



APPLICATION GUIDE

FRONIUS GEN24, Verto, Tauro, SnapINverter VIC Emergency Backstop Mechanism

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Gender-specific wording refers equally to female and male form.

CHANGE LOG

DATE	VERSION	COMMENTS	AUTHOR
30/09/2024	1.0	First version	Fronius Australia

SCOPE

This document describes the process of how to configure a Fronius inverter system to comply with the AEMO directive for Victoria’s Emergency backstop Mechanism for Solar.

The following inverter series are relevant to this document:

- **Fronius Primo & Symo GEN24 and GEN24 Plus**
- **Fronius Verto**
- **Fronius Tauro & Tauro ECO**
- **Fronius SnapINverter Primo, Symo, ECO, Galvo**

GENERAL

Stage 1 of the emergency backstop will commence on the 1.October 2024, new, upgraded or replacement solar systems (less or equal to 200kW) must comply.

The following 5 energy distributors are participating:



- This document does **not** cover the individual application process with the above mentioned energy distributors.
- **Single** device functionality (Primo & Symo GEN24 and GEN24 Plus, Verto, Tauro, Tauro ECO).
- **Multiple** device functionality for SnapINverter in a “Solar Net communication loop.”

1 Components

The following components are **required** as part of the system:

Fronius inverter:

- Fronius Primo or Symo GEN24, GEN24 Plus
- Fronius Verto
- Fronius Tauro or Tauro ECO
- Fronius Primo, Symo, Eco SnapINverters


NOTE: A minimum inverter firmware version of $\geq 1.33.x-x$ (GEN24, Verto, Tauro) or $\geq 3.31.1-5$ (Datamanager firmware of the SnapInver) is required.

Supported Fronius Smart Meters:

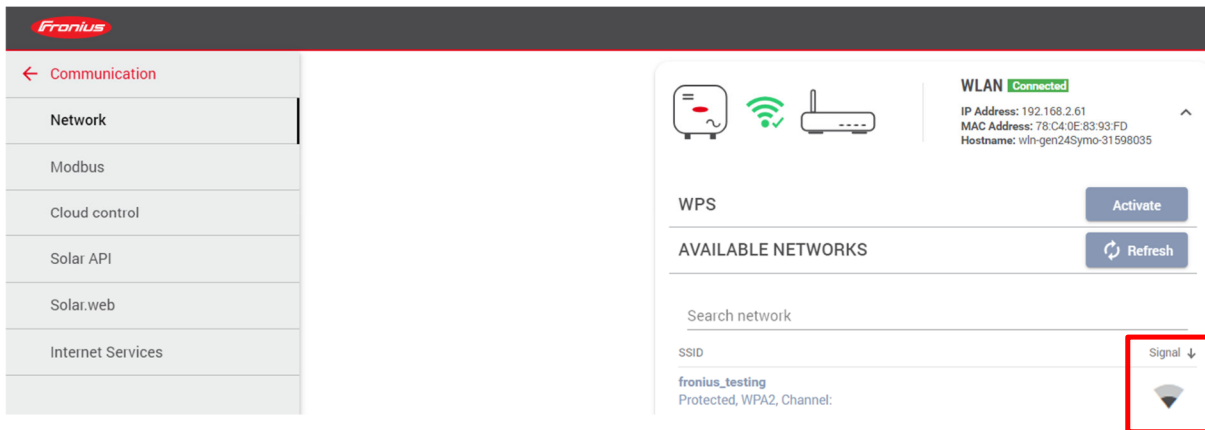
- Smart Meter 63A-1; 63A-3; 50kA-3
- Smart Meter WR, 480V UL; 240V UL
- Smart Meter IP

Router:

A ethernet router with internet connection is required so that all inverters can be controlled via internet (IEEE 2030.5 – CSIP-AUS).

NOTE: A hard wired ethernet connection to the inverters is recommended to ensure stable and reliable operation. Where a Wi-Fi connection is the only possible connection, the signal strength must be equal or better than 

- Click on **“Communication”** then **“Network”** to check the signal strength.



