

How to connect Fronius Wattpilot (OCPP) with Reduxi controller

Connect the Fronius Wattpilot wallbox to the Reduxi Controller via OCPP 1.6J, so that the Controller can monitor and control charging with PV surplus and load management.

🕒 approx. 15–20 min

🔧 Fronius Wattpilot · Reduxi Controller

🌐 OCPP 1.6J (LAN / Wi-Fi via router)

📱 Fronius Solar.wattpilot app



Text description of this image

Product photo of a Fronius Wattpilot wall unit on a

Fronius Wattpilot – wall-mounted version



2. Text description of this image

Product photo of a Fronius Wattpilot on a light

Fronius Wattpilot – portable version with CEE plug

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1 Technical documentation

The **Fronius Wattpilot** supports **OCPP 1.6J** (Open Charge Point Protocol, JSON over WebSocket). In this setup the **Reduxi Controller acts as the local OCPP server** (central system) and the Wattpilot connects to it as a charge point – no cloud service is needed.

PROTOCOL

OCPP 1.6J

CONNECTION

WebSocket `ws://`
(local)

NETWORK

LAN / Wi-Fi via
router

DEVICE IDENTIFIER

Wattpilot serial
number

SMART CHARGING

Charging profiles in
A

PHASE SWITCHING

3 → 1 phase
supported

Manufacturer documents:

- **Fronius Wattpilot OCPP – User Information** (42,0410,2881) – supported OCPP messages, configuration parameters and activation in the app
- **Open Charge Alliance** – OCPP 1.6 specification



Supported OCPP functions

Authorize, BootNotification, Heartbeat, MeterValues, Start/StopTransaction, StatusNotification as well as RemoteStart/Stop, SetChargingProfile, ClearChargingProfile, TriggerMessage, UnlockConnector, Reset and UpdateFirmware. Feature profiles: Core, FirmwareManagement, SmartCharging, RemoteTrigger.

2 Required equipment

- ☐ Fronius Wattpilot, installed and commissioned by a qualified electrician
- ☐ Wattpilot connected to the same local network as the Reduxi Controller (Wi-Fi or LAN via router)
- ☐ Smartphone with the **Fronius Solar.wattpilot** app, connected to the Wattpilot
- ☐ Reduxi Controller with a known, **fixed IP address** (e.g. `192.168.31.73`) – shown in the Reduxi Configurator as *Controller OCPP JSON 1.6 URL* when you add the device, or in the router
- ☐ Serial number of the Wattpilot (shown in the app and on the type plate, e.g. `91099800`)
- ☐ Laptop or tablet with internet access for the Reduxi Configurator



Fixed IP address for the Controller

The Wattpilot connects to the Controller's IP address. If the router assigns a new address, the OCPP connection is lost. Reserve the IP of the Reduxi Controller in the router (DHCP reservation).

3 System overview

The Wattpilot opens a WebSocket connection to the Reduxi Controller and identifies itself with its serial number. The Controller assigns the connection to the device with the same **device identifier** and then reads measurements and sends charging limits.

COMPONENT	ROLE	ADDRESS / SETTING
Reduxi Controller	OCPP server (central system)	<code>ws://<Controller IP>/ocpp/1.6/json</code>
Fronius Wattpilot	OCPP client (charge point)	Connects to the URL above + its serial number
Full URL used by the Wattpilot	–	<code>ws://192.168.31.73/ocpp/1.6/json/91099800</code>



Unencrypted connection in the local network

For a local server the Wattpilot allows `ws://` (unencrypted) or `wss://`. The Reduxi Controller uses `ws://`. External OCPP servers always require `wss://`.

4 Configure OCPP in the Wattpilot app

4.1 Enable OCPP

1

Open the app

Start the **Fronius Solar.wattpilot** app and connect to the Wattpilot.

