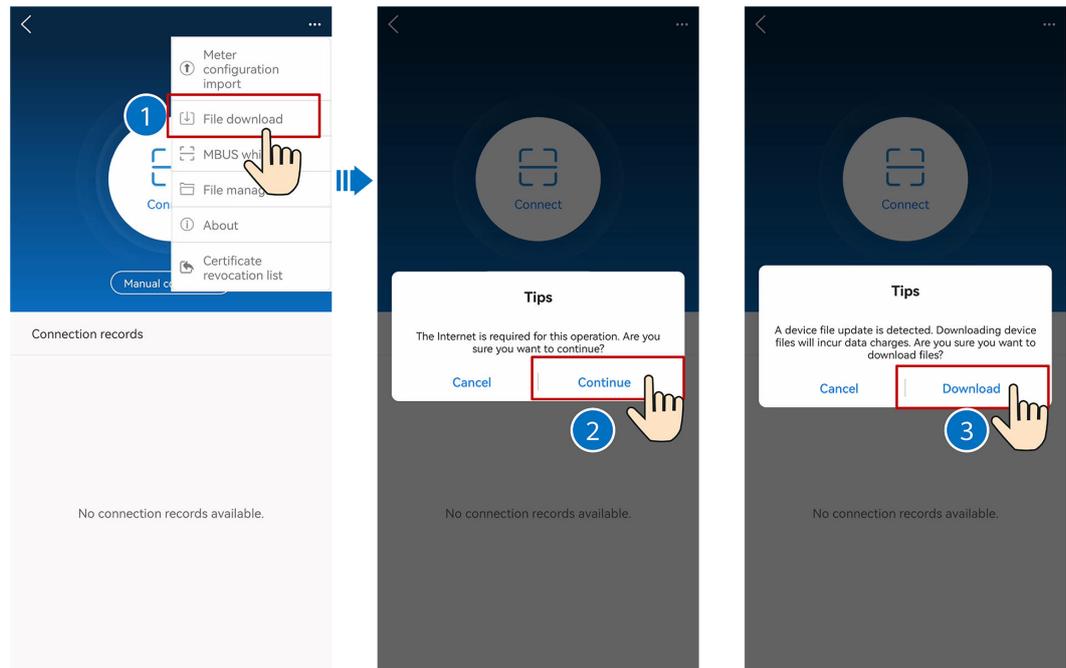


Downloading the Software Upgrade Package

Log in to the FusionSolar app and tap **Me > Device Commissioning > Inverter**. If the downloaded software upgrade package is of an earlier version, an update message is displayed, prompting you to download the latest software upgrade package.



If no update message is displayed, tap ... > **File download** to manually check for updates.



