

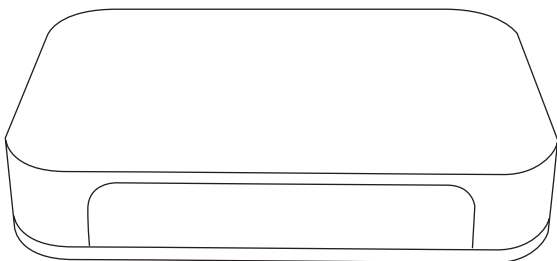
reduxi[⚡]

Take Control. Use Reduxi.

REDUXI CONTROLER

User Manual

Version V1.2 11.2022



www.redux.eu

1. INTRODUCTION

Welcome to the world of Reduxi which allows you to take control of energy costs and efficient use of electricity for sustainable development. Main features:

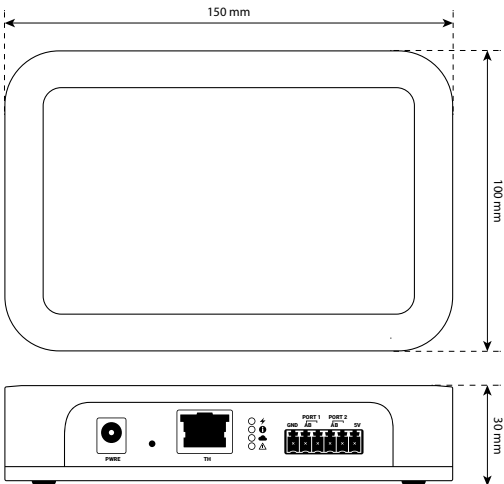
- PEAK POWER MANAGEMENT.
- SOLAR POWER PLANT PRODUCTION MANAGEMENT.
- OPTIMISATION OF ELECTRICITY CONSUMPTION.

Energy costs in your household or industry can only be reduced by accurate measurement. For doing so, you need the right technology. Based on advanced algorithms, the innovative system Reduxi measures and analyses electricity consumption for you. With its advanced features, Reduxi reduces consumption costs and increases energy efficiency.

2. SPECIFICATIONS

2.1. Dimension

- Desktop housing with option for DIN rail IEC/EN 60715 TH35 attachment.
- Dimensions: 150 x 100 x 30 mm.
- Ingress Protection: <IP20.
- Weight: 230.



2.2. Technical data

| POWER SUPPLY | |
|--------------------------------------|---------------------|
| Supply voltage – DC Jack | 12 - 24 V DC |
| Average power consumption at 12 V DC | 250 mA |
| Supply voltage – PoE | 48 V |
| PoE type | IEEE 802.3at Type 1 |

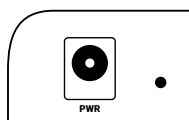
| PINS | |
|--------------|--------------------------------------|
| Power supply | 2-pin DC jack |
| Ethernet | RJ45 10/100 Mbps (half/ full duplex) |
| RS485 | 2x 2-pin terminal block |

| CONNECTIVITY | |
|--------------|-----------------------------------|
| Ethernet | 10/100 Mbps |
| WiFi | IEEE 802.11 a/b/g/n/ac, 2.4/5GHz, |
| RS485 | 2x 921600 BAUD half duplex |

| OTHER | |
|------------------------------------|------------------------|
| Operating temperature range | From 0°C to +40°C |
| Storage temperature range | From -10°C to +70°C |
| Relative humidity during operation | < 95% (non-condensing) |
| Ingress Protection | < IP20 |

2.3. Connection pinouts

2.3.1. Reset button



With the following procedure you can reset Reduxi to factory default:

- Disconnect Reduxi from power.
- Press needle and do not let go (continues pressing).
- Connect Reduxi to power.
- Continue pressing reset needle for 30-60 seconds until all LED lights start blinking.
- Release reset needle after LED lights start blinking .
- Wait 3-5 minutes for Reduxi to reset everything to factory settings.

2.3.2. Power supply

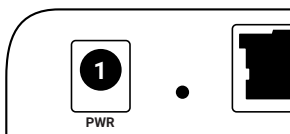


Figure 1: Power supply pinout (marked as number 1)



Device shall be supplied by Limited power supply or power supply complying with PS2 according to IEC 62368-1.

2.3.3. Ethernet – RJ45