2

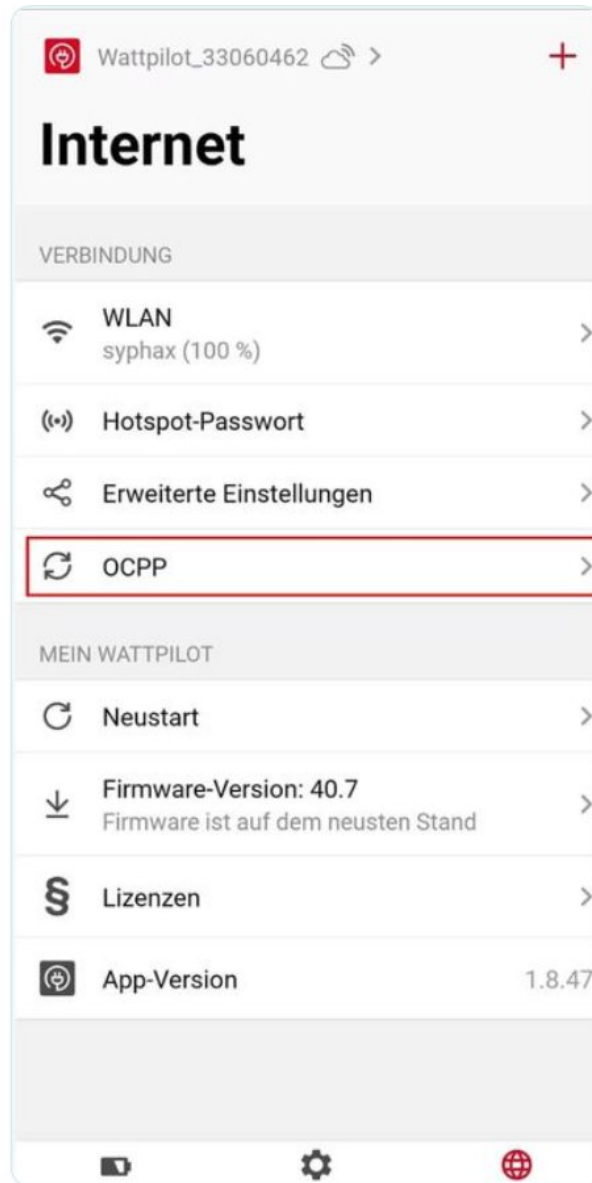
Open the OCPP settings

Open the **Internet** tab and tap **OCPP** (in newer app versions: **Einstellungen** → **OCPP**).

3

Enable OCPP 1.6J

Switch on **OCPP1.6J**. OCPP automatically activates access management on the Wattpilot.



Text description of this image

Screenshot of a mobile phone app screen titled Internet. Header: device name Wattpilot_33060462 with a

Internet menu with the OCPP entry (Fronius Solar.wattpilot app)

4.2 OCPP server settings

Tap **OCPP-Server** and enter the following values:

FIELD (DE / EN)	VALUE
Protokoll / Protocol	WS
Benutzername / User	empty
Passwort / Password	empty
Host	IP address of the Reduxi Controller, e.g. 192.168.31.73
Pfad / Path	/ocpp/1.6/json/
SN zur URL hinzufügen / Add SN to URL	On – mandatory



“SN zur URL hinzufügen / Add SN to URL” must be switched on

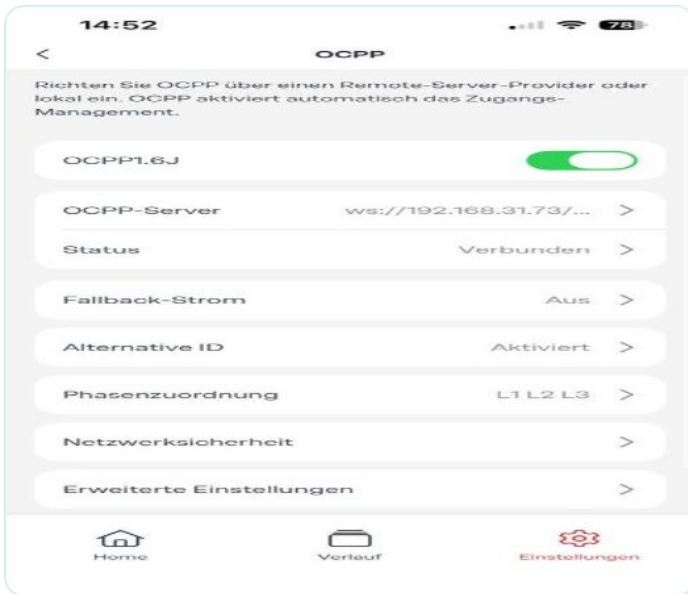
Without this option the Wattpilot does not add its serial number to the URL, the Controller cannot identify it and **no communication is established**. Always check that the switch is green before saving.

