

# Digi Connect Sensor Telit Modem Firmware Update

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Update Guide

## Revision history—90002339

Revision	Date	Description
A	February 2019	Initial release.
B	February 2019	Additional edits.
C	November 2022	Documentation update.

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# Digi Connect Sensor+ firmware and cellular modem firmware update

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This document describes how to update Connect Sensor+ firmware and the cellular modem firmware to resolve cellular brown-out failures.

It applies to the Connect Sensor+ containing one of these LTE modems:

Model	Description	Revisions
Telit LE910-NA1	AT&T	20.00.524.0 20.00.525.2
Telit LE910-SV1	Verizon	20.00.012.3 20.00.015.0

## Update process

The process is done in two steps:

### Update the Connect Sensor firmware

In this step you will update the current Connect Sensor+ firmware.

- [Update Connect Sensor+ firmware from Digi Remote Manager](#)

### Update the cellular modem firmware

In this step you will update the cellular modem firmware.

- [Update the cellular modem firmware over the air \(FOTA\)](#)

# Update Connect Sensor+ firmware from Digi Remote Manager

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This section describes how to update the Connect Sensor+ firmware. The Connect Sensor+ firmware should be updated before updating the cellular modem firmware.

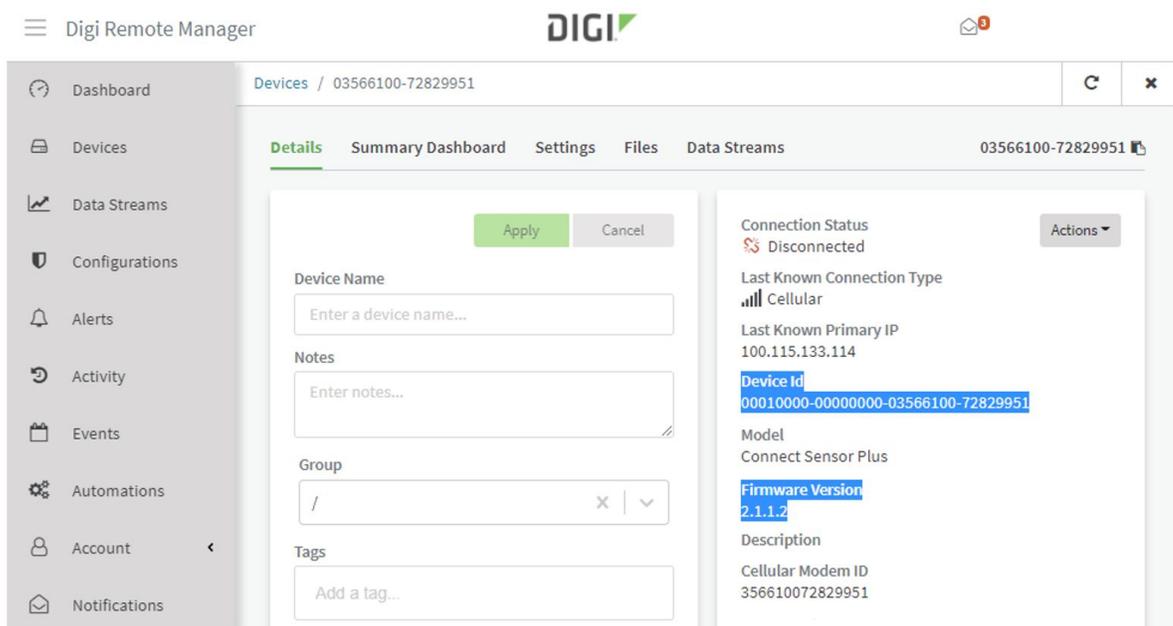
The update process is initiated from the Digi Remote Manager. It requires a working cellular connection. It does not require physical access to the device.

## Prerequisites

- Remote manager account
- Device ID of the Connect Sensor to update
- Connect Sensor firmware update file
- Modem firmware update file name

## Step 1: Open Remote Manager

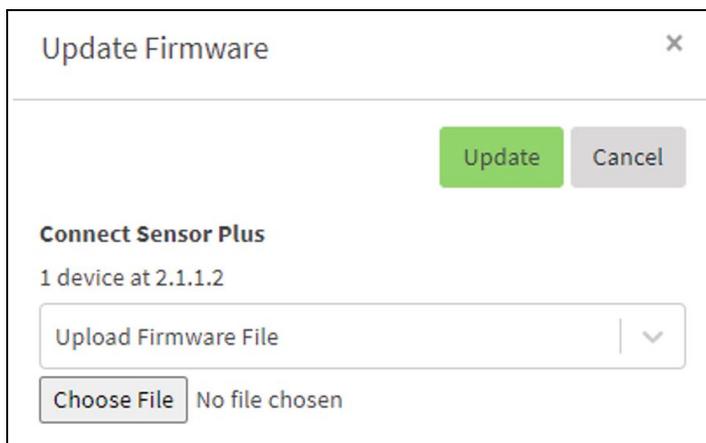
1. Open a web browser and navigate to [Remote Manager](#).
2. Log into your account.
3. Click **Devices** in the menu on the left side.
4. Find the device ID for the Connect Sensor+.
5. Click the device ID to open your device. The **Device ID** looks like this string: 00010000-00000000-03566100-72829951.
6. Check the **Firmware Version** of the device. Connect Sensor+ firmware version 2.1.1.3 or later is needed to update the modem firmware.
  - If the firmware version is 2.1.1.3 or later, you do not need to update the firmware. Skip to updating the cellular modem firmware: [Update the cellular modem firmware over the air \(FOTA\)](#).
7. Review the **Device ID**, which looks like this string: 00010000-00000000-03566100-72829951. It contains the IMEI of the modem. Make note of the device ID. You will need the device ID later to start the modem firmware update process.



## Step 2: Update the Connect Sensor+ firmware

This step is needed if the Connect Sensor+ firmware is less than version 2.1.1.3.

1. Click **Actions** > **Update Firmware**. The **Update Firmware** screen displays.
2. Click **Choose File**.
3. Select the desired Connect Sensor+ firmware update file and click **Open**.
4. Click **Update**.



The next time the Connect Sensor+ is scheduled to connect to Remote Manager, it will start the firmware update process. To cause the device to connect immediately, press the **Wake** button on the device.

Once started, the update will take a few minutes to complete. After the device completes the update, it will reconnect to the Remote Manager the next time it is scheduled to do so.

# Update the cellular modem firmware over the air (FOTA)

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The update process is initiated from the Digi Remote Manager. It requires a working cellular connection. It does not require physical access to the device.

## Prerequisites

- Remote manager account
- Device ID of the Connect Sensor+ that you want to update
- Modem firmware update file name

## Step 1: Open Remote Manager

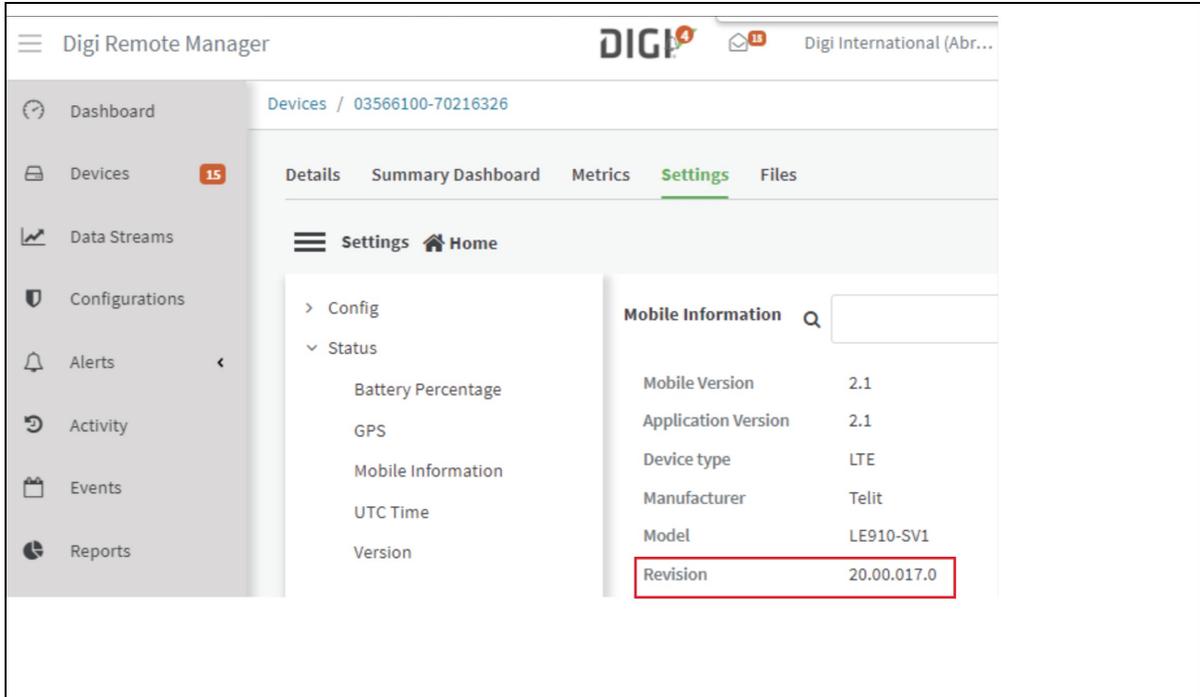
1. Open a web browser and navigate to [Remote Manager](#).
2. Log into your account.
3. Click **Devices** in the menu on the left side.
4. Find the device ID of your device.
5. Click the device ID to open your device and review the device ID.

The **Device ID** looks like this string: 00010000-00000000-03566100-72829951. It contains the IMEI of the modem. Make note of the device ID. You will need the device ID later to start the modem firmware update process.

## Step 2: Confirm the current firmware revision

1. Click **Settings** from the tabs at the top of the page.
2. Click **Status**.
3. Review the information in **Mobile Information** panel. Note the current revision in the **Revision** field.

The desired revision is 20.00.527.0 for AT&T modems, or 20.00.017.0 for Verizon modems. If the modem is already at this revision or later, no firmware update is needed.



### Step 3: Determine the Update String

Find the firmware revision in this table, and copy the corresponding update string:

Model and string	Revision	Update file name	Patch size
<b>LE910-SV1</b>	20.00.012.3	UpdPkg_LE910_SV1_1G_20.00.012.3_20.00.017.0.bin	4,277,678
ZnRwMS5kaWdpLmNvbQAYMQBhbm9ueW1vdXMAAdGVzdABzdXBwb3J0L3RlbGl0AFVwZFBrcZ19MRTkxMF9TVjFfMUdfMjAuMDAuMDEyLjNmJmJmJmJmMDE3LjAuYmlu			
<b>LE910-SV1</b>	20.00.015.0	UpdPkg_LE910_SV1_1G_20.00.015.0_20.00.017.0.bin	506,950
ZnRwMS5kaWdpLmNvbQAYMQBhbm9ueW1vdXMAAdGVzdABzdXBwb3J0L3RlbGl0AFVwZFBrcZ19MRTkxMF9TVjFfMUdfMjAuMDAuMDE1LjBfMjAuMDAuMDE3LjAuYmlu			
<b>LE910-NA1</b>	20.00.524.0	UpdPkg_LE910_NA1_1G_20.00.524.0_20.00.527.0.bin	932,846
ZnRwMS5kaWdpLmNvbQAYMQBhbm9ueW1vdXMAAdGVzdABzdXBwb3J0L3RlbGl0AFVwZFBrcZ19MRTkxMF90QTTFfMUdfMjAuMDAuNTI0LjBfMjAuMDAuNTI3LjAuYmlu			