If the connection to the router or internet is lost the inverter will go into **“Default Control”** until the connection is restored. The **“Default Control”** value vary depending on the DNSP (e.g. 1.5kW...) Once the internet is restored, the latest active DER Control is enabled (e.g. 5kW)

2 General Configuration

- DNSP application and approval needs to be achieved before commissioning the system.
- A stable internet connection needs to be established.
- The inverter needs to be configured and registered to Solarweb.
- Solarweb configuration to allow remote control.

3 Inverter Configuration Setup (GEN24/Verto/Tauro)

There are 4 x functions must be configured:

- **Inverter Setup**
- **Export Limitation - Default Control**
- **Enable Cloud Control**

3.1 Inverter Setup:

- Update inverter firmware to at least **1.33.x-x**

3.2 Export Limitation – Default Control

Connect to the user web interface and login using the “**Technician**” password.

If required, see our YouTube video: *How-To video: Connecting to the user interface of the GEN24/Tauro*

- Click on “**Safety and grid requirements**” in the menu on the left and then select “**Export limitation**”.

The screenshot shows the 'Export Limitation' configuration screen. On the left is a menu with 'Safety and Grid Regulations' selected and 'Export Limitation' highlighted. The main area is titled 'Export Limitation' and contains three sections:

1. **Power Control**: A toggle switch is turned on. Below it is a text input field for 'Total DC power of the Entire System *' with a unit of 'W'.
2. **Export Limit Control (Soft Limit)**: A toggle switch is turned on. Below it is a text input field for 'Maximum Grid Feed-In Power *' with units for 'W' and '%'. There is also a section for 'Export Limit Protection (Hard Limit)' with a toggle switch turned off.
3. **Reduce inverter power to 0% if meter connection has been lost.**: A toggle switch is turned on.

At the bottom of the screen is a red bar with 'CANCEL' and 'SAVE' buttons.

1. Activate “**Power limitation**” and enter the total system power (DC) in watts.
2. Activate “**Export Limit Control (Soft limit)**” and enter the “**Default Control**” grid feed-in power in W*.
3. Ensure that “**Reduce inverter power to 0% if meter connection has been lost**” is activated.
4. Click on “**Save**”

* The “**Default Control**” value will vary depending on the DNSP.

The system will fall back to the “**Default Control**” value when the internet connection is lost. Once the internet is restored, the latest active DER control is enabled.

3.3 Enable Cloud Control

- Click on **“Communication”** in the menu on the left and then select **“Cloud Control”**.

← Communication

- Network
- Modbus
- Cloud control**
- Solar API
- Solar.web
- Internet Services

Cloud control

Note

If cloud control (remote control via cloud) is mandated by the grid operator or needed by a user authorized by you (e.g. operator of a virtual power plant), consent to the terms and conditions is required. A controlling user is displayed in Solar.web.

Cloud control commands always take precedence over local control commands.

1 Off On

Profiles

2 Allow cloud control for regulatory purposes (Technician)

Allow cloud control for Virtual Power Plants (Customer)

CANCEL | SAVE

1. Activate **“Cloud Control”** and enter the total system power (DC) in watts.
2. Ensure **“Allow cloud control for regulatory purposes (Technician)”** is activated.
3. Click on **“Save”**

4 Inverter Configuration Setup (SnapINverter)

There are 4 x functions must be configured:

- **Inverter Setup**
- **Export Limitation - Default Control**
- **Enable Cloud Control**

4.1 Inverter Setup

- Update inverter firmware to at least **3.31.1-5**

4.2 Export Limitation

- Navigate to “DNO editor”