The app then shows the complete address, e.g. `ws://192.168.31.73/ocpp/1.6/json/91099800`. Tap **Änderungen speichern / Save**. The Controller URL is also shown in the Reduxi Configurator (see [Point 6.2](#)).

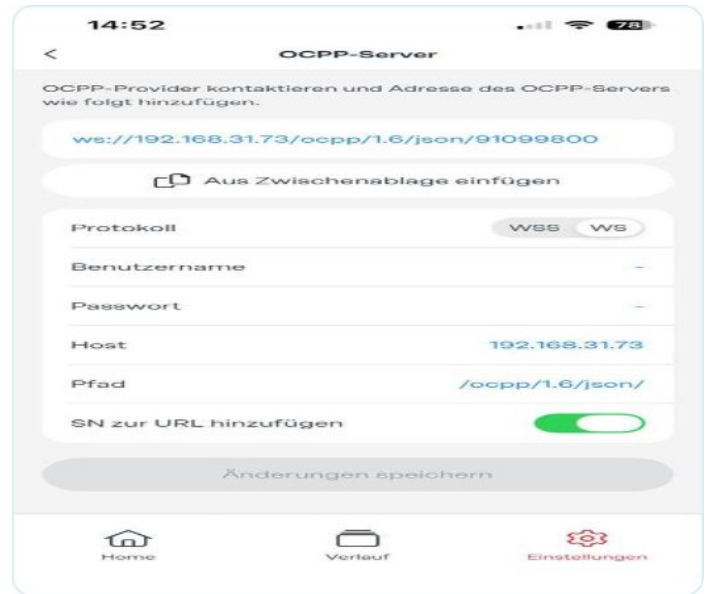


Status not “Connected” yet? That is expected

The Wattpilot is only accepted once it has been added in Reduxi with its serial number. Continue with [Point 5](#) and [Point 6](#) – afterwards the status changes to **Verbunden / Connected**. Tip: if you don’t know the Controller IP yet, do [Point 6](#) first and copy the address from the field *Controller OCPP JSON 1.6 URL*.



Text description of this image



2. Text description of this image

Screenshot of a mobile phone app screen (status bar: time 14:52, signal, Wi-Fi, battery 78%) titled OCPP, with a menu: OCPP1.6J enabled, status Verbunden (connected).

Screenshot of a mobile phone app screen (status bar: time 14:52, signal, Wi-Fi, battery 78%) titled OCPP-Server: protocol WS, host = Controller IP, path /ocpp/1.6/json/, SN added to URL

4.3 Further OCPP options

OPTION	RECOMMENDATION
Status	Shows <i>Not connected, Started, Connected</i> or <i>Connected and accepted</i> . After adding the device in Reduxi it must show Verbunden / Connected .
Fallback-Strom / Fallback current	Charging current the Wattpilot uses if the OCPP connection to the Controller is lost. Set a value that is safe for the house connection.
Phasenzuordnung / Phase assignment	L1 L2 L3 right phase.
Alternative ID, Netzwerksicherheit, Erweiterte Einstellungen	Leave unchanged.

5 Log in to the Reduxi web interface

The Reduxi Configurator can be opened **remotely via the tunnel connection** in the Reduxi app or **locally** in a web browser in the same network. Both lead to the same web interface.



REMOTE

Reduxi app

Via tunnel connection · works from anywhere



Web browser

In the local network · via IP address or redux.local

5.1 Remote via the Reduxi app (tunnel)

1 Open the app and log in

Launch the Reduxi app on your smartphone or tablet and log in with your credentials.

