

How to upgrade my Ewon device from 3G to 4G?
PRODUCT TYPE: EWON[®] COSY, EWON[®] FLEXY, EWON[®] NETBITER

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Table of Contents

1. Preface	1
2. How to Check my Ewon Gateway Modem Type?	2
3. Upgrade your Ewon® Flexy Device	3
3.1. How to replace your Extension Card?	4
4. Upgrade your Ewon® Cosy Device	6
4.1. How to Replace your Ewon® Cosy?	6
5. Upgrade your Ewon® Netbiter	8
6. Upgrade your Ewon Device via an Anybus Bolt LTE/5G	12

1. Preface

Cellular networks are by nature complex and versatile. In the life cycle of your Ewon base unit, some situations will require to adapt your connectivity capabilities.

- Customer upgrade request
- Adapt the Ewon base unit to different location/area
- Local Network modification (Technology phasing out / Coverage limitation)

Some countries are already starting to phase out mobile technologies like the 3G. Most of the time, the 2G (EDGE) networks will remain allowing connectivity for most of the mobile devices.

By default, Ewon's cellular modems will automatically:

- Switch between 2G/3G for 3G models: FLB3202 - EC6133D - EC350
- Switch between 3G/4G for 4G models: FLB320A/5/9 - EC71330K/L/M - EC360

As an example, the Ewon base units using a 3G modem will be able to switch back automatically (default configuration) to the 2G networks.

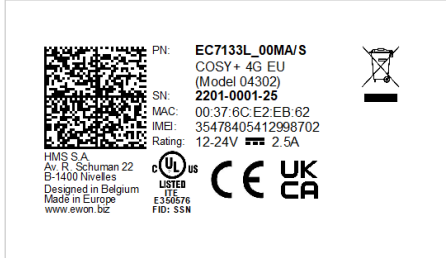
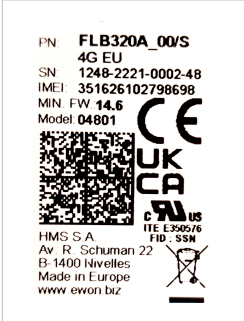
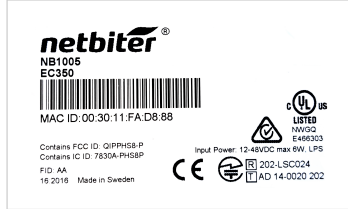
However, the *2G technology may be too slow* to allow correct remote access. Therefore, a **hardware upgrade** of your Ewon will be **required**.

This document explains what you need to consider performing this change.


2. How to Check my Ewon Gateway Modem Type?

You can check the *Gateway Modem Type* of your device from:

- The Unit or Extension Card **Label sticker**

Ewon Cosy Label	Ewon Extension Card Label	Netbiter EC350
		

- The **Summary** page via the Ewon Web Configuration Interface (only for Cosy & Flexy devices)



System Information

General

Ewon Type: Cosy (EC7133L_00)

LAN IP/Mask: 10.0.0.53/255.255.255.0

Embedded modems

4G EU modem ✓

[From the EWON Cosy Interface]

Extension cards

3G extension card ✓

[From the EWON Flexy Interface]

The Part Number is followed by the *Product Code Name* that provides you with the identification of the modem type.

3. Upgrade your Ewon® Flexy Device

Ewon® Flexy base units use modem extension cards so they can be replaced to match the connection requirements.

**IMPORTANT**

Check your local network and mobile operator capabilities before ordering.

- **FLB320A - EU 4G LTE:**
 - 4G: B7(2600), B1 (2100), B3 (1800), B8 (900), B20 (800)MHz
 - 3G: B1 (2100), B8 (900) MHz
- **FLB3205 – NA 4G LTE (AT&T compliant):**
 - 4G: B12/B13 (700), B5 (850), B4 (AWS1700), B2 (1900)
 - 3G: B2 (1900), B5 (850)MHz
- **FLB3209 – APAC 4G LTE:**
 - 4G: B1, B3, B5, B7, B8, B18, B19, B21, B28, B38, B39, B40, B41
 - 3G: B1, B5, B6, B8, B9, B19

3.1. How to replace your Extension Card?

1. You need to **Power Off** the Ewon base unit.
2. Remove the current modem extension card.



NOTICE

If you plan to use the same SIM card for the new extension card, do not forget to remove the SIM card too.



Figure 1. The hooks to press are off-centered. Press while pulling upwards

3. Insert the SIM card into the new modem extension card.



4. Insert the extension card:
 - It can be **any** slot for the **Flexy 205**
 - It can only be **Slots B** for **other Flexy** devices



IMPORTANT


Cards that only fit in one slot type have a mechanical "mistake-proof" security to prevent them from being inserted in the wrong slot type.

