APPLICATION NOTE

FRONIUS GEN24 –
SAPN FLEXIBLE EXPORT TRIAL
COMMISSIONING SETUP

Application Note
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Version 1.1/2023

1. CHANGE LOG

Date	Version	Comments	Author
19/08/2022	1.0	First release	Fronius Australia
14/02/2023	1.1	Amended screenshots, INV SW version change, editorial clean up	RD

2. SCOPE

This document outlines the necessary procedure required to enable the *GEN24 series* inverters to function and received commands on the SAPN Flexible Export Trial. These are "additional" steps required on top of the standard inverter commissioning process. Please consult our other documentation for information on how to perform the standard commissioning steps.

The following Fronius Inverter series are relevant to this document:

/ **Fronius Primo GEN24 (Plus) series**
/ **Fronius Symo GEN24 (Plus) series**

For more information on the Flexible Export Trial installers are encouraged to visit the following websites:

https://www.sapowernetworks.com.au/industry/flexible-exports/
https://www.sapowernetworks.com.au/future-energy/projects-and-trials/flexible-exports-for-solar-pv-trial/

3. GENERAL REQUIREMENTS

The SAPN Flexible Export Trial uses the IEEE 2030.5 communication protocol to communicate from a Utility Server (SAPN) to the Fronius Cloud Aggregator. The Utility Server publishes varying "export limits' which the Fronius Aggregator retrieves and forwards to the relevant inverter (Client). For identification of the correct inverter, the protocol requires an LFDI (Long Form Device Identifier) to be created/issued to SAPN.

In order for the above mechanism to function, the system MUST have the following processes applied:

/ Inverter model must be listed on the SAPN compatible inverter list
https://www.sapowernetworks.com.au/industry/flexible-exports/compatible-equipment/
/ Inverter is loaded with a min. firmware version **≥ 1.23.5-1**.
/ Remote Control activated on the inverter WebUI
/ An LFDI number created and supplied to SAPN
/ PV System created in Solarweb for the inverter

4. SYSTEM INSTALLATION & COMMISSIONING

Carry out the installation & commissioning process as per the standard process, for more information please consult with our online manuals Primo GEN24, Symo GEN24.

NOTE: After completion the inverter MUST be running the firmware version **1.23.5-1** or greater.
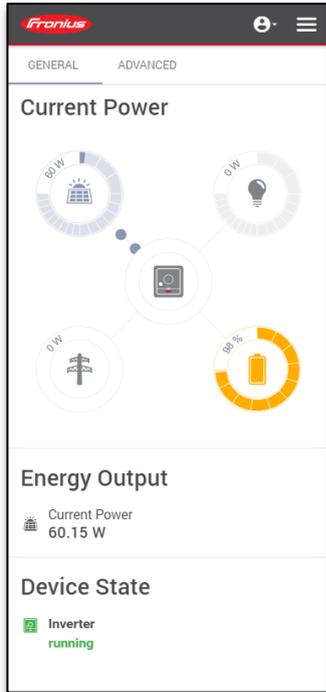
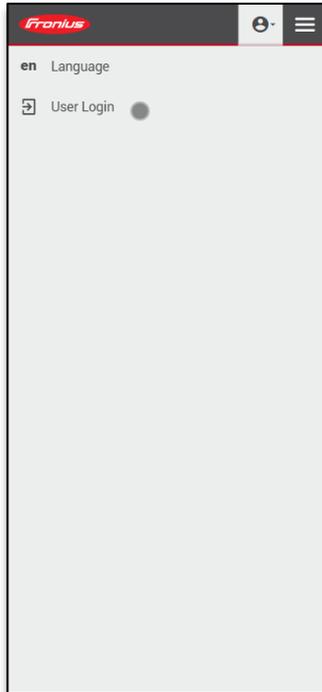If the firmware is lower than **1.23.5-1**, please update the inverter via the Solar.Start App or via Solarweb.

5. ONSITE INVERTER SETUP

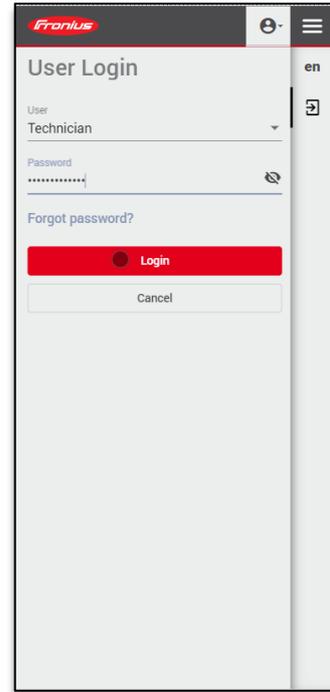## 5.1   Activate "Allow remote control"
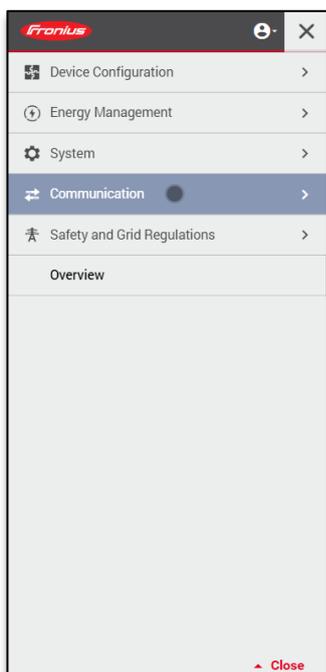
/ Connect to inverter
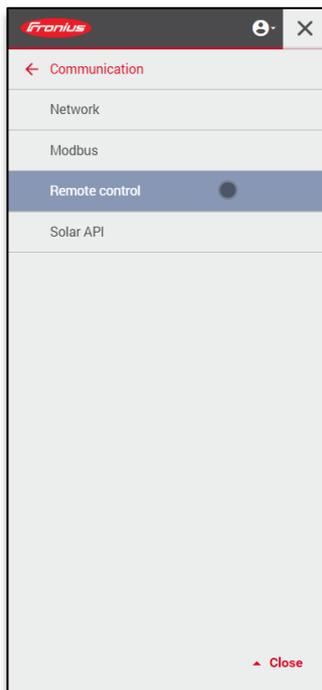 Wi-Fi Access Point
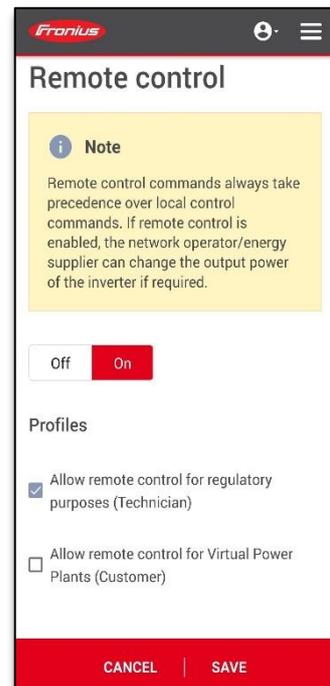
/ Select *"User Login"*

/ Log in as *"Technician"*

/ Navigate to *"Communication"*
 (from top right icon)

/ Navigate to
 "Remote Control"

/ Activate to *"Allow remote control though Solar.web"* and "**SAVE**"

6. SOLAR.WEB CLOUD SETUP

6.1 Create system in Solar.web

Create a new system in Solar.web as per the standard process, see how [here](#).

6.2 Input correct site Address & Installation Date

For tracking of system performance it is essential that the correct address and installation date of the system is entered, see figure below for clarifications.
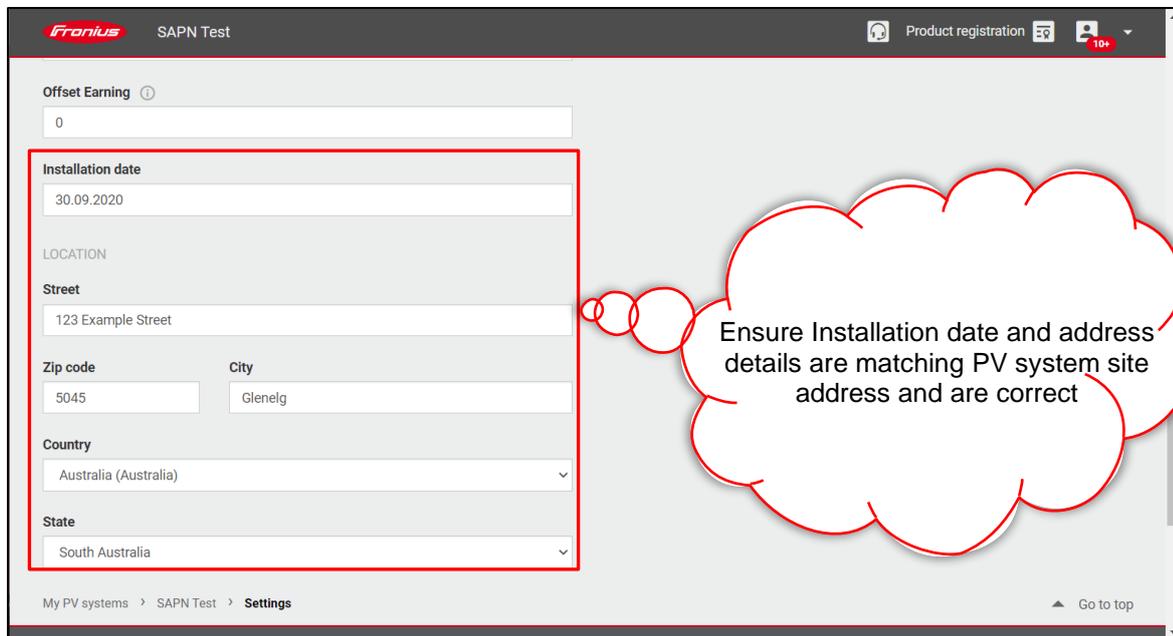
6.3 Enter site NMI number

Under "**SETTINGS**" → "**PROFILE**" do the following:

/ For **"Australian National Meter Identifier (NMI)"** enter site's 11 x digit NMI number.

under "**Australian National Meter Identifier**" enter the site's 11 digit NMI number

7. INVERTER LFDI CREATION

7.1 Create an LFDI for the inverter

An LFDI (Long Form Device Identifier) is required to be created and provided to SAPN for device registration. To do this go to the dedicated Fronius LFDI Registration page/website: https://flexible-export.solarweb.com/

Select Utility - **"SA Power Networks"**, Enter the site "**NMI**" number, Under GEN24 Information enter the inverter **Serial Number & Vcode** found on the right-hand side of the inverter on the nameplate label.
And click "**Submit**".

The result should appear with a number as per below:

Fronius Fdi Registration   Home   Privacy

IFdi: 2448-189A-6F1F-5E0A-A7DA-E1F4-9164-7B73-5C03-190C
sFdi: 973-927-466-25

© 2021 - Fronius DI Registration - Privacy

The **IFdi** number will need to be copy & pasted into the SAPN registration form…

NOTE: The **sFdi** will NOT be needed and does NOT need to be recorded

8.   SAPN DEVICE REGSITRATION

8.1   Close out the LFDI in SmartInstall

Access SmartInstall and log in
Retrieve the site either through the EG number or using the NMI and meter number

SA Power Networks   SmartInstall   MK

Search by NMI / Application ID / Address / User ID   RETRIEVE SITE

All   **Pending**   Commissioned

SA Power Networks   SmartInstall   MK

Retrieve Site

◯ NMI / Meter   ⦿ Application ID

EG Application ID:

EG1193226

Please note that retrieval via Application ID requires installation permission to be granted on the application (or ownership).

SEARCH

Confirm the address and click **"NEXT"**

Expand the *LFDI* section

Enter the 40 digit LFDI generated using the Fronius LFDI Generation page and click **"COMMISSION"**
NOTE: without hyphens between the numbers

The status of the LFDI section shows as **Commissioned**. Notice you can change and update the LFDI here.

The Flexible Export registration is now complete, you can continue to close out each of the components of the installation in **SmartInstall**.

END OF DOCUMENT

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To access Technical articles, Quick guides, Whitepapers and other technical documents, please visit the
Tech Support Area for Installers on our website