2 Open Reduxi devices

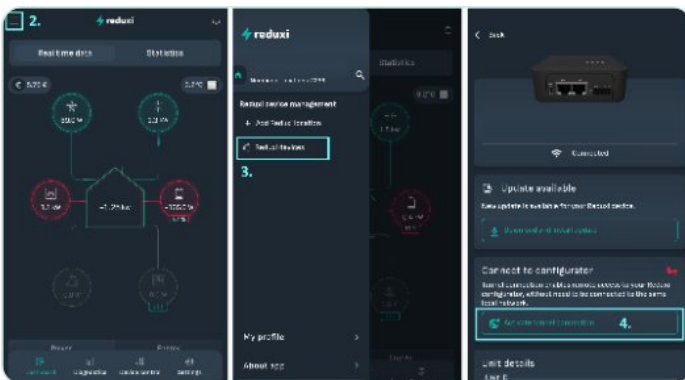
Tap the menu icon (three lines, top left) and select **Reduxi devices**.

3 Activate the tunnel connection

Switch on the tunnel connection and wait a moment until it is active.

4 Open the configurator

Tap **Open configurator**. The Reduxi web interface opens.



Text description of this image

Screenshot of three Reduxi mobile app screens side by side, with cyan boxes and number badges 2 to 4. Left screen (dashboard, dark theme): menu icon at top left marked with a box and badge 2; 'reduxi' logo; tabs 'Real time data' (active) and 'Statistics'; price 5.79 € and temperature 3.2 °C; energy flow diagram with a



2. Text description of this image

Screenshot made of two parts side by side. Left part:

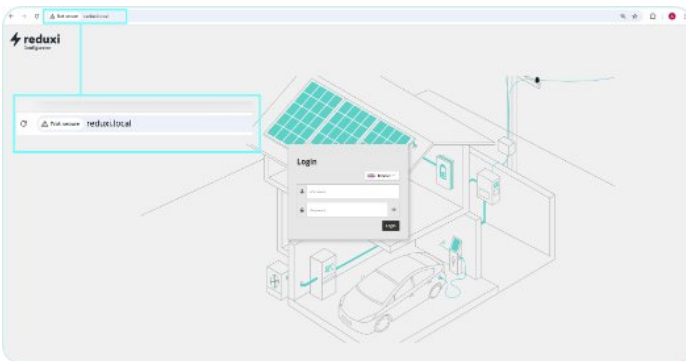
5.2 Locally via a web browser

1 Open the login page

On a device in the same network, open a web browser and enter the Controller's IP address (e.g. `http://192.168.31.73`) or `http://reduxi.local`.

2 Log in

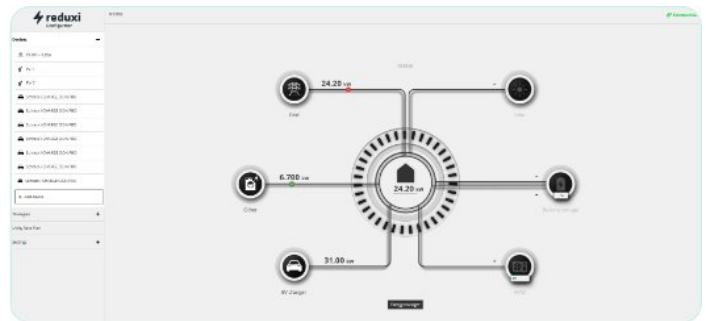
Username: `admin` · Password: `admin` (factory default).



Text description of this image

Screenshot of the Reduxi Configurator login page in a

Reduxi Controller login screen



2. Text description of this image

Screenshot of the Reduxi Configurator web interface after login, light theme. Top left: 'reduxi configurator'

Web interface after login



The Watterpilot always connects locally

Regardless of how you open the Configurator, the Watterpilot itself always connects to the Controller in the local network via `ws://<Controller IP>/ocpp/1.6/json`.

6 Add the Watterpilot to Reduxi

6.1 Basic settings

1 Add a new device

In the left menu under **Devices** click **+ Add device**.