Model and string	Revision	Update file name	Patch size
<b>LE910-NA1</b>	20.00.525.2	UpdPkg_LE910_NA1_1G_20.00.525.2_20.00.527.0.bin	877,554
ZnRwMS5kaWdpLmNvbQAYMQBhbm9ueW1vdXMAAdGVzdABzdXBwb3J0L3RlbGl0AFVwZFBzZ19MRTkxMF9OQTFFMUDfMjAuMDAuNTI1LjJfMjAuMDAuNTI3LjAuYmlu			

## Step 4: Initiate the firmware update

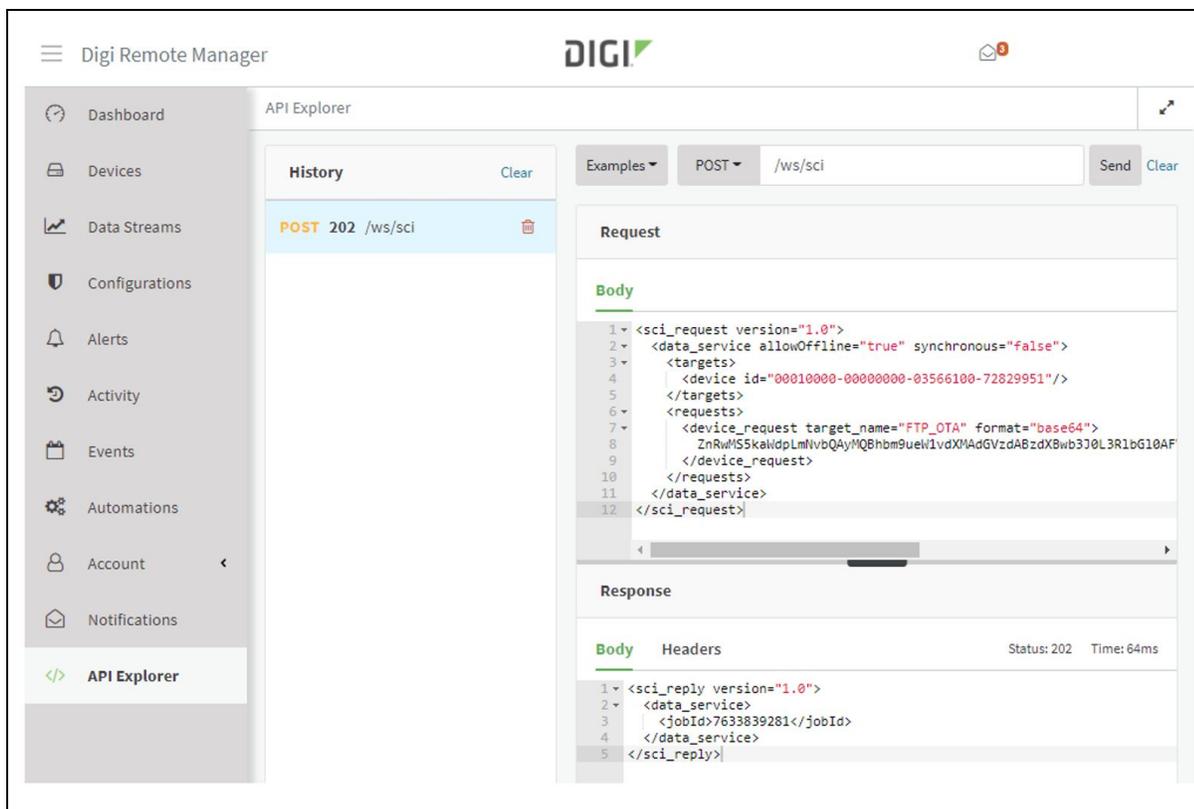
1. In the Remote Manager, click **API Explorer**.
2. Select **Examples > SCI > Data Service > Send Binary Request**.
3. A template request (in XML) displays. Delete the template and replace with the XML below.
  - Patch the **#Device ID#** with the correct value from [Step 1](#).
  - Patch the **#Update string#** with the value from [Step 3](#).

