Fronius

This plugin enables the seamless integration of Fronius devices into the Loxone system. The data from the devices can be read out and control commands can be sent.

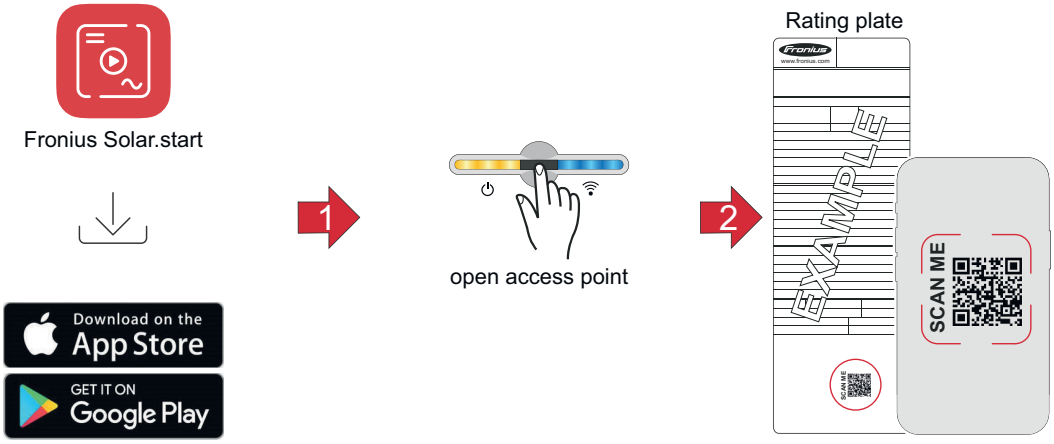
System requirements

The Loxone Miniserver Gen. 1 is not supported.

Compatible devices

Device
Fronius SnapINverter (Fronius Datamanager 2.0 / Fronius Hybridmanager)
Fronius GEN24 / Fronius Verto / Fronius Tauro
Fronius Smart Meter IP
Fronius Ohmpilot
Fronius Wattpilot Go / Home

Commissioning and configuring Fronius devices



The Solar.wattpilot app must be installed for the Fronius Wattpilot.

Adding devices

NOTE!

All Fronius devices must be installed in the same sub-network as the Loxone Miniserver.

All Fronius devices are automatically displayed via the device search and can be added to the "My Fronius devices" list. The devices are displayed on the Miniserver as an icon with type designation and serial number.

Authentication

A password-protected interface must be activated in order to integrate some Fronius devices. If this is not yet activated, the service/technician password must be entered in the Loxone Config. In this case, a system status message is displayed with the request to allow the Loxone Miniserver access to Fronius devices. An incorrect or missing password is displayed as a message.

Device	Authentication (if required)
Fronius SnapINverter (Fronius Datamanager 2.0 / Fronius Hybridmanager)	Service password
Fronius GEN24 / Fronius Verto / Fronius Tauro	Technician password
Fronius Wattpilot Go / Home	App password

After authentication, the Fronius devices are color-coded in the system overview:
- green icon: Connection of the device to the Loxone Miniserver is active
- Red icon: Connection is inactive

Description of the API connectors
- PV power (API Connector PV AC): current power of the PV system (Pf) and energy measurement values (Mr) are transmitted.
- Feed-in power/grid supply (API Connector Grid AC): current power of the feed-in point (Pf) and measured energy values for supply (Mrc) and feed-in (Mrd) are transferred.
- Battery power (API Connector Battery): current power (Pf), the state of charge (Slvl), the total power consumed (Mrc) and delivered (Mrd) by the battery are transmitted.
- API Connector AC: current total power of the Ohmpilot (Pf) and consumed energy (Mr) are transmitted.
- Charging power (API Connector): current charging power (Pf) and the total charging energy (Mr) are transmitted.

Only one API connector can be implemented per module. In addition to the blocks that only display values, there are also enabler blocks with toggle switches that switch functions on and off.

It is possible to create an energy flow monitor with the display values of the Fronius devices.

Function overview

Device	PV power (API Connector PV AC)	Feed-in power/grid consumption (API Connector Grid AC)	Battery power (API Connector Battery)	PV power limitation (Power Limit Value/ Switch AQ/Q)	Battery control (Battery Control Value/Switch AQ/Q)
Fronius SnapINverter (Fronius Datamanager 2.0)	✓	✓	✗	✓	✗
Fronius SnapINverter (Fronius Hybridmanager)	✓	✓	✓	✓	✓
Fronius GEN24 / Fronius Verto / Fronius Tauro	✓	✓	✓	✓	✓
Fronius Smart Meter IP	✗	✓	✗	✗	✗

device	API Connector AC	Temperature (AQ)	Boost mode (AQ)
Fronius Ohmpilot	✓	✓	✓

Device	Charging power (API Connector)
Fronius Wattpilot Go / Home	✓

Inverter control

NOTE!

For Fronius SnapINverter, night mode must be activated on the device display so that data logging and thus also inverter control function without interruption. Continuous data logging is set for all other devices and does not need to be configured.

A prerequisite for inverter control is the activation of manual mode and a setpoint value, which must be set in kilowatts. In addition, the associated toggle switch must be activated to activate the power or battery control to the defined setpoint.

NOTE!

Safety functions of the inverter and / or the battery cannot be overridden.

1. **PV power control**

The maximum active power of the inverter can be limited with the power control. The grid feed-in limitation set on the inverter can have a higher priority depending on the control priority setting (e.g. safety and grid requirements) and thus influence the PV power control.

2. **Battery control**

NOTE!

Depending on the configuration, battery control may result in increased charging cycles.

Setpoints for the battery charging and discharging power can be defined for the connected battery. To do this, a corresponding prioritization of the battery must be set on the user interface of the inverter in the Energy management menu. Activation of battery charging from the public grid must also be configured here.

Positive battery control value = charging the battery

Negative battery control value = discharging the battery

If the battery is being calibrated, the battery control is temporarily disabled. The requested power would exceed the maximum battery current. Information on calibration charges is displayed on the user interface of the inverter or in Fronius Solar.web.

Fronius Ohmpilot

The Fronius Ohmpilot regulates the efficient use of PV surplus for water heating. Regardless of the available PV line, the boost mode can be activated to supply loads at output heating 1 with 100% of the available power for a short time. The dimming level (L1) is controlled at 100%, phases L2 and L3 are switched through. This can result in a mains supply. Boost mode remains activated until the function is deactivated via Loxone.

Fronius Wattpilot

The Fronius Wattpilot is a charging station for charging electric vehicles for fixed connection to an AC/AC grid. A password for charging management and user administration is assigned in the Fronius

Solar.wattpilot app. This password is used for authentication in the Loxone Config. Charging power monitoring is available for all device variants (e.g. Fronius Wattpilot Go 11 J, Fronius Wattpilot Home 22 J 2.0) of the Fronius Wattpilot.