5. **Power On** your Ewon device.

6. Wait for **LEDs** signal and *status confirmation*.

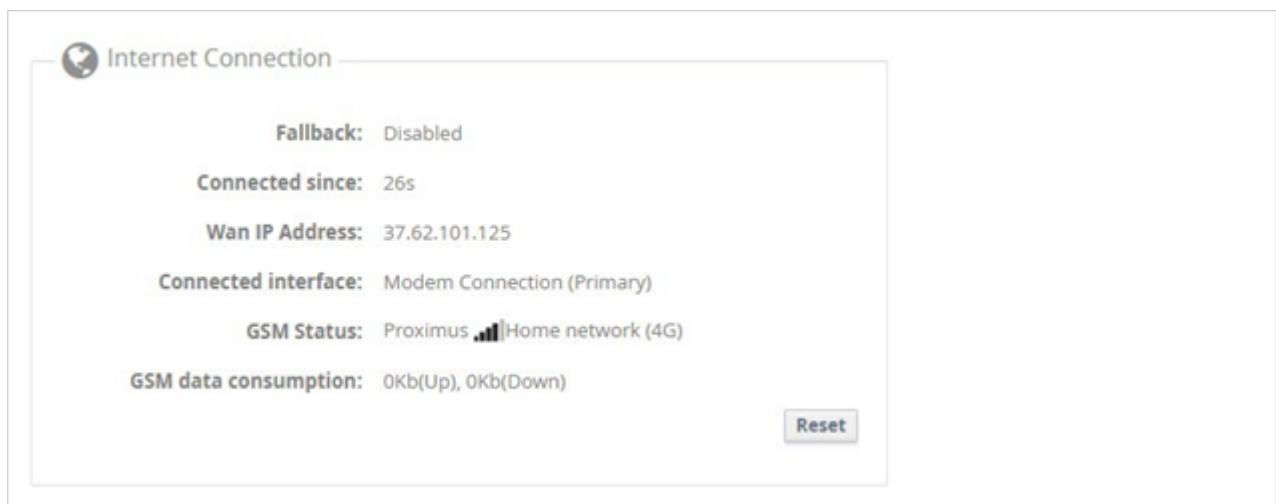


Item	Mark	Function
1	STAT	Tricolor: Red / Orange / Green Green ON = Modem is online
2	■	Reception Signal level Orange ON = level > 1 (poor signal)
3	■ ■	Reception Signal level Orange ON = level > 10 (signal ok)
4	■ ■ ■	Reception Signal level Orange ON = level > 16 (good signal)

 The LEDs represent only the signal level and not the type of technology used to perform a connection.

If the *connection* is not coming back *automatically*, you can launch the Ewon **Internet Wizard** again.

Connection type and **status** are also visible in the ewon *Web Configuration Interface* on the summary page.



NOTICE

Power On the Ewon **without** any modem **extension card** replacement **will automatically reset** the connection mode.

Ewon switch to *No Internet Connection*, to *No Maintain Connection* ("Wancnx" & "Wanpermcnx" set to 0).

In this case, after inserting the new extension card, you will need to launch the **Internet Connection Wizard** again or manually adjust the configuration:

- Modify the Network Connection via the **Menu**:
System > Communication > Networking > Internet Connection > Main Setup > Internet Acces
- Or set "Wancnx" to **1** for *modem connection* & "Wanpermcnx" to **1** for *maintain connection*

4. Upgrade your Ewon® Cosy Device

Ewon® Cosy units use embedded modems. This component can not be replaced or modified.

To ensure a connectivity modification, the **replacement** of the Ewon® Cosy unit is required.



IMPORTANT

Check your local network and mobile operator capabilities before ordering.

- **EC7133L – 4G EU Quad-band Modem :**
 - LTE: 800MHz (B20), 900MHz (B8), 1800MHz (B3), 2100MHz (B1), 2600MHz (B7)
 - UMTS/HSPA: 900MHz (B8), 2100MHz (B1)
- **EC7133K – 4G NA Quad-band Modem:**
 - LTE: 700MHz (B12/B13), 850MHz (B5), 1700MHz (B4), 1900MHz (B2)
 - UMTS/HSPA: 850MHz (B5), 1900MHz (B2)
- **EC7133M – 4G APAC Quad-band Modem:**
 - LTE: B1, B3, B5, B7, B8, B18, B19, B21, B28, B38, B39, B40, B41
 - UMTS: B1, B5, B6, B8, B9, B19, B39

