

# CCGX & Fronius PV Inverters

By connecting a Fronius PV Inverter and [Color Control GX](#) (CCGX) together you be able to:

1. See Fronius information on the CCGX.
2. Monitor the Fronius on the VRM Portal.
3. Enable the Fronius kWh reading so that it is used for the solar yield and also the consumption tab on VRM.
4. Allow the Victron system to control the Fronius output power, Zero feed-in. See the [ESS manual](#), chapter 2.1.3 Fronius Zero feed-in for details.

This document describes how to setup the monitoring functions; and how to configure a Fronius PV inverter to work together with the Multi or Quattro, see [AC-coupled PV with Fronius PV Inverters](#).

## 1. Requirements

| Model               | Required accessory   |
|---------------------|--|
| Fronius Symo Light  | Purchase and install the <a href="#">datamanager 2.0</a>     |
| Fronius Symo        | No accessory needed, datamanager card installed from factory |
| Fronius Galvo       | No accessory needed, datamanager card installed from factory |
| Fronius IG Plus (*) | Purchase and install the <a href="#">datamanager 2.0</a>     |
| Fronius Agilo       | Purchase and install the <a href="#">datamanager box</a>     |

(\*) The Fronius Zero feed-in feature - which is part of an Energy Storage System [ESS](#) - will work on all the above models except the *IG Plus*.

All the new Fronius inverters - for example the upcoming Fronius Primo - will arrive fitted with a *datamanager 2.0*, as standard.

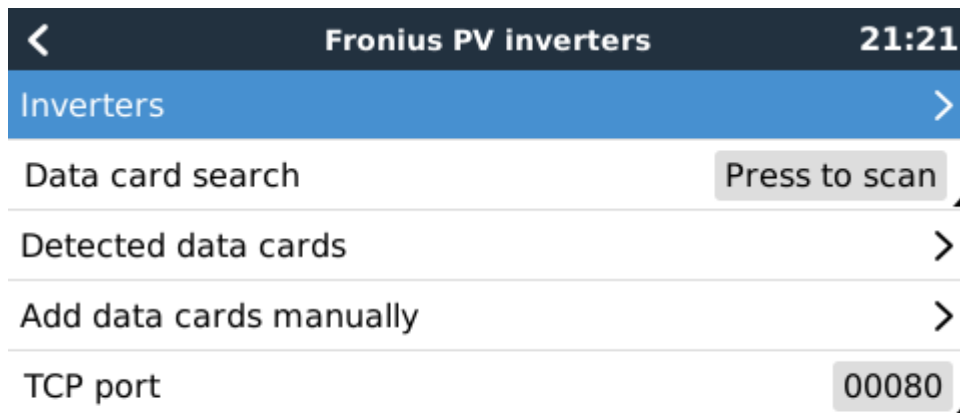
Both the Fronius and the CCGX need to be connected on the same LAN - either via Wi-Fi or Ethernet.

Note that the [Datalogger Web](#) is not supported. Contact your Fronius dealer to find out about the upgrading options.

## 2. Configuring

### 2.1 Setup

1. Connect both the Fronius and the CCGX on the same LAN network, in the same subnet. (If you don't know what a subnet is, don't worry - you'll probably be fine!)
2. Configure the Fronius datamanager using its manual. (On DHCP networks, no configuration of the datamanager is required.)
3. In the CCGX, navigate to *Settings* and then the *Fronius PV Inverters* section. You will see this menu:

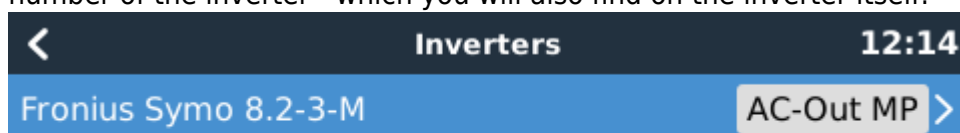


The screenshot shows the 'Fronius PV inverters' menu. At the top, there is a back arrow, the title 'Fronius PV inverters', and the time '21:21'. Below the title bar, the 'Inverters' option is highlighted in blue with a right arrow. Other menu items include 'Data card search' with a 'Press to scan' button, 'Detected data cards' with a right arrow, 'Add data cards manually' with a right arrow, and 'TCP port' with a text field containing '00080' and a dropdown arrow.



The screenshot shows the bottom navigation bar with two icons: a bar chart icon labeled 'Pages' and a hamburger menu icon labeled 'Menu'.

4. Select *Scan* in the CCGX menu, and after completion go into the Inverters submenu to see the results. If scanning does not find the inverter, manually add the IP address of the Fronius Datamanager from its card, or box.
5. Once located, you will see the Inverters listed in the menu. The name used will be the serial number of the inverter - which you will also find on the inverter itself:

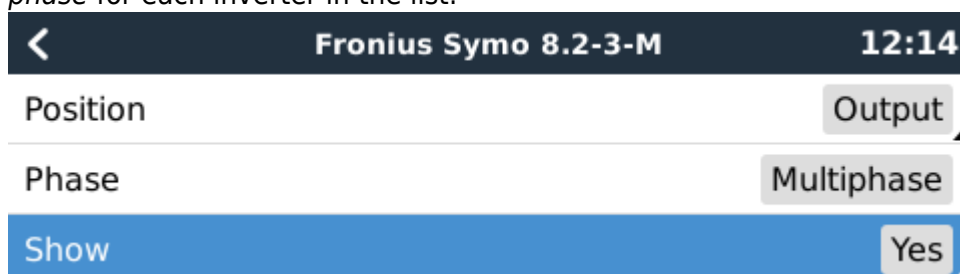


The screenshot shows the 'Inverters' menu. At the top, there is a back arrow, the title 'Inverters', and the time '12:14'. Below the title bar, the 'Fronius Symo 8.2-3-M' option is highlighted in blue. To its right, there is a button labeled 'AC-Out MP' with a right arrow.



