

How to connect an AC-coupled solar inverter (Deye hybrid inverter, additional PV on GEN port) with Reduxi controller

Settings for a Deye hybrid inverter with an additional AC-coupled PV inverter on the GEN port.



🔧 Deye hybrid inverter · Reduxi Controller

⚡ Additional PV on GEN port

🔌 Grid_Tie_meter2: 9600 baud · slave 2



Deye hybrid inverter

Text description of this image

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1 Required equipment

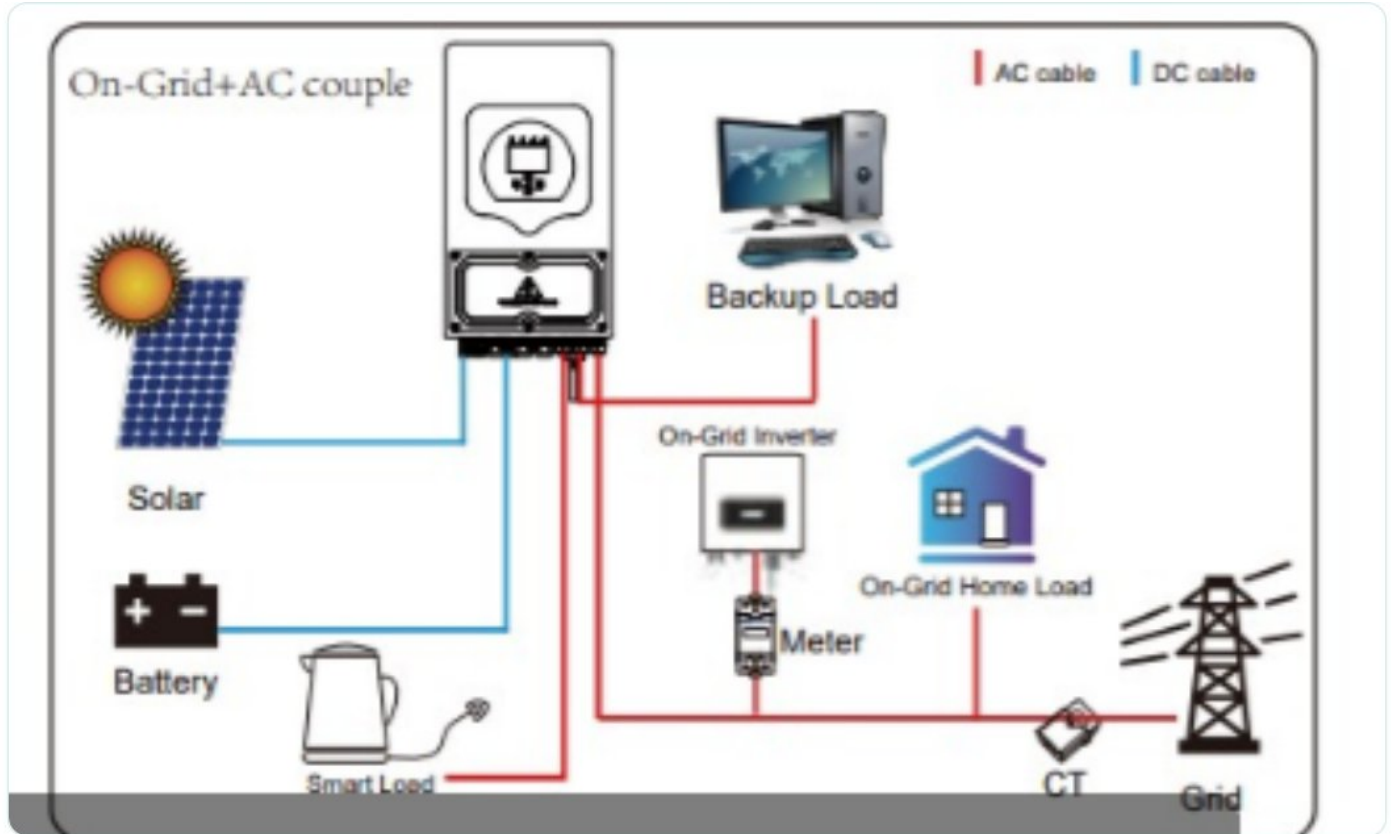
You need the following components:

- ☐ Deye hybrid inverter with the additional PV inverter connected to the GEN port
- ☐ Additional Grid Tie meter (Grid_Tie_meter2), or the Reduxi RS485 emulator if the meter cannot be connected to the Deye hybrid inverter (see [Point 4](#))
- ☐ Reduxi Controller
- ☐ Laptop or tablet with internet access to configure the device in Reduxi

2 System overview and wiring

2.1 Scheme

The scheme shows the AC-coupled solar inverter and the Deye hybrid inverter with the additional PV connected to the GEN port.



Connection scheme

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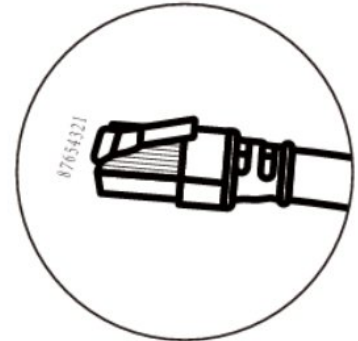
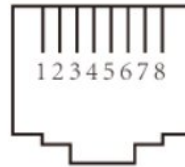
2.2 PIN definition

- PINs 1 and 2: `EX_meter_for_CT`
- PINs 4 and 5: `Grid_Tie_meter2`

Definition of RJ45 Port Pin for Meter-485

No.	Meter-485 Pin
1	METER-485-B
2	METER-485-A
3	COM-GND
4	METER-485-B
5	METER-485-A
6	COM-GND
7	METER-485-A
8	METER-485-B

Meter-485 Port



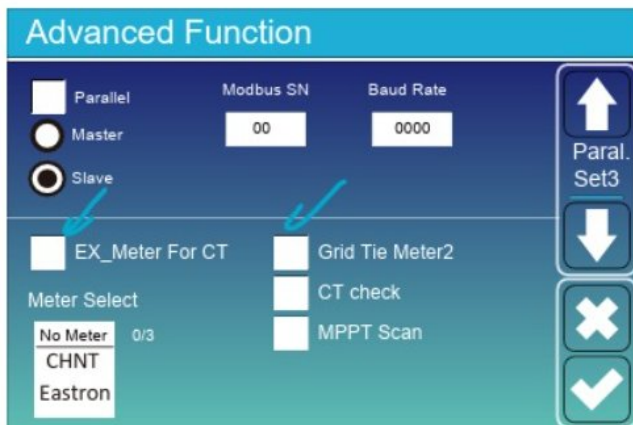
PIN definition

Text description of this image

3 Device configuration (Deye hybrid inverter)

3.1 Advanced settings

Under **Advanced Settings**, set both options to **TRUE** and choose your meter.



Parallel: Enable this function when several same model hybrid inverters are connecting in parallel.

Master: Select any hybrid inverter in the parallel system as a master inverter, and the master inverter needs to manage the working mode of the parallel system.

Slave: Set the other inverters managed by the master inverter as slave inverter.

Modbus SN: The Modbus address of each inverter, should be different.

Baud Rate: The rate at which inverter transmits data.

Ex_Meter For CT: when using zero-export to CT mode, the hybrid inverter can select EX_Meter For CT function and use the different meters, e.g. CHNT and Easton.

Grid Tie Meter2: When there are one or more grid-tied inverters AC coupled on the grid or load port side of the hybrid inverter and an external meter is installed for this/these grid-tied inverters, it is necessary to enable this function to upload the data of the external meter to the hybrid inverter to ensure that the power consumption data of the load is correct.

CT Check: Inverter will perform self check on external CT and return the test results.

MPPT Scan: After enabling this function, MPPT will perform I-V curve scanning every 5 minutes to find the maximum power point again and eliminate MPPT failure caused by shadows.

Advanced settings: both options set to TRUE

Text description of this image

3.2 Modbus settings for Grid_Tie_meter2

PARAMETER	VALUE
Baudrate	9600
Slave	2



Important

Set the slave address to **2**.

3.3 Additional PV on the GEN port

The additional PV is connected to the GEN port.



Important

MI export to Grid must be **Disabled**.

SmartLoad Setting

SmartLoad Setup:

Micro Input ^

AC Couple Settings:

Please Select ^

OFF %:

100

%

MI export to Grid cutoff:

Disable v

ON %:

95

%

AC_couple_Frz_High:

55

R/W

Read Successfully

Read at 2026-01-11 16:44:04 UTC+01:00

Collapse ^

Read

Setup

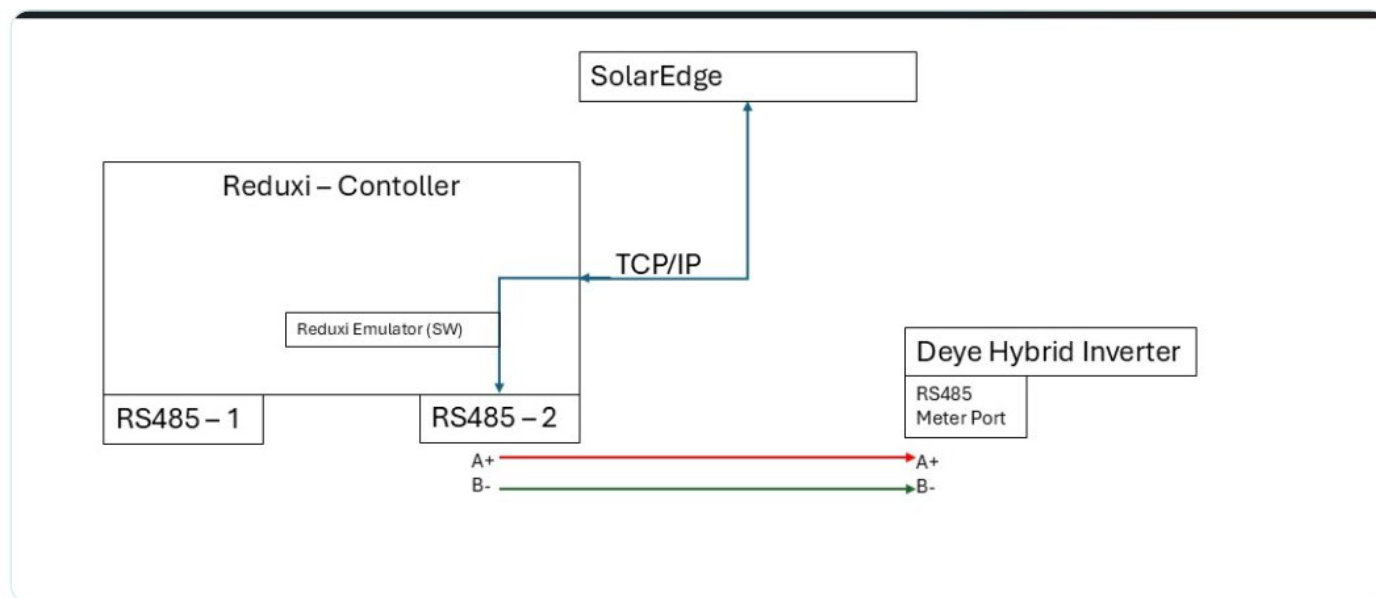
MI export to Grid: Disabled

Text description of this image

4 Emulator for the additional Grid Tie meter

Use the emulator when the additional Grid Tie meter cannot be connected to the Deye hybrid inverter. In this case, the RS485 interface of the Reduxi Controller emulates the meter data for the Deye hybrid inverter.

Wiring schematic:



Wiring schematic of the emulator

Text description of this image

5 Log in to the Reduxi web interface

You can open the Reduxi web interface in two ways:


REMOTE

Reduxi app

Via tunnel connection · works from anywhere



Web browser

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

5.1 Via the Reduxi app

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**.

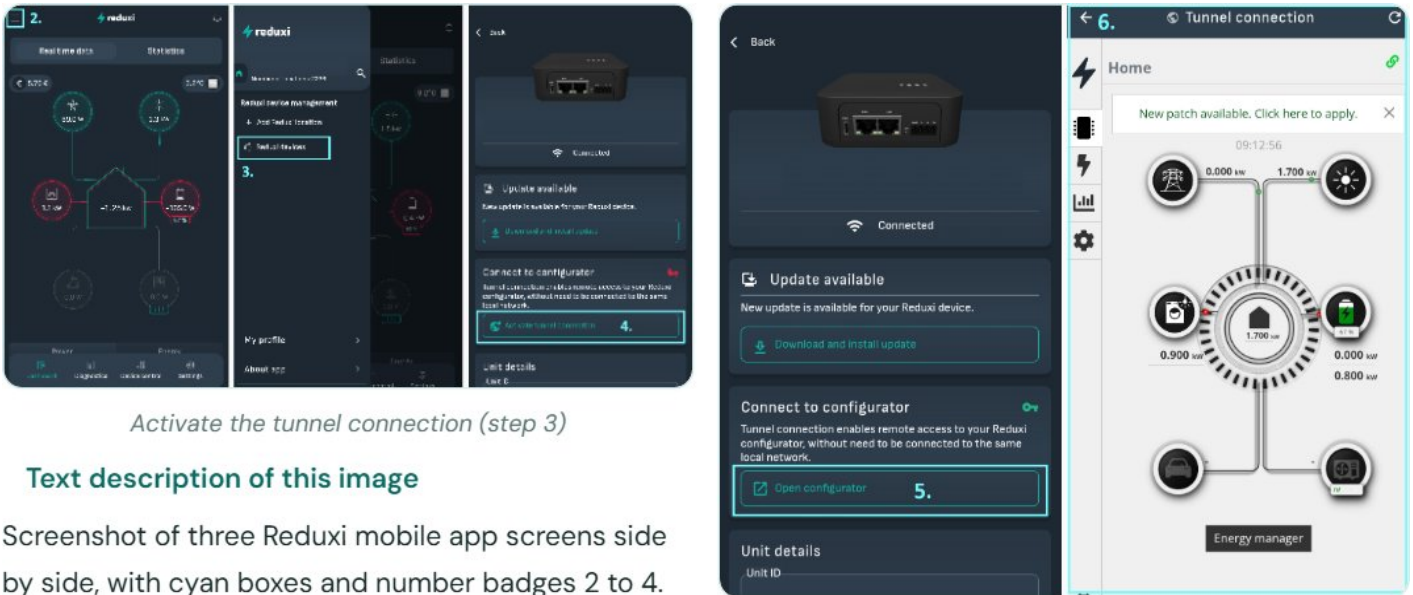
3 Activate the tunnel connection

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.



Activate the tunnel connection (step 3)

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. Middle screen (statistics, dark theme): 'Statistics' tab selected; 'Open configurator' button highlighted with a cyan box and badge 3. Right screen (update available, dark theme): 'Update available' section; 'Open configurator' button highlighted with a cyan box and badge 4. Far right screen (tunnel connection, light theme): 'Tunnel connection' screen; 'Open configurator' button highlighted with a cyan box and badge 5.

Open configurator (step 4)

Text description of this image

5.2 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 or **<http://reduxi.local>**. You can find the controller's IP address in your router's device list or in the Reduxi app under **Reduxi devices**.

2

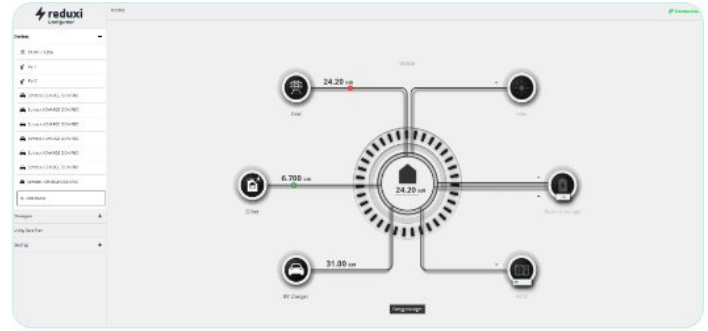
Log in

Username: **admin** · Password: **admin** (factory default)



Reduxi Controller login screen

Text description of this image



Controller web interface after login

2. Text description of this image

Screenshot of the Reduxi Configurator web interface

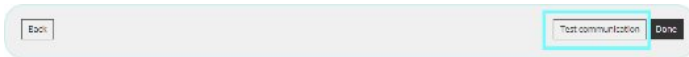
6 Add the device to Reduxi

6.1 Basic settings

Add the Deye hybrid inverter in the Reduxi Configurator as described in [Connect Hybrid Inverter Deye to Reduxi](#). Log in locally to the [Reduxi Configurator](#) (see [Point 5](#)) and click **+ Add device**.

6.2 Test communication

Click **Test communication** at the bottom of the wizard. It reads the Deye hybrid inverter once and saves nothing. If the test succeeds, click **Done**: only **Done** creates the device.



The **Test communication** button

Text description of this image

Screenshot of the bottom button bar of a Reduxi Configurator page. Left: button 'Back'. Right: button 'Test communication' (marked with a cyan box) and dark button 'Done'.



The **Done** button

2. Text description of this image

7 Check the readings

7.1 Last measurements

After communication is established, check the values of the devices in the Reduxi Configurator under **Devices**.

7.2 Enable control by Reduxi

Set the **control type** to **AUTO**. Only then do strategy commands affect the device. To define a strategy, see [Strategies for Reduxi controller](#).

✓ Summary

Preparation (Points 1–2): Prepare the Deye hybrid inverter, the additional Grid Tie meter or the Reduxi RS485 emulator, and the wiring.

Deye hybrid inverter (Points 3–4): Set both advanced settings to TRUE, set Grid_Tie_meter2 to 9600 baud and slave 2, and disable MI export to Grid.

Add to Reduxi (Points 5–6): Log in to the Reduxi Configurator, add the device and test communication.

Go live (Point 7): Check the readings and set the control type to AUTO.

→ Common issues

ISSUE	SOLUTION
Grid_Tie_meter2 does not respond	Check the PIN connection (PINs 4 and 5), baudrate <code>9600</code> and slave address <code>2</code> .
Additional PV exports to the grid	Check that MI export to Grid is Disabled (Point 3.3).
Open configurator does not open or stays empty	The tunnel is not active yet. Wait about 30 seconds and check that the controller is online.
Login with <code>admin</code> is rejected	The password was changed during installation. Ask the installer. The Reduxi account password does not work here.
<code>reduxi.local</code> does not load	Your device is not in the same network as the controller. Use the IP address or the tunnel connection.
Communication test fails, device shows offline	Check reachability, IP address / port / unit ID, and that the protocol is enabled on the device.

→ Related articles

Matching guides from the Reduxi knowledge base:



Connect Hybrid Invetrer Deye to Reduxi

Main guide for adding a Deye hybrid inverter to the Reduxi Controller.



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