4.1. How to Replace your Ewon® Cosy?

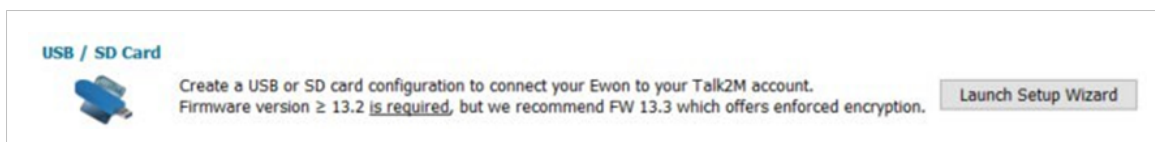
eCatcher allows an easy replacement of your Ewon device by using the **Talk2M Connectivity** parameters.



NOTICE

The *replaced Ewon* should be **powered off** before configuring the new Ewon® Cosy.

1. Connect to your eCatcher account.
2. Select the corresponding Ewon unit that needs to be replaced.
3. Click on the button **Properties**.
4. Then click on **Talk2M Connectivity**.
 - a. You can use the **Setup Wizard** to generate a configuration by *USB/SD Card*.



- b. You can copy the Ewon **Activation Key** and use the Ewon *Web Configuration Interface* to launch the VPN Wizard again.



Once registered on Talk2M, all your eCatcher users will be able to connect to it without any extra modification.

**NOTE**

If your previous Ewon® Cosy device contains additional settings (not only Internet and Talk2M Connection settings), you can also generate a manual **backup** of your **previous Ewon** device via **eBuddy** or **FTP**.

Restoring this backup via eBuddy or FTP, will register the new device on your Talk2m account but it is **mandatory to relaunch** the Talk2M Wizard, via the Ewon Web Configuration Interface, so you can **fully align the configuration**.

Otherwise, the Ewon will be connected in degraded mode to the Talk2M server, and several Talk2M features will not work. The **replaced Ewon** should be always **powered off and disconnected** from Internet before restoring the backup on the new unit.

Skipping this step will generate connection issues for both Ewon devices.

5. Upgrade your Ewon® Netbiter

To connect your Ewon Netbiter to the 4G Mobile Network, you need to use the Ewon Netbiter EC360.

Therefore if you are still using the Netbiter EC350, an hardware replacement to the new model is required.

On the Manage and Analyze account type, the **Replace** function allows you to substitute the Ewon Netbiter EC350 **without losing the configuration** and accumulated **data**.

1. **Adding your EC360 as a new field systems (M&A):**

- a. On the Management tab, select **All systems** > **Add system**.

The screenshot shows the 'Add system' form in the Netbiter management interface. The 'Management' tab is selected, and the 'All systems' > 'Add system' path is followed. The form includes the following fields:

- System name ***: My Netbiter EC360
- System ID ***: (empty field with a help icon)
- Activation code ***: (empty field)
- Project ***: My First project (dropdown menu)
- Time zone**: Europe (dropdown menu) and Brussels (dropdown menu)

An 'add' button is located at the bottom left of the form.

- b. Enter a **descriptive name** for the new field system.
 c. Enter the **System ID** and **Activation code** for the gateway.
 d. Select the **Project** that the field system will be a part of.
 e. Set the Time zone where the field system will be installed (optional).
 f. Click the **Add** button. You will be redirected to the **Inactive** tab, indicating that the system has been added to the project but is still inactive.

2. **Replacing a System (M&A):**


- a. Connect the new gateway via mobile network and power it up.
 b. Add the new gateway to the Netbiter Argos account. See [Adding your EC360 as a new field system \(M&A\)](#).
 c. On the **Management** tab, select **All Systems** and click on the **Replace** link for the system that is to be replaced.

The screenshot shows the 'Active' tab in the Netbiter management interface. The 'Management' tab is selected, and the 'All systems' > 'Active' path is followed. The table displays the following data:

Online	Name	System ID	Project	Level	GPS	Sync	
★	My Netbiter EC350	003011FAD888	My First project	MA-LOG50			replace deactivate remove

Below the table, there is a legend: ★ Offline, ★ Online, ☆ Unknown.

- d. Enter the *Activation Codes* for both gateways and click on **Replace**.



Replacing system: **My Netbiter EC350**

Replacing a system will swap all information between the two systems. After replace the system will need to be re-synchronized.

Replaced system	My Netbiter EC350 (003011FAD888)
Replaced system activation code *	<input type="text" value="heihirrho"/>
Replacement system *	** Select replacement system ** ▼
Replacement system activation code *	<input type="text"/>

- e. If using a mobile network, go to the **Mobile network** tab for the new system and configure the **SIM card settings**.
See [Connecting to the Netbiter Gateway](#).
- f. The new gateway will now *swap names with the old one*, which will be moved to the **Inactive** tab.
- g. Finally, **synchronize** the configuration.