NOTE

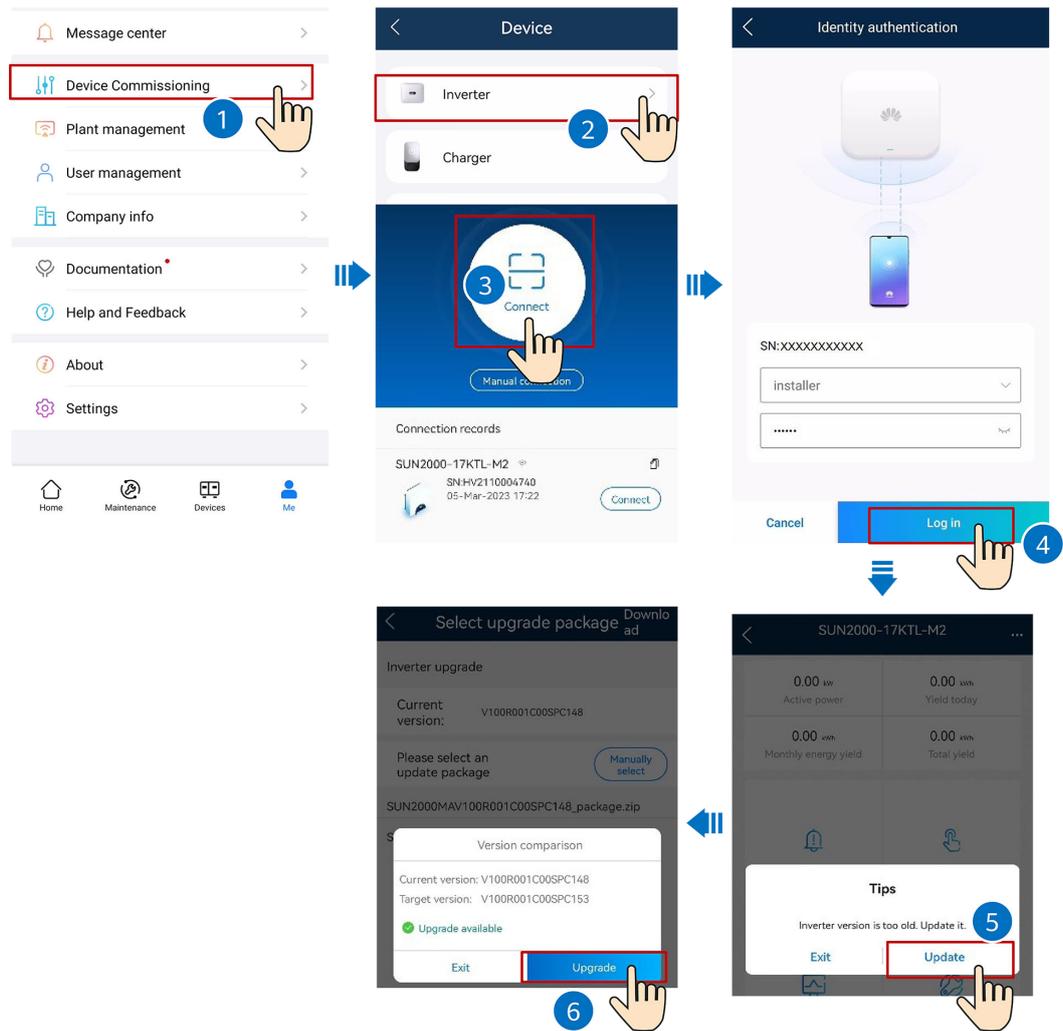
Updating the app version and downloading a software upgrade package consume a lot of data. You are advised to perform the update when the network signal is good.

2 Upgrading Devices on the App

Upgrading the Inverter Software Version

Connect the app to the WLAN hotspot of the inverter. Log in to the app and upgrade the inverter as prompted to the following software versions or later.

Inverter Model	Software Version
SUN2000L1	SUN2000L V200R001C00SPC130
SUN2000MA-M1/M2	SUN2000MA V100R001C00SPC153
SUN2000MA-M3	SUN2000MA V100R001C20SPC121

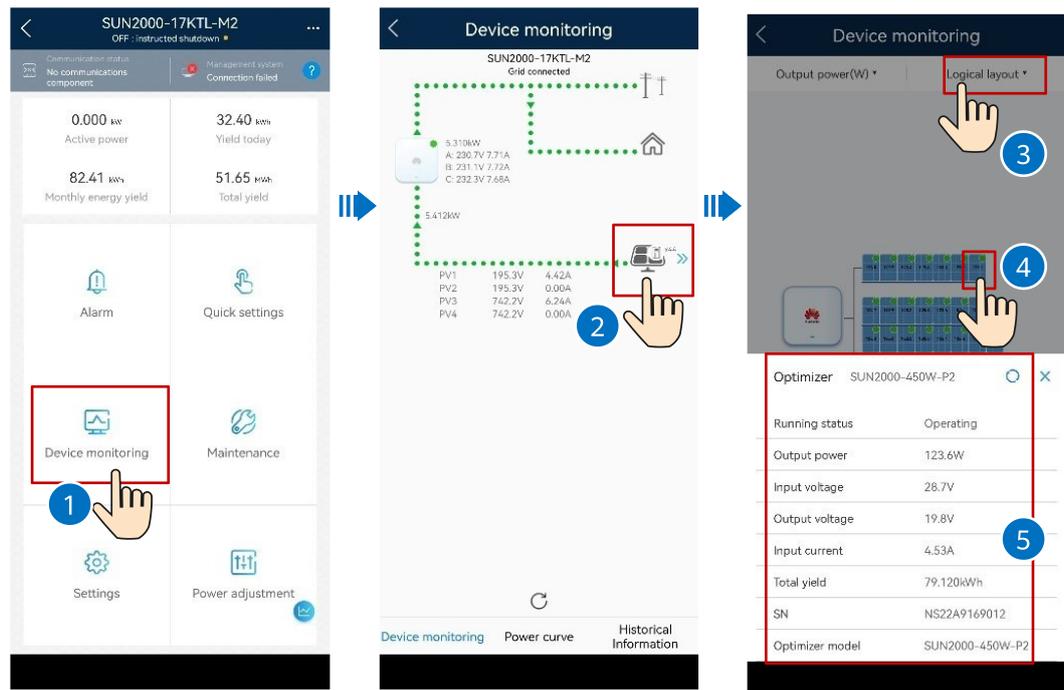


NOTE

The upgrade takes about 10 minutes. Do not leave the upgrade page until the upgrade is complete. If the upgrade fails, access the inverter commissioning screen and perform the upgrade again.