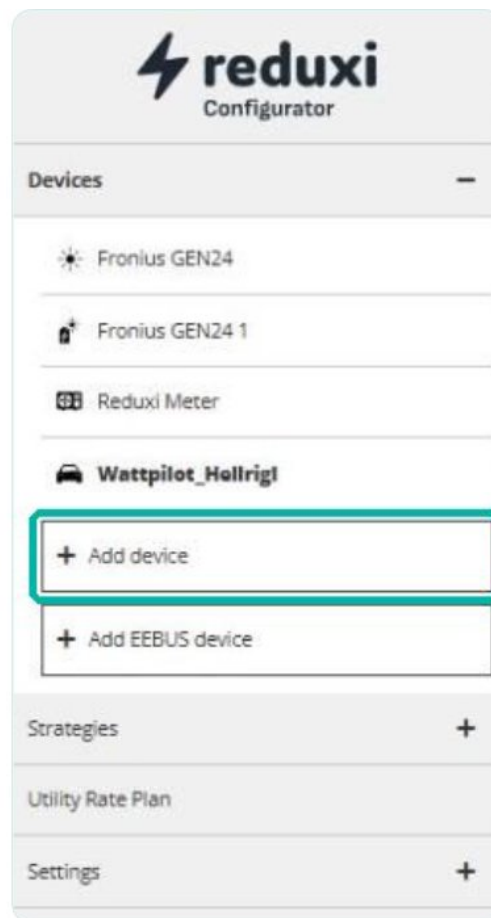
2 Select type

Device type: `EV charger` · Type: `OCPP 1.6 - JSON`.

3

Name and strategy

Enter a **Name** (e.g. **Fronius Wattpilot**). Under **Include to strategy** keep **Energy manager** → **Regulated devices** ticked, then click **Next**.



Text description of this image

Screenshot of the Reduxi Configurator left menu (reduxi logo with the word Configurator on top). Section

Click + Add device in the left menu

Basic settings

Device type *

EV charger

Type *

OCPP 1.6 - JSON

Name *

Fronius Wattpilot

Include to strategy

Strategy	Measurement devices	Regulated devices
Energy manager	☐	☒

Back

[How to configure?](#)

Next

Text description of this image

Screenshot of the Reduxi Configurator wizard step titled Basic settings. Device type *: EV charger (dropdown).
 Device type EV charger, type OCPP 1.6 - JSON, name and strategy

6.2 Communication settings

FIELD	VALUE
Device identifier	Serial number of the Wattpilot , e.g. 91099800 – exactly the number at the end of the URL in the app
Connector	1
Charger type	AC
Energy counter	Default
Allocate power to EVSE when EV is not connected	Default
Per phase max. current	Auto detect from EVSE or Manual override with the fused current, e.g. 32 A (22 kW) or 16 A (11 kW)
Forward communication / username / password / measurements to backend OCPP server	empty – only needed if an external OCPP backend is used in parallel
Allow new charging session	Always
Controller OCPP JSON 1.6 URL	read only, e.g. ws://192.168.31.73/ocpp/1.6/json – this is the address entered in the app (see Point 4.2)



Device identifier = serial number of the Wattpilot

Enter the **serial number** of the Wattpilot as **Device identifier** – it is shown in the app header (e.g. `Wattpilot_91099800` → `91099800`) and at the end of the OCPP URL. Without the correct identifier the Controller cannot assign the incoming OCPP connection and shows no data.

The screenshot shows the 'Communication channel and device configuration' section of the Reduxi Configurator. It contains several input fields and dropdown menus:

- Device identifier ***: A text input field containing '91099800'.
- Connector ***: A dropdown menu with '1' selected.
- Charger type ***: A dropdown menu with 'AC' selected.
- Energy counter**: A dropdown menu with 'Default' selected.
- Allocate power to EVSE when EV is not connected to EVSE**: A dropdown menu with 'Default' selected.
- Per phase max. current ***: A dropdown menu with 'Manual override' selected.
- Per phase max. current manual override**: A text input field containing '32'.
- In effect when manual override is selected.
- Forward communication to backend OCPP server**: A checkbox that is currently unchecked.