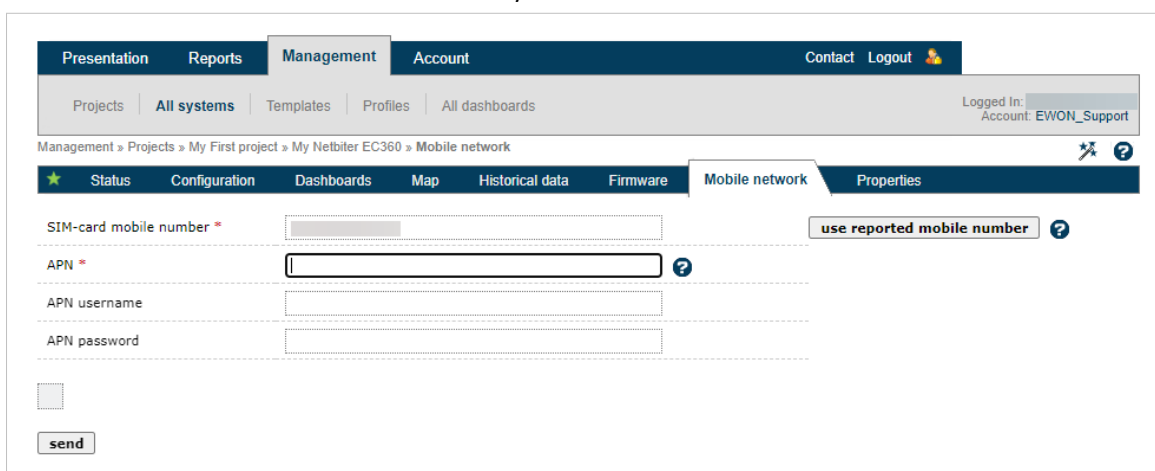
NOTICE

The removed unit may still be shown as online and the new unit as offline until Netbiter Argos has finished updating.

Please note that this may take several minutes.

3. Connecting to the Netbiter Gateway:

- a. Go to the **Management** tab and click on **All systems** subtab.
- b. Click on the Mobile network section and enter your **SIM Card Mobile Number**.



The screenshot shows the Netbiter Gateway Management interface. The top navigation bar includes 'Presentation', 'Reports', 'Management' (selected), and 'Account'. Below this, there are sub-tabs: 'Projects', 'All systems' (selected), 'Templates', 'Profiles', and 'All dashboards'. The main content area shows the path: 'Management » Projects » My First project » My Netbiter EC360 » Mobile network'. The 'Mobile network' tab is selected, showing fields for 'SIM-card mobile number *', 'APN *', 'APN username', and 'APN password'. There is a 'use reported mobile number' button and a 'send' button at the bottom.

- c. If available, click on Use reported mobile number to load the phone number that was reported from the SIM card.
Otherwise, enter the phone number manually.

- d. Enter the **APN** (Access Point Name) for the SIM card and (if required) the APN username and password. This should be provided by the mobile network operator.
- e. Click on **Send to confirm** and transmit the settings to the gateway.

**NOTE**

The SMS text message can take a long time to deliver depending on the mobile network used.

If the message has not been delivered within 2 hours it will be discarded and must be resent.

Make sure that you entered the correct phone number and that the Netbiter gateway is powered up and has coverage.

6. Upgrade your Ewon Device via an Anybus Bolt LTE/5G

You can also use an Anybus Bolt LTE/5G as an alternative to upgrade your Ewon device (Ewon® Flexy, Ewon® Cosy) and Ewon Netbiter.








TIP

For more information about this feature, please check the Anybus related documentation [SCM-1202-180](#).

As an extended option, a custom wizard page is available on the [Bolt configuration page](#) to ease the configuration of your Ewon® Flexy device and the **Anybus Bolt LTE/5G**:

Bolt Wizard for Ewon Flexy



STEP 1: Connection to BOLT

To start the test, connect the Flexy's WAN port to the Bolt.
Warning: Please make sure the BOLT can be connected [BOLT](#) + first.

[Test Bolt Connection](#)

STEP 2: Internet 4G connection

Be sure to have a SIM Card correctly inserted in the Bolt.
[Hide advanced settings](#)

PIN OK
PUK OK
APN iot.1ncs.net
APN authentication Disabled
Radio Access Technology auto

[Test Internet Connection](#)

STEP 3: Connection to Talk2M

Click [back](#) to open the Talk2M configuration wizard.