---

```
<sci_request version="1.0">
  <data_service allowOffline="true" synchronous="false">
    <targets>
      <device id="#Device ID#"/>
    </targets>
    <requests>
      <device_request target_name="FTP_OTA" format="base64">
        #Update string#
      </device_request>
    </requests>
  </data_service>
</sci_request>
```

---

4. Click **Send**.
5. Enter your user name and password if prompted.



The next time the Connect Sensor+ is scheduled to connect to Remote Manager, it will start the firmware update process. To cause the device to connect immediately, press the **Wake** button on the device.

Once started, the update will take a few minutes to complete. After the device completes the update, it will reconnect to the Remote Manager the next time it is scheduled to do so.

## Updating multiple devices

The above example shows how to update a single Connect Sensor+. More than one device can be updated with a single Remote Manager request.

To update a list of devices, add their device IDs to <targets> in the request. For example:

```

<targets>
  <device id="00010000-00000000-03566100-79000697"/>
  <device id="00010000-00000000-03566100-79000698"/>
  <device id="00010000-00000000-03566100-79000699"/>
  <device id="00010000-00000000-03566100-7900069A"/>
  <device id="00010000-00000000-03566100-7900069B"/>
</targets>

```

To update all devices in a Remote Manager group, add the group name to <targets>.

For example:

```

<targets>
  <group path="my_group"/>
</targets>

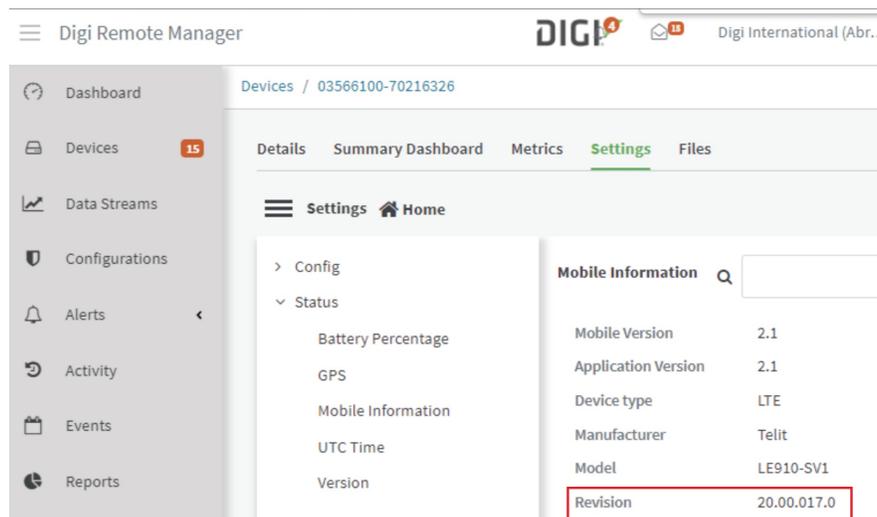
```

All devices in the request must have the same modem revision and update string. Devices will individually connect as scheduled and perform the update.

See the [Digi Remote Manger 3 User Guide](#) for more information.

## Step 5: Confirm the new firmware revision

1. In the Remote Manager, click **Devices** in the menu on the left.
2. Click on your device to open it.
3. Click **Settings** from the tabs at the top of the page.
4. Click **Status**.
5. Review the information in **Mobile Information** panel.
6. Click the refresh arrow at the top of the page to update the fields.
7. The new revision value displays the **Revision** field. It should now be 20.00.017.0 (Verizon) or 20.00.527.0 (AT&T).



## Troubleshooting the FOTA update

If the device does not report the expected revision, follow these steps:

- Check if the device has connected to the Remote Manager since the firmware update was initiated. In Remote Manager, click **Devices** to display the device page. Click **Summary Dashboard**.
- Repeat [Step 5](#) to refresh the modem firmware revision on the device page.
- Try the FOTA update again.