Checking the SNs and Quantity of Optimizers (Grid-Connected Scenario)

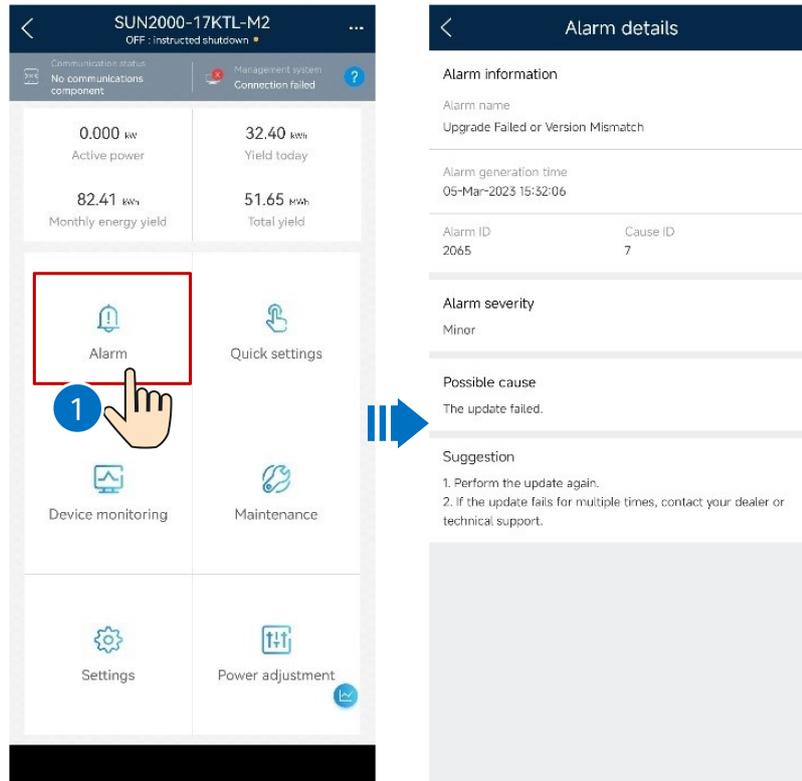
After the inverter upgrade is complete, reconnect the app to the inverter. Ensure that the SNs and quantity of optimizers displayed on the **Device monitoring** screen are consistent with those of the installed optimizers.



Clearing the Inverter Alarm 2065-7 Upgrade Failed or Version Mismatch

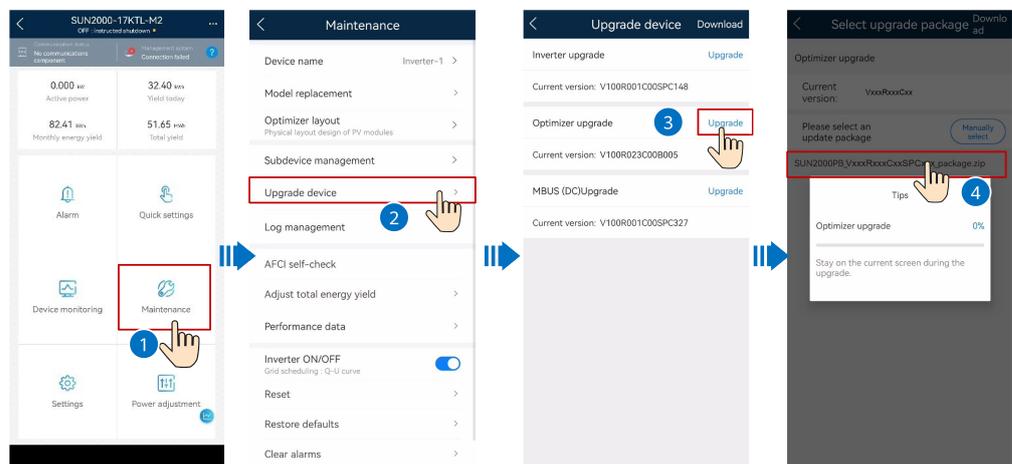
If the inverter detects that the optimizer software version is outdated, the alarm "2065-7 Upgrade Failed or Version Mismatch" will be generated and the inverter will shut down. Upgrade the optimizer software to clear the alarm by referring to the alarm handling suggestions.