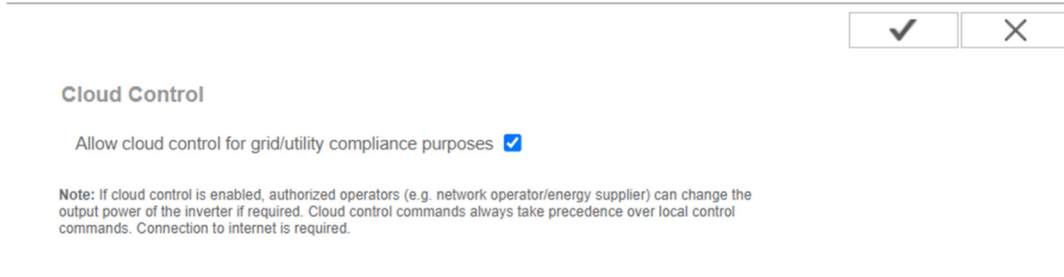
- Set “Limit entire system” in the “Dynamic power reduction”
- Set “Total DC system power of the system” and “Maximum grid feed-in power” to “X Watts”*.
- Click on the “check” to save the settings.

* The “Default Control” value will vary depending on the DNSP.

The system will fall back to the “Default Control” value when the internet connection is lost. Once the internet is restored, the latest active DER control is enabled.

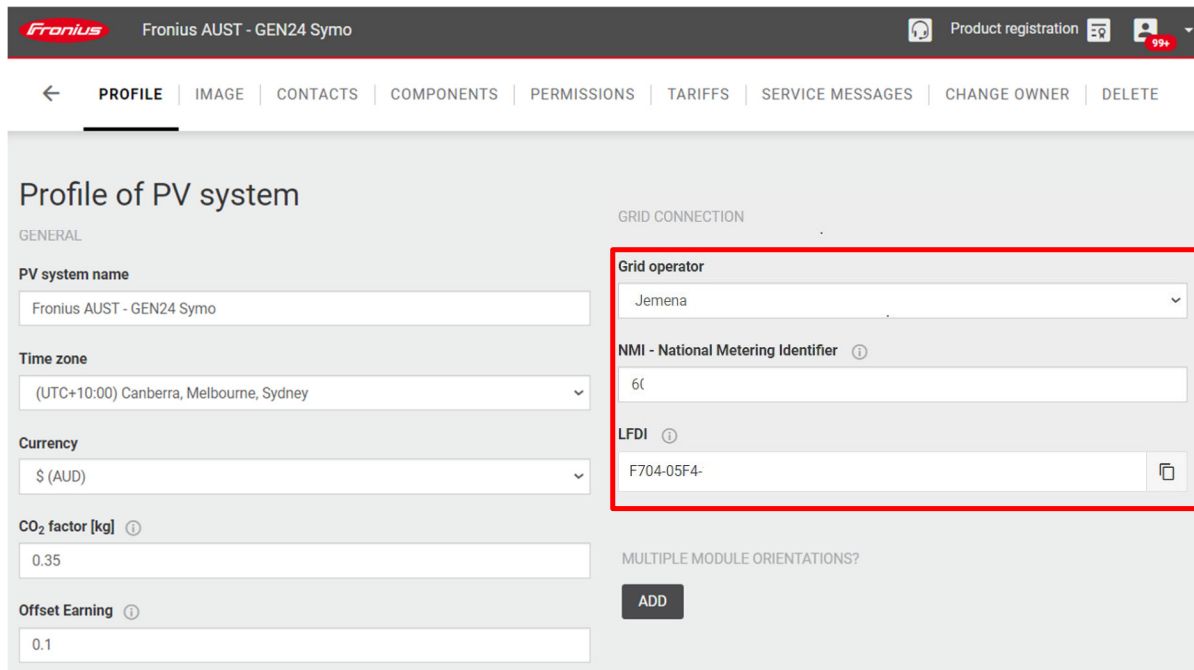
4.3 Enable Cloud Control

- Set **“Allow cloud control for grid/Utility purposes”** in the **“Cloud Control”**
- Click on the **“check”** to save the settings.



5 Solarweb Platform configuration

- Navigate to the system on Solarweb and click on **“Settings”**.
- Set **“Grid Operator”** under **“Profile”**.
- Add the **“NMI”** of the site.
- Tick the registration box.
- **“LFDI”** is required in some cases to be added to the DNSP registration portal.



END OF DOCUMENT

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For more detailed information see the operation manual available on the product specific page on [here](#).