Text description of this image

Screenshot of the upper part of the Reduxi Configurator form Communication channel and device

Check the values and click **Done** to save the device.

The screenshot shows the lower part of the Reduxi Configurator form. It contains the following elements:

- Forward measurements to backend OCPP server once every**: A dropdown menu.
- Allow new charging session**: A dropdown menu with 'Always' selected.
- Controller OCPP JSON 1.6 URL**: A text input field containing 'ws://192.168.31.73/ocpp/1.6/json'.
- Back**: A button.
- How to configure?**: A link.
- Done**: A button.

Text description of this image

Screenshot of the lower part of the Reduxi Configurator form Communication channel and device

6.3 Test communication

With OCPP the Wattpilot connects to the Controller by itself – no IP address of the Wattpilot is needed. Open the device again (**Devices** → **[Wattpilot]** → **Details**) and click **Test communication** at the bottom right.



“Unable to communicate with device” is normal for OCPP

With OCPP the Controller cannot actively ping the charger – the Wattpilot connects to the Controller by itself. The red line in the first box can therefore be ignored. What matters is the box below: **Number of devices found** must be at least **1** and the **Device identifier** must show the serial number of the Wattpilot. The final proof are the live values under **Last measurements**.



Text description of this image

Screenshot of the Reduxi Configurator dialog Test communication (close X at top right). First box in red text: *Test communication: the window lists the chargers connected via OCPP and their device identifiers*

- **Number of devices found on OCPP – JSON 1.6** shows how many chargers are connected to the Controller via OCPP.
- **Device identifier** must show the serial number of the Wattpilot (e.g. **91099800**). If it does not appear, the Wattpilot is not connected – check the app settings (see [Point 4.2](#)).
- In the **Wattpilot app** the OCPP status must show **Verbunden / Connected**.
- Final check: live values and **Communication error** = **OFF** (see [Point 7](#)).