Skip the following steps if the optimizer SNs and quantity have been checked, no alarm is generated on the inverter, and the inverter is running properly in grid-connected mode.



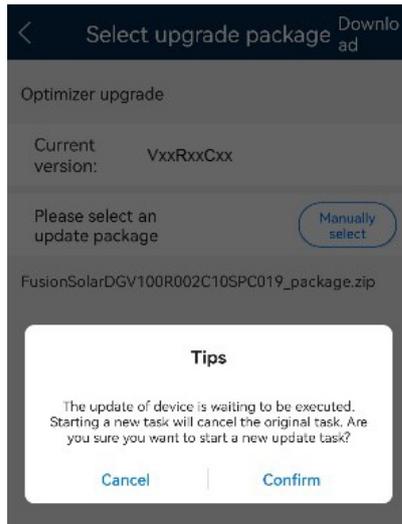
Upgrading the Optimizer Version

1. When the irradiance is good, reconnect the app to the inverter and upgrade the optimizers to FusionSolarDG V100R002C10SPC019 or later.



2. If the optimizer upgrade is successful, the alarm "2065-7 Upgrade Failed or Version Mismatch" will be automatically cleared, and the inverter will be reconnected to the power grid.

If the optimizer upgrade fails, upgrade the optimizer software again. If a message is displayed, indicating that the device upgrade is waiting to be executed, tap **Cancel**. In this case, ensure that the AC power supply to the inverter is normal. When there is light, the inverter automatically upgrades the optimizer software. If no such message is displayed or an AC power failure occurs on the inverter, manually upgrade the optimizer software again.



NOTE

The upgrade takes about 5 to 10 minutes (depending on the quantity of installed optimizers). Do not leave the upgrade screen until the upgrade is complete. If the inverter is not reconnected to the grid within 24 hours or other optimizer-related alarms are generated, contact GTAC technical support.

Connecting to the FusionSolar Management System

Connect the inverter to the FusionSolar management system by referring to the [FusionSolar App Quick Guide](#). You can log in to the FusionSolar management system to maintain the plant and update the device software.

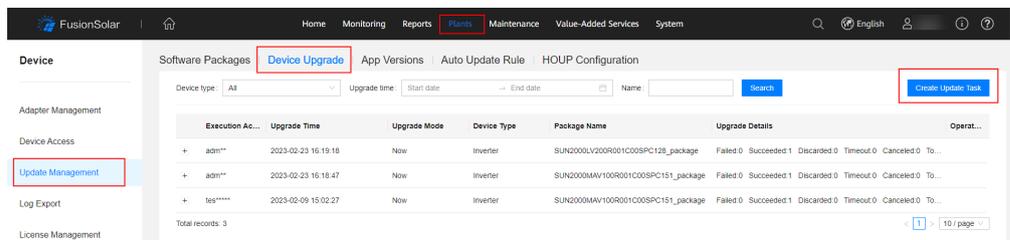
Scan the QR code to access the quick guide:



3 FusionSolar Management System Operation Guide

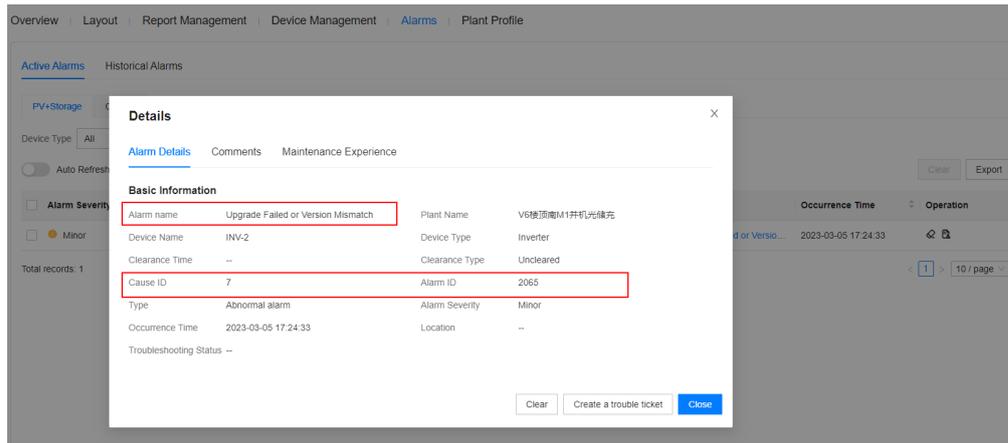
1. Log in to the FusionSolar management system and create an inverter upgrade task to upgrade the inverter to the following software versions or later.

Inverter Model	Software Version
SUN2000L1	SUN2000L V200R001C00SPC130
SUN2000MA-M1/M2	SUN2000MA V100R001C00SPC153
SUN2000MA-M3	SUN2000MA V100R001C20SPC121

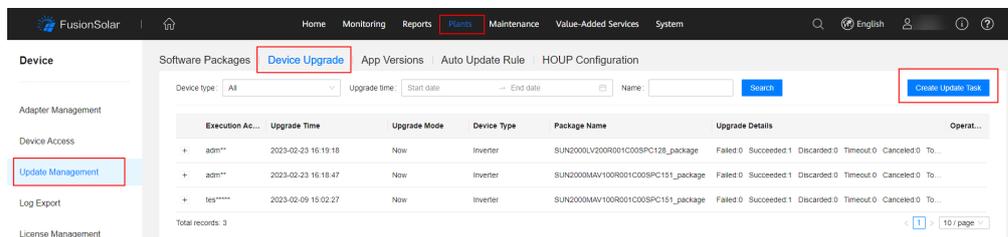


2. If the inverter detects that the optimizer software version is outdated, the alarm "2065-7 Upgrade Failed or Version Mismatch" will be generated and the inverter will shut down. Upgrade the optimizer software by referring to the alarm handling suggestions.

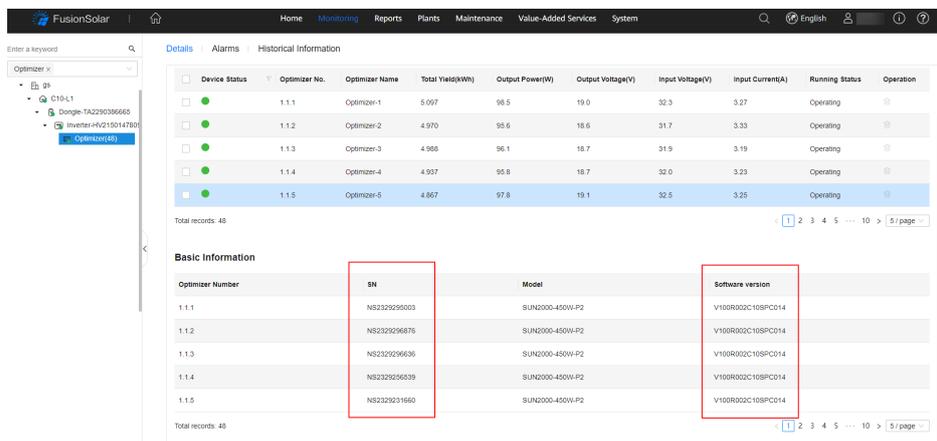
If no alarm is generated and the inverter is running properly, skip the following steps.



- When the irradiance is good, create an optimizer upgrade task to upgrade the optimizer to FusionSolarDG V100R002C10SPC019 or later.



- If the optimizer upgrade is successful, the alarm "2065-7 Upgrade Failed or Version Mismatch" will be automatically cleared, and the inverter will be reconnected to the power grid. If the optimizer upgrade progress reaches 100% but an upgrade failure message is displayed, ensure that the AC power supply to the inverter is normal. When the irradiance is sufficient, the inverter automatically upgrades the optimizer software.



NOTE

If the inverter is not reconnected to the grid within 24 hours or other optimizer-related alarms are generated, contact GTAC technical support.

4 FAQ

4.1 How Do I Locate and Handle an Offline Optimizer?

If there is an offline optimizer, locate it by referring to [SUN2000-\(600W-P, 450W-P2\) Smart PV Optimizer Quick Guide](#).

If the optimizer impedance is abnormal, contact GTAC to replace the optimizer. After the optimizer is replaced, perform the optimizer search again and ensure that the quantity of the searched optimizers is the same as that of the installed optimizers.

Scan the QR code to access the quick guide:

