
How To Update The WiFi Dongle Chipset Firmware

This guide explains how to update the HF21 / HFA21 WiFi Dongle chipset used in some GivEnergy systems. Updating the chipset improves WiFi stability with newer routers. The update requires connecting to the dongle's local hotspot and uploading two firmware files.

Download the Required Files

You can download the firmware files here:

Download File: [Firmware Downloads](#)

Before You Begin

- You must use a laptop or computer (not a phone).
- Ensure strong local hotspot connection.
- If using an external dongle, power it from a USB power supply.
- If using an internal inverter dongle, turn DIP switches 2 and 3 **Off** to reduce data load, then turn them back **On** afterwards.

Step 1 - Connect to the Dongle Hotspot

On your laptop, search for WiFi networks and connect to the dongle hotspot. Its name will look similar to:

- **WE2300G100**
- **WJ2300G100**

If the hotspot is password-protected and you cannot access it, press the dongle reset button for 10 seconds. After rebooting, the hotspot will have no password.

Step 2 - Log in to the Dongle

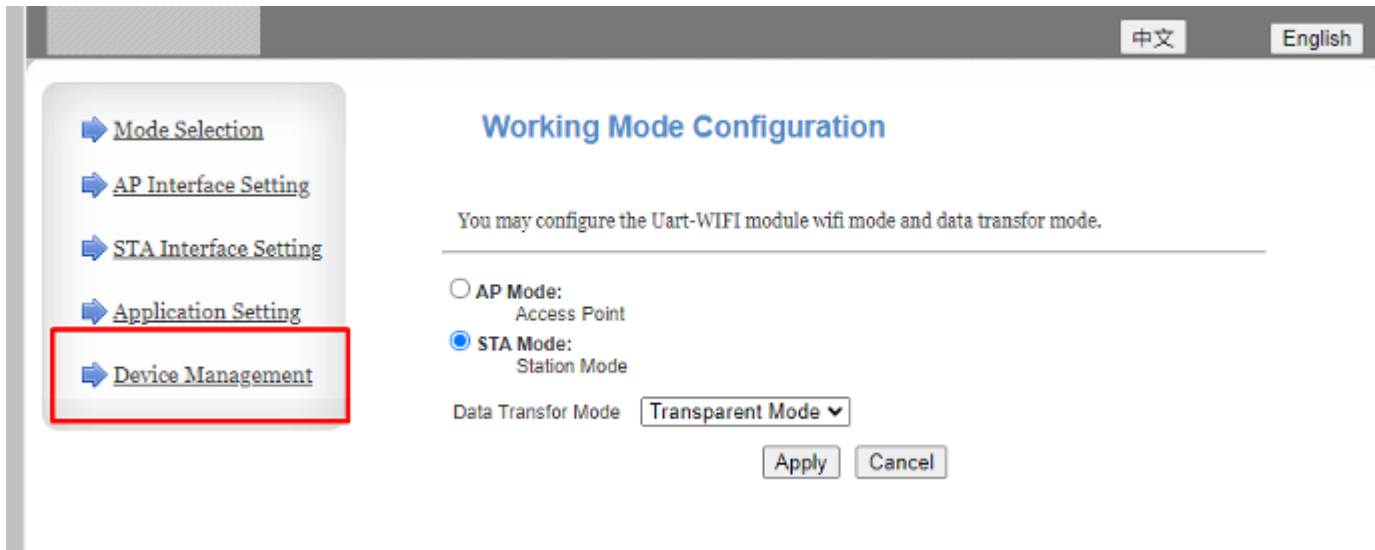
Open a web browser and go to:

<http://10.10.100.254>

Username: admin

Password: admin

Step 3 - Check Your Current Version



Select **Device Management**. Make a note of the current chipset version. If it is below T27, proceed with the update.

Step 4 - Upload the Firmware Files

Go to:

<http://10.10.100.254/EN/uboot.html>

The screenshot shows a web browser at the URL `http://172.16.10.117/EN/uboot.html`. The page title is "Firmware Upgrade" and the version is "5.05T.24(Boot:V1.1.4)". There are two main sections for file uploads:

- Update Firmware:** Includes a "Location:" label, a "Choose file" button, and the text "No file chosen". Below it is an "Apply" button.
- Uboot Upgrade:** Includes a "Uboot Upgrade" label, a "Choose file" button, and the text "No file chosen". Below it is a "确定" (Confirm) button.

The bottom part of the screenshot shows a "Device Management" section for version "5.02T.04". It contains a description: "You may configure administrator account and password, load default setting or update firware." Below this is an "Adminstrator Settings" table:










Adminstrator Settings	
Account	<input type="text" value="admin"/>
Password	<input type="text" value="admin"/>

At the bottom of the settings table are "Apply" and "Cancel" buttons. On the left side of the interface, there is a navigation menu with the following items: Mode Selection, AP Interface Setting, STA Interface Setting, Application Setting, and Device Management (which is currently selected). Language options for "中文" and "English" are visible in the top right corner.

Upload the files **one at a time** in the following order:

1. **T27 Chipset Update File** → Apply → Reboot when prompted

2. **Bootloader (1.1.4)** → Apply → Reboot

name	status	Date modified	type	size
 NW15197_A21_GeiLi_V27.bin	 	24/07/2025 17:01	BIN File	786 KB
 ReadMe how to Update WiFi Chipset.docx	 	21/06/2025 17:14	Microsoft Word D...	253 KB
 v1.1.4_uboot 2.bin	 	11/04/2025 10:22	BIN File	84 KB

After both uploads and reboots, the page should display:

5.05T.27(Boot:V1.1.4)

You may configure administrator account and password, load default setting or update firmware.

- **Chipset Version:** T27
- **Bootloader:** 1.1.4

Step 5 - Confirm the Update

Return to **Device Management** and verify the firmware version now shows T27. This confirms the update completed successfully.

Step 6 - Secure the Dongle

中文 English

Mode Selection
AP Interface Setting
STA Interface Setting
Application Setting
Device Management

STA Interface Setting

You could configure STA interface parameters here.

STA Interface Parameters	
AP's SSID	IoT_NET Search...
MAC Address (Optional)	
Security Mode	WPA2PSK ▼
Encryption Type	AES ▼
Pass Phrase	[Redacted]

Apply Cancel

WAN Connection Type: DHCP(Auto config) ▼

DHCP Mode	
Hostname(Optional)	GivEnergy_ACCF233D9BBC

Apply Cancel

Under STA Interface Settings

- Change the local hotspot password (under AP Interface Settings).
- Change the login password (under Device Management).
- Use a secure password rather than simple values such as 12345678.

WO2310G357	
Security Mode	WPA2-PSK ▼
WPA	
WPA Algorithms	<input type="radio"/> TKIP <input checked="" type="radio"/> AES <input type="radio"/> TKIPAES
Pass Phrase	12345678



WO2310G357	
Security Mode	WPA2-PSK ▼
WPA	
WPA Algorithms	<input type="radio"/> TKIP <input checked="" type="radio"/> AES <input type="radio"/> TKIPAES
Pass Phrase	12345678



Step 7 - Reconnect the Dongle to Your WiFi Network

Once the chipset is updated and secured, reconnect the dongle to your home WiFi network as normal using the WiFi setup menu.

After the Update

The dongle should now maintain a more stable WiFi connection on modern routers. If issues continue:

- Ensure router is using 2.4 GHz WiFi
- Ensure DHCP is enabled
- Reduce WiFi channel width to 20 MHz
- Move router closer or reduce obstructions

<https://givenergy2025.zohodesk.eu/portal/en/kb/articles/how-to-update-the-hf21-hfa21-wifi-dongle-chipset>