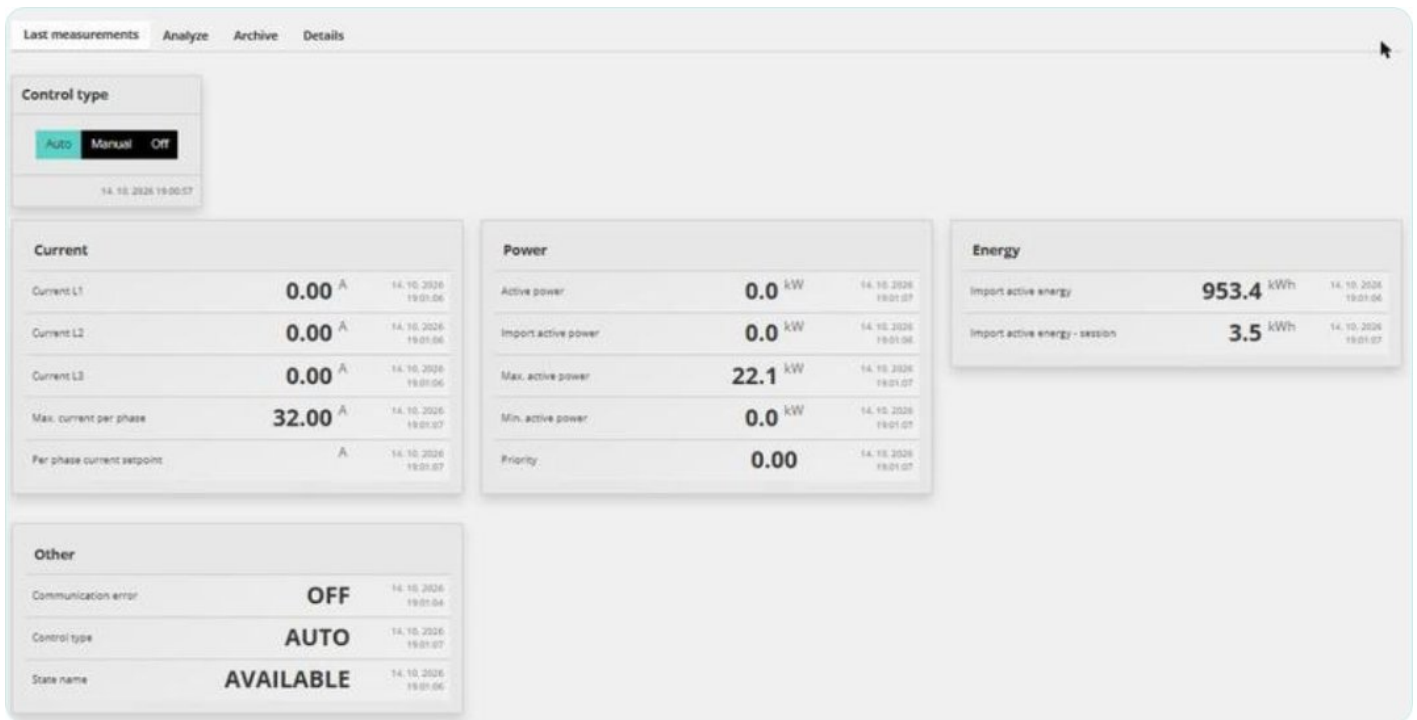


Connection established

If both sides show a connection, the Wattpilot is ready. The Reduxi Controller now controls the charging current according to the active strategy.

7 Check the readings

Open **Devices** → **[Wattpilot]** → **Last measurements**:



Text description of this image

Screenshot of the Reduxi device page with tabs Last measurements (selected), Analyze, Archive, Details. Card
Last measurements: control type, currents per phase, power, energy and charger state

VALUE	MEANING
Control type	Auto = controlled by the Reduxi strategy · Manual · Off
Current L1 / L2 / L3	Charging current per phase
Max. current per phase	Maximum current of the charger (e.g. 32 A)
Active power / Max. active power	Current charging power and maximum power (e.g. 22.1 kW)
Import active energy / session	Total charged energy and energy of the current session
Communication error	Must be OFF
State name	Current state of the charger, e.g. AVAILABLE when no car is connected

✓ Summary

Preparation (Points 1–3): Wattpilot and Reduxi Controller in the same network, Controller with fixed IP, serial number of the Wattpilot at hand.

Wattpilot app (Point 4): enable `OCPP1.6J` , protocol `WS` , host = Controller IP, path `/ocpp/1.6/json/` , **“SN zur URL hinzufügen” on (mandatory)**.

Add to Reduxi (Points 5–6): EV charger · `OCPP 1.6 - JSON` , device identifier = serial number, connector `1` , AC.

Go live (Point 7): app shows “Connected”, Reduxi shows live values and communication error `OFF` .

→ Common issues

ISSUE	SOLUTION
App status stays “Started” / “Not connected”	Check that “SN zur URL hinzufügen” is on, then host (Controller IP), protocol <code>WS</code> (not WSS), path <code>/ocpp/1.6/json/</code> and that both devices are in the same network.
App shows “Connected”, but Reduxi shows no data	The device identifier in Reduxi must match the serial number at the end of the URL exactly (e.g. <code>91099800</code>). “SN zur URL hinzufügen” must be on.
Connection lost after a router restart	The Controller got a new IP address. Reserve a fixed IP in the router and update the host in the app.
Unwanted charging behaviour when the Controller is offline	Set a Fallback current in the app’s OCPP menu (see Point 4.3).
Load management reduces the wrong phase	Check the phase assignment in the app and in Reduxi (Advanced configuration → “L1/L2/L3 is connected to main feed”).
Car does not start charging	OCPP activates access management – check Allow new charging session = <code>Always</code> in Reduxi.

→ Related articles

Matching guides from the Reduxi knowledge base:



Fronius Wattpilot OCPP documentation

OCPP user information from Fronius



Device setup guides

All step-by-step guides for connecting devices to the Reduxi Controller



Strategies for the Reduxi Controller

Energy manager and other strategies explained