The screenshot shows the bottom navigation bar with two icons: a bar chart icon labeled 'Pages' and a hamburger menu icon labeled 'Menu'.

6. Configure the *position* relative to the Multi or Quattro (is it: AC Input / AC Output); and the *phase* for each inverter in the list:



The screenshot shows the configuration screen for 'Fronius Symo 8.2-3-M'. At the top, there is a back arrow, the title 'Fronius Symo 8.2-3-M', and the time '12:14'. Below the title bar, there are two settings: 'Position' with a dropdown menu showing 'Output' and 'Phase' with a dropdown menu showing 'Multiphase'. At the bottom, there is a blue bar with the text 'Show' and a button labeled 'Yes'.



The screenshot shows the bottom navigation bar with two icons: a bar chart icon labeled 'Pages' and a hamburger menu icon labeled 'Menu'.

- Position: = the position relative to the Multi or Quattro [AC Input 1 / AC Input 2 / AC Output]
- Phase: = the phase on which the PV Inverter installed. Disabled and set to Multi-phase for split- and three-phase PV Inverters
- Show: = show this device in the system or not. Use this feature when there are multiple, separate, energy systems on the same LAN.

7. Done!

## 2.1 Device scan details

As mentioned above the CCGX should find all Fronius inverters automatically. It will scan all IP-addresses in the local network (that is, all IP-addresses within the netmask assigned to the CCGX) to check whether or not they are *Fronius datamanager* cards. This scan will be performed during CCGX startup; whenever the CCGX loses connection to a data card; and a scan can also be initiated manually by selecting 'Press to scan'.

Usually a scan is completed within a minute - though if you have a large subnet it may take much more time. If you don't want to wait for completion, enter an IP-address manually.

All data cards found will be entered in the 'Detected data cards' list. The CCGX will regularly (once every minute) scan the IP-addresses in this list in order to find new data cards, or reconnect to data cards whenever the connection was lost.

If you changed to *TCP* port number on the data manager, you should change this setting on the CCGX, too (TCP port) - otherwise leave the setting at its default (80).

## 3. Monitoring CCGX

When the Fronius is detected and configured on the CCGX all PV inverters will be visible in the devicelist.

| Device List             |  | 12:16 |
|-------------------------|--|-------|
| BMV-702                 |  | >     |
| MultiPlus 48/5000/70-50 |  | >     |
| Fronius Symo 8.2-3-M    |  | >     |
| PV Inverter on output   |  | >     |
| Notifications           |  | >     |
| Settings                |  | >     |
| Pages                   |  | Menu  |

To see the device details, navigate to the menu. Here you can see the current state, current power generated, total power generated.

| Fronius Symo 8.2-3-M |      | 12:12 |         |
|----------------------|------|-------|---------|
| Status               |      |       | Running |
| Error Code           |      |       | 0       |
| AC Phase L1          | 228V | 1.0A  | 225W    |
| AC Phase L2          | 229V | 1.0A  | 231W    |
| AC Phase L3          | 228V | 1.0A  | 229W    |
| AC Totals            | 2.9A | 685W  |         |
| Pages                |      | Menu  |         |

| Fronius Symo 8.2-3-M |      | 12:13      |           |
|----------------------|------|------------|-----------|
| AC Totals            | 3.0A | 704W       |           |
|                      |      | 1578.87kWh |           |
| Energy L1            |      |            | 522.37kWh |
| Energy L2            |      |            | 532.77kWh |
| Energy L3            |      |            | 523.74kWh |
| Device               |      |            | >         |
| Pages                |      | Menu       |           |

For more details on each device navigate to the Device menu. Here you will find: IP address, Product name, product ID, and Serial number, etc.

| Device           |                      | 12:14 |
|------------------|----------------------|-------|
| Connection       | 192.168.1.109 - 1    |       |
| Product          | Fronius Symo 8.2-3-M |       |
| Product ID       | 41282                |       |
| Firmware version | --                   |       |
| Device instance  | 20                   |       |
| Serial number    | 65915                |       |
| Pages            |                      | Menu  |

## 4. Monitoring on the VRM Portal

To see the yield on the VRM site (in the *Advanced* tab), don't forget to enable the PV Inverter yield

widget(s) in Settings → Advanced tab setup.

| PV Inverter Status [20] |            |            |  |
|-------------------------|------------|------------|--|
| Running                 |            |            |  |
| Voltage                 |            |            |  |
| L1 Voltage              | L2 Voltage | L3 Voltage |  |
| 234.6 V                 | 234.7 V    | 232.9 V    |  |
| Current                 |            |            |  |
| L1 Current              | L2 Current | L3 Current |  |
| 2.72 A                  | 2.79 A     | 2.74 A     |  |
| Power                   |            |            |  |
| L1 Power                | L2 Power   | L3 Power   |  |
| 645 W                   | 662 W      | 645 W      |  |
| Energy                  |            |            |  |
| L1 Energy               | L2 Energy  | L3 Energy  |  |
| 524.32 kWh              | 534.77 kWh | 525.70 kWh |  |

## DISQUS

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