⚡ REDUXI INSTALLER CERTIFICATION · KNOWLEDGE BASE

Checklist: planning and prerequisites for a Reduxi installation

Everything you clarify and bring before the installation appointment: devices, measurement point, material, space and network.

⏱ approx. 10 min 🔧 Before the installation appointment 📋 5 groups to tick off

🎓 Module 2 · Installer certification

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1 Why plan before the appointment

A good installation starts before the mounting. Use this checklist before every appointment. It follows module 2 “Planning and prerequisites” of the Reduxi installer certification program.

ℹ️ **The most important question:**
Which devices are installed on site, and which of them should be connected to Reduxi? Every device you want to connect must be actively addressable, for example via Modbus TCP, Modbus RTU or OCPP.

2 Clarify the devices in advance

Create a list of all devices that should be connected: manufacturer, model and location. Then tick off the following points for every device.

- [ ] Device list created: manufacturer, model and location
- [ ] All devices checked in the **list of compatible devices**
- [ ] Device setup guides read (there is one for many devices)
- [ ] Communication active on every device: `Modbus TCP`, `Modbus RTU` or `OCPP`
- [ ] Access data and manufacturer app available: account, password, installer access or service code
- [ ] Connection data noted: IP address and port; for Modbus RTU the connection type, baud rate, data bits, stop bits and parity

> ⚠️ **Set this up on the device itself.**
> The communication mode is set in the manufacturer's app or web interface, not in Reduxi. If it is not active on the device, the connection test in Reduxi fails. This is the most common cause of problems. Devices connected via RS485 can also communicate through a Reduxi Gateway.

3 Measurement at the grid connection point

Reduxi needs a measurement at the grid connection point (root measurement). It must capture all power flows. There are three ways:

- **Smart meter of the grid operator** with the P1 Ultra
- **Smart meter with Modbus TCP or Modbus RTU**, installed after the grid operator's meter or in its place
- **Smart meter of an inverter**, if it sits directly behind the grid operator's meter

- [ ] Root measurement clarified: all power flows are captured
- [ ] Measurement variant decided (you decide on site)
- [ ] Meters that can only be read via the infrared interface: IR sensor for the P1 Ultra planned
- [ ] Key for the customer interface of the grid operator requested: the customer contacts their grid operator in good time
- [ ] Fuse values for L1, L2 and L3 noted in the meter cabinet
- [ ] Connection power requested from the last electricity bill

✅ **IR sensor:**
It is sold separately. If the IR sensor is used, no RS485 connection between the P1 and the controller is possible. A typical example for meters that need it is Wien Energie.

4 Material and accessories

Plan the power supplies and accessories when you order:

PRODUCT	POWER SUPPLY	NOTE
Controller stand-alone	230 V to 5 V, USB-C	Included, ready to plug in
Controller DIN rail	DIN rail power supply 5 V	Needs 1 TE next to the controller (4 TE wide)
Controller Industrial	DIN rail power supply 24 V	Needs 2 TE
Reduxi Gateway	230 V to USB-C	Included; clarify the current transformer size (15, 30, 50 or 100 A, or without clamps)
P1 Ultra Plus / Pro	230 V to USB-C or DIN rail 5 / 24 V	**Not included**, order separately

- [ ] Current transformer size for the Gateway clarified: 15, 30, 50 or 100 A, or without clamps
- [ ] Matching power supplies ordered (the P1 Ultra comes without one)
- [ ] SIM card available if mobile data is used, including PIN and APN (separately available, requests to sales@reduxi.eu)

5 Space and network

Clarify how the controller gets onto the network and whether everything fits in the cabinet.

- [ ] Controller including power supply fits into the distribution cabinet (width in TE)
- [ ] Location of the controller and cable routes to inverter, battery and meter clarified
- [ ] Connection decided: Ethernet, WLAN or mobile data; free port on the router, number of routers known
- [ ] WLAN name and password ready (for the P1 Ultra only 2.4 GHz)
- [ ] Fixed IP addresses clarified with the customer
- [ ] Firewall approvals clarified with IT, if a firewall is in use (see “Reduxi Firewall rules”)

> ⚠️ **Be careful when saving network settings:**
> All connections are briefly disconnected. A wrong fixed address can make the controller unreachable, so make sure you have a second access first.

6 What you bring

- [ ] Reduxi app and Reduxi Cloud account
- [ ] Laptop for the local interface (web interface of the controller)

✓ Summary

Devices (Point 2): List ready, all devices compatible, communication active, access data and app available.

Measurement (Point 3): Root measurement clarified, key for the grid operator’s customer interface requested, fuse values for L1, L2 and L3 noted.

Material (Point 4): Power supplies, current transformer size, SIM card and IR sensor clarified.

Space and network (Points 5–6): Cabinet space, network connection, fixed addresses and firewall clarified; app, account and laptop with you.

→ Common issues

ISSUE	SOLUTION
The connection test in Reduxi fails	Communication is not active on the device. Switch on `Modbus TCP`, `Modbus RTU` or `OCPP` in the manufacturer's app or web interface and check the access data.
The controller is unreachable after saving network settings	A wrong fixed address was entered. Use a second access (for example the tunnel connection) or search for the controller with a network scanner.
The P1 Ultra does not connect to the WLAN	The P1 Ultra only supports 2.4 GHz. Use a 2.4 GHz network.
The SIM card is blocked	A wrong PIN was entered. Check PIN and APN with your provider before you insert the card.

→ Related articles

Matching guides from the Reduxi knowledge base:

📡 **Is my Smart Meter supported by Reduxi?**
Find out whether your meter works with the Reduxi system

📋 **Setup guides and integrations**
All step-by-step guides for connecting devices to the Reduxi Controller

⚡ **List of compatible devices**
All devices that work with the Reduxi Controller

⚡ **Strategies for the Reduxi Controller**
Energy manager and other strategies explained