



Fronius UP.storage: Upgrade Fronius GEN24 to Fronius GEN24 Plus

Application Guide

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Solar Energy Business Unit

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Introduction

This paper describes the upgrade process of a GEN24 inverter to a GEN24 Plus. The GEN24 Plus is an all-in-one hybrid inverter that has all functions integrated, including the ability to run a battery and a full backup power solution. For customers who do not yet require a battery or full backup power solution during initial installation, Fronius offers a future-proof version of the GEN24 without hybrid functions. With this version, the aforementioned hybrid functions can be retrofitted at any time without having to replace the inverter. The Fronius UP online upgrade program offers the option of unlocking certain functions at any time. Currently, the "UP.storage" upgrade is available to upgrade the GEN24 to the GEN24 Plus. This paper describes the advantages of the online upgrade program and the upgrade process itself.

Distinction GEN24 and GEN24 Plus

This table shows the differences between GEN24 and GEN24 Plus inverters:

| Functions | Primo and Symo GEN24 | Primo and Symo GEN24 Plus |
|---|----------------------|---------------------------|
| Battery connection including MultiFlow technology | - | ✓ |
| Basic backup power PV Point | ✓ | ✓ |
| Full Backup power | - | ✓* |
| Open interfaces (Modbus, Solar API, etc.) | ✓ | ✓ |
| Digital energy management I/Os | ✓ | ✓ |
| Active Cooling Technology | ✓ | ✓ |
| Shading management Dynamic Peak Manager | ✓ | ✓ |
| Possibility of connection to Solar.web | ✓ | ✓ |

*The Full Backup power option is available both for the Primo GEN24 3.0 - 10.0 Plus and the Symo GEN24 6.0 - 10.0 Plus.

Compatible inverters for UP.storage

The following Fronius GEN24 inverters can be upgraded to GEN24 Plus using UP.storage:

- Fronius Symo GEN24 3.0 - 5.0*
- Fronius Symo GEN24 6.0 - 10.0
- Fronius Primo GEN24 3.0 - 10.0

*On the Fronius Symo GEN24 3.0/4.0/5.0, only the battery function can be enabled. The option for a full backup power operation does not exist here.

Please note that the inverter firmware for UP.storage must always be up to date.

Advantages of Fronius UP.storage

No pressure to make a decision when investing:

With the GEN24 and Fronius UP.storage, the decision to invest in a battery does not have to be made at the outset when the PV system is installed. The customer can start with a basic configuration and choose to expand the system later if required, to include a battery storage system or a full backup power solution. This enables greater flexibility when planning and implementing an energy storage solution.

Flexibility and security for future changing requirements:

Since energy storage solutions and individual requirements can change over time, Fronius UP.storage offers the option of adapting and expanding the system. As a result, the system offers long-term security.

Sustainable inverter concept:

With the Fronius UP.storage upgrade, the existing inverter can still be used. This not only reduces the consumption of materials and resources, but also saves the costs of replacing the inverter. By extending the service life of the inverter, the sustainability of the entire energy system is improved.

In summary, Fronius UP.storage offers an investment opportunity without pressure to make a decision, flexibility and security for future requirements, and a more flexible investment. This makes the Fronius GEN24 and Fronius UP.storage an attractive option for those looking for a customized and adaptable energy storage solution.

Upgrade process from GEN24 to GEN24 Plus

This chapter describes the specific steps to be followed and the platforms required for the Fronius UP.storage upgrade process. The starting point for the upgrade is Fronius Solar.web and the purchase is completed in the Fronius Webshop. Fronius UP can only be purchased by installers or Fronius System Partners (FSP). End customers do not have the option to do this themselves. **Fronius UP.storage can only be carried out in countries where the Fronius Webshop is available.** An overview of these countries can be found in the download section on the Fronius website (*country availability – Webshop*)¹. The upgrade can be performed both with and without an Internet connection.

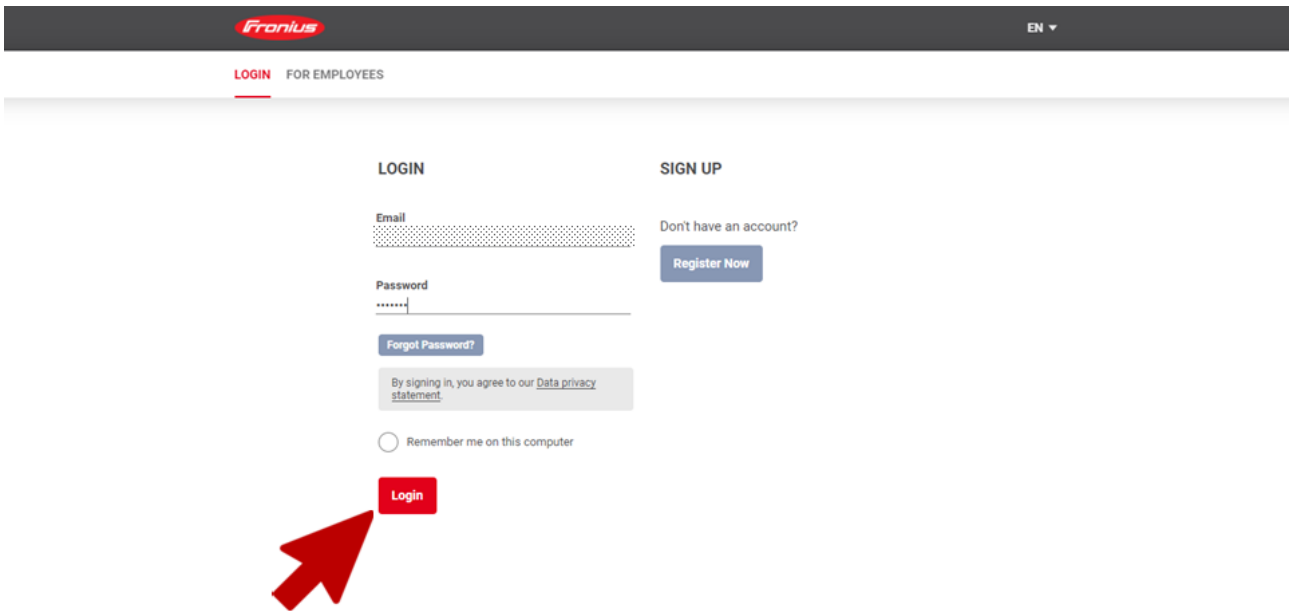
Below is a step-by-step guide of the upgrade process:

1. Log in with your Solar.web account.

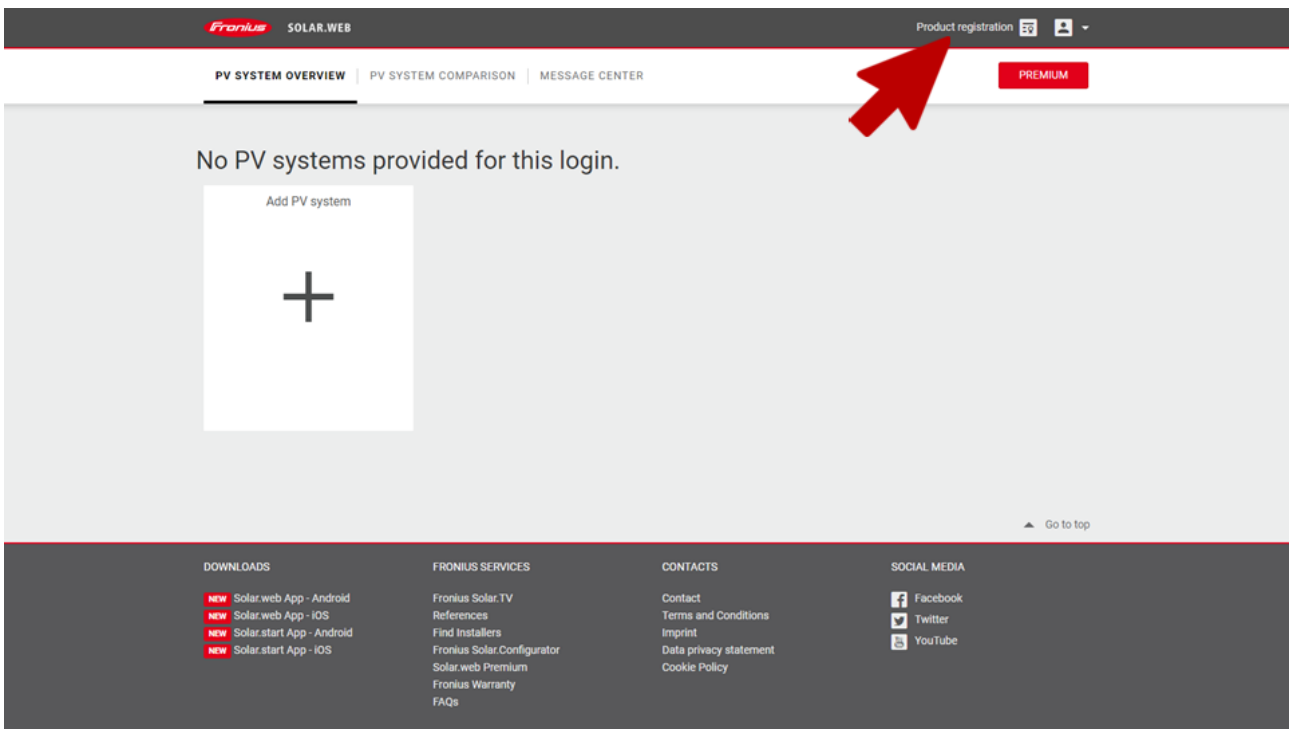


We believe in a future in which we use renewable energy sources to cover 100% of our global energy requirements.

¹https://downloads.fronius.com/Solar%20Energy/User%20Information/SE_UI_Availability_Fronius_Webshop.pdf



2. Click on "Product registration".



3. Click on "Register product".

The screenshot shows the 'Product registration' dashboard. At the top, there are navigation tabs for 'ALL (16)', 'NON-REGISTERED PRODUCTS (0)', and 'REGISTERED PRODUCTS (16)'. A search bar is located on the right. Below the navigation, a progress bar indicates the current step: '1. Register your Product' (active), '2. Order your free warranty extension', and '3. Prolong your warranty extension (optional)'. A red arrow points to a red 'REGISTER PRODUCT' button. To the right of this button is a link for 'MORE INFORMATION'. Below the button, a notification bar states '> Devices not assigned to a Fronius Solar.web system (16)' and 'Warranty selection incomplete (16/16)'. At the bottom, there are sections for 'DOWNLOADS', 'FRONIUS SERVICES', 'CONTACTS', and 'SOCIAL MEDIA'.

4. Fill in all mandatory fields and click on "Register". You will find the serial number and the V.Code on the inverter's name plate.

The screenshot shows the registration form for a device. The progress bar is the same as in the previous screenshot. Below the progress bar, there is a 'MORE INFORMATION' link. A dropdown menu is open, showing 'Devices not assigned to a Fronius Solar.web system (1)'. The form contains the following fields: 'Serial number' (text input), 'V.Code' (text input), 'Installation date' (text input with '06.01.2021'), 'Installation country' (dropdown menu), 'Installer' (text input), and 'Additional info' (text input with 'optional'). On the right side of the form, there are three buttons: 'REGISTER' (grey), 'APPLY FOR ANOTHER' (grey), and 'REGISTER ALL' (red). A red arrow points to the 'REGISTER' button.

5. Click on "Choose upgrade" for the respective inverter.

The screenshot shows the 'Product registration' page on the Fronius website. At the top, there is a navigation bar with the Fronius logo and 'Product registration'. Below this, there are tabs for 'ALL (16)', 'NON-REGISTERED PRODUCTS (0)', and 'REGISTERED PRODUCTS (16)'. A search bar is also present. A progress indicator shows three steps: 1. Register your Product, 2. Order your free warranty extension, and 3. Prolong your warranty extension (optional). Below the progress indicator are buttons for 'REGISTER PRODUCT' and 'MORE INFORMATION'. The main content area is titled 'Devices not assigned to a Fronius Solar.web system (16)' and shows a table of devices. The first device is a 'Primo GEN24 6.0'. The table lists details such as Serial number, Installation country (DE), Installer, Warranty (Fronius Warranty Plus; 14.01.2023), Product registration by, and Additional info. To the right of the table, there are two red buttons: 'EXTEND WARRANTY' and 'CHOOSE UPGRADE'. A red arrow points to the 'CHOOSE UPGRADE' button. The status 'Warranty selection incomplete (16/16)' is shown in the top right corner of the device list.

Please note that the inverter firmware for UP.storage must always be up to date.

6. You will now be redirected to the Fronius Webshop.

The screenshot shows the 'SOLAR.WEB' interface on the Fronius website. At the top, there is a navigation bar with the Fronius logo and 'SOLAR.WEB'. Below this, there is a yellow notification banner with an information icon and the text 'You are being redirected to the FRONIUS International GmbH webshop'. The banner is circled in red. Below the banner, there is a 'Go to top' link. At the bottom, there is a footer with four columns of links: 'DOWNLOADS', 'FRONIUS SERVICES', 'CONTACTS', and 'SOCIAL MEDIA'. The 'DOWNLOADS' column lists 'NEW Solar.web App - Android', 'NEW Solar.web App - iOS', 'NEW Solar.start App - Android', and 'NEW Solar.start App - iOS'. The 'FRONIUS SERVICES' column lists 'Fronius Solar.TV', 'References', 'Find installers', 'Fronius Solar.Configurator', 'Solar.web Premium', 'Fronius Warranty', and 'FAQs'. The 'CONTACTS' column lists 'Contact', 'Terms and Conditions', 'Imprint', 'Data privacy statement', and 'Cookie Policy'. The 'SOCIAL MEDIA' column lists 'Facebook', 'Instagram', 'Twitter', and 'YouTube'.

7. Now add the upgrade to the shopping cart.

The screenshot shows the 'UP.storage' upgrade package selection page. At the top, there are navigation links: 'SIGN OUT', 'MY USER ACCOUNT', 'SOLAR.WEB', and 'BASKET' with a red notification icon. Below the navigation is the 'Fronius' logo and 'FRONIUS WARRANTY | FRONIUS SOLAR.WEB PREMIUM | FRONIUS UPGRADE'. The main heading is 'CHOOSE THE RIGHT UPGRADE PACKAGE FOR YOUR PRODUCT'. Underneath, the 'UP.storage' package is described, including 'Battery Operation and Full Backup'. A search bar is visible. Below the search bar, there is a 'RECENTLY SELECTED' section with a dropdown arrow. Underneath, there is a 'DEVICES NOT ASSIGNED TO A FRONIUS SOLAR.WEB SYSTEM' section. Below that, there is a 'MULTI-UPGRADE' section with a description and a red 'UP.storage' icon with a shopping cart icon. Below the 'MULTI-UPGRADE' section, there is an 'INVERTER' section with a product card showing 'Product name: Inverter', 'Serial number: [redacted]', 'Description: Inverter', 'Installation Country: AU', and 'Installer: [redacted]'. A red 'UP.storage' icon with a shopping cart icon is next to the product card. A large red arrow points to this icon. At the bottom right, there is a 'Chat with me' button.

8. The upgrade has been added successfully to the shopping cart. Now switch to the shopping cart.

The screenshot shows the 'UP.storage' upgrade package selection page after the upgrade has been added to the shopping cart. At the top, there are navigation links: 'SIGN OUT', 'MY USER ACCOUNT', 'SOLAR.WEB', and 'BASKET' with a red notification icon. Below the navigation is the 'Fronius' logo and 'FRONIUS WARRANTY | FRONIUS SOLAR.WEB PREMIUM | FRONIUS UPGRADE'. A green success message banner reads 'Successfully added UP.storage 3.0-S for the inverter with serialnumber [redacted]'. Below the banner, the 'CHOOSE THE RIGHT UPGRADE PACKAGE FOR YOUR PRODUCT' section is visible, including the 'UP.storage' package description. A search bar is visible. Below the search bar, there is a 'RECENTLY SELECTED' section with a dropdown arrow. Underneath, there is an 'INVERTER' section with a product card showing 'Product name: Inverter', 'Serial number: [redacted]', 'Description: Inverter', and 'Installation Country: AU'. A red 'UP.storage' icon with a shopping cart icon is next to the product card. A large red arrow points to the 'BASKET' link in the navigation bar. At the bottom right, there is a 'Chat with me' button.

9. Click on "Proceed to checkout".

10. Select the desired payment method and accept the terms of use and webshop conditions. Then click "Place Order" to be forwarded to the respective payment portal.

CHECKOUT

BILLING ADDRESS

[Redacted]

[Edit](#)

ORDER SUMMARY

Cart Subtotal [Redacted]
GST (10%) [Redacted]

ORDER TOTAL

[Redacted]

PAYMENT METHOD

Pay by Card

Visa [Redacted]

Use a new card

Accept Terms of Use and General Webshop Terms and Conditions

Right to cancel

[Place Order](#)

PayPal

1 ITEM IN CART

UP.storage 6.0-S
Qty: 1
[Redacted]

[View Details](#)

[Chat with me!](#)

11. Your order is complete. Now switch back to Solar.web.

SIGN OUT | MY USER ACCOUNT | SOLAR.WEB | BASKET 0

FRONIUS WARRANTY | FRONIUS SOLAR.WEB PREMIUM | FRONIUS UPGRADE

THANK YOU FOR YOUR ORDER!

We have received your order [Redacted] and are processing it now. You will receive a confirmation e-mail shortly.

Order information:
Orders are processed immediately. If you have ordered goods that are being delivered digitally, you will receive them as soon as your order has been successfully submitted. Products that are being shipped are processed on the next working day. As soon as your order has been processed, the invoice will be sent to your specified e-mail address.

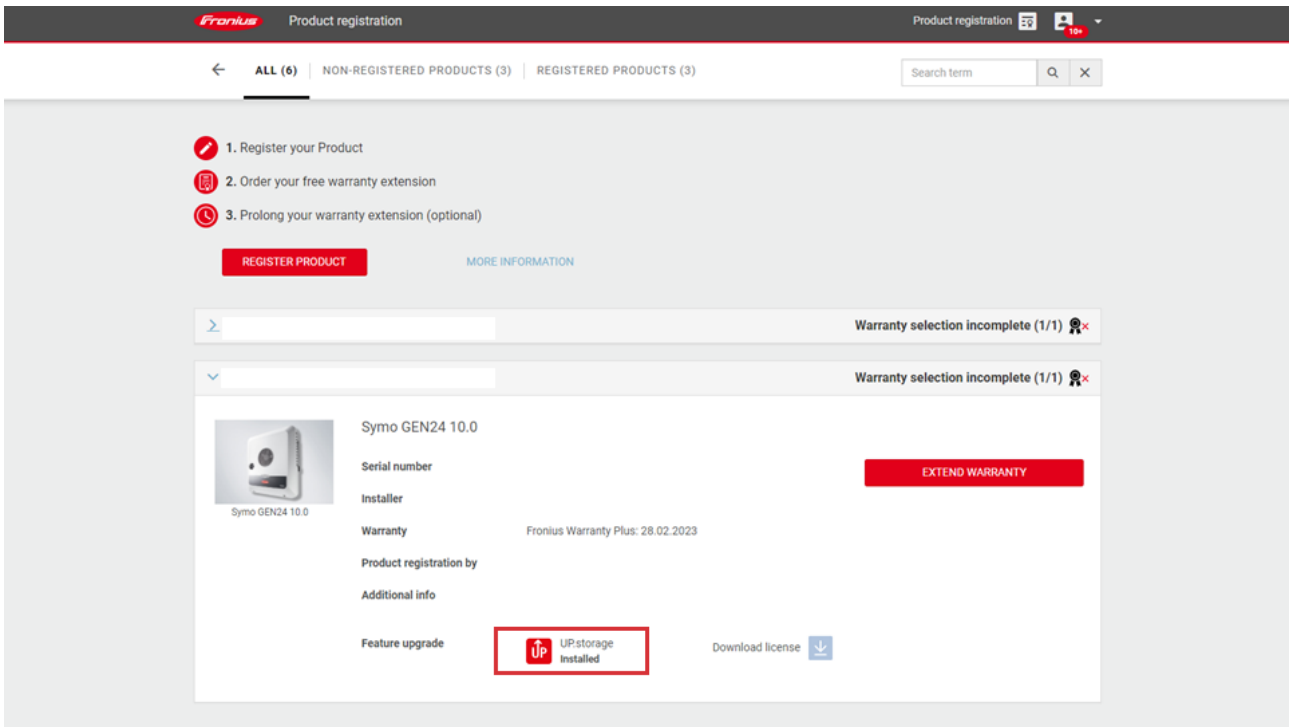
Right of withdrawal/right of termination:
You can find details on your right of withdrawal/right of termination in our [Terms of Use and General Webshop Terms and Conditions](#).

If you have any further questions, please see our [FAQs](#). If you can't find the answer you're looking for there, please contact support@fronius.com

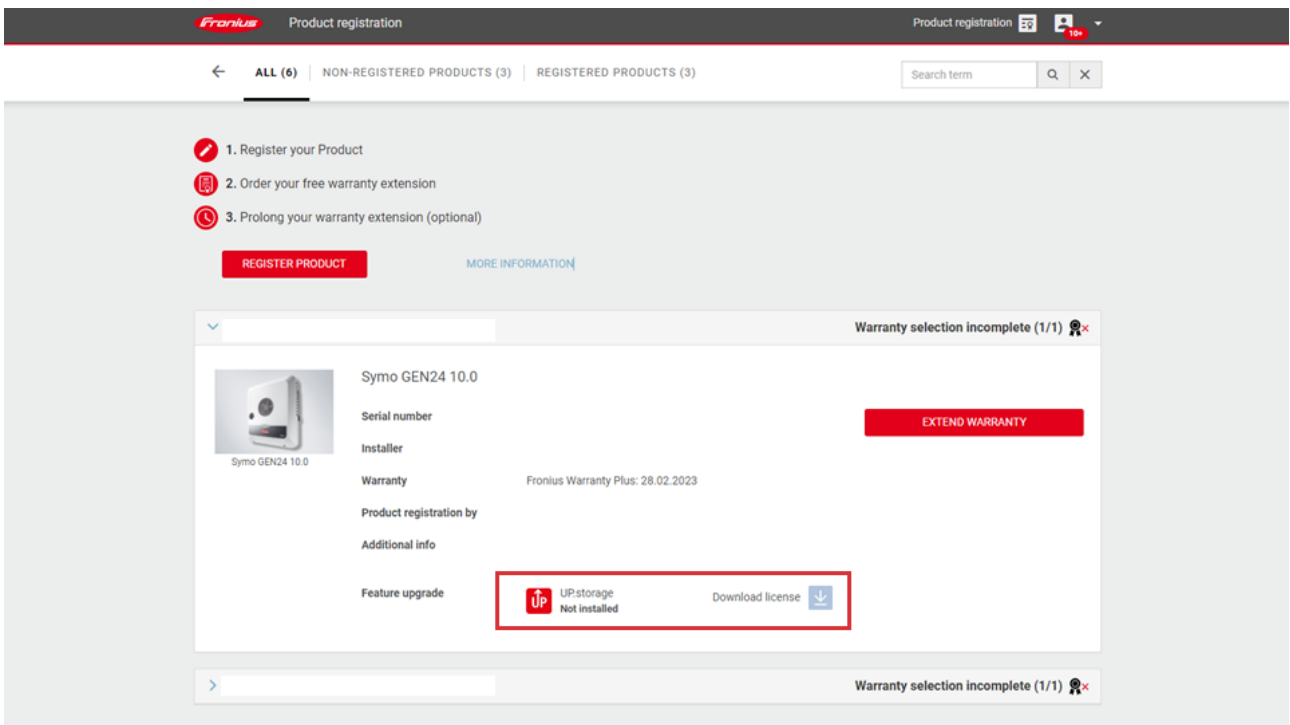
[To Fronius Solar.web](#) [Continue shopping](#)

[Chat with me!](#)

12. If the GEN24 is connected to the Internet, the upgrade will be installed automatically.

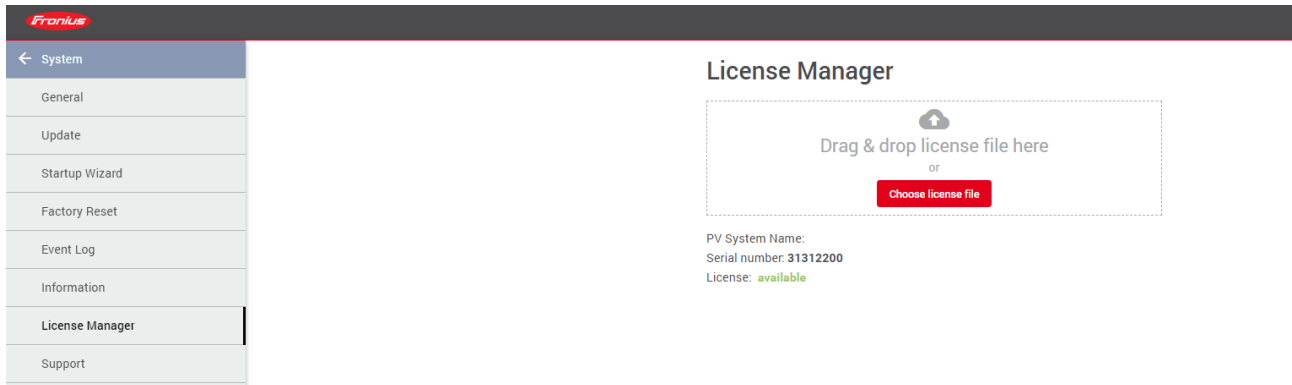


13. If the GEN24 does not show an Internet connection, either establish a connection or perform the upgrade manually by downloading the license locally to your PC in step 1. Note that Fronius recommends performing the upgrade process when the inverter is connected to the Internet, as it is much easier and more time-efficient than without an Internet connection.



14. Then connect to the user interface of the inverter* and log in via the Technician Account. Click "System" - "License Manager" in the menu and upload the license file here.

*This video explains the connection to the user interface of the inverter: <https://youtu.be/T25omrhcroU>



15. Once the upgrade process is complete, the battery can be installed at any time. There is also the option to activate the Full Backup power supply of the GEN24 Plus. Please note that additional external components are required for the mains switchover. More detailed information on this process can be found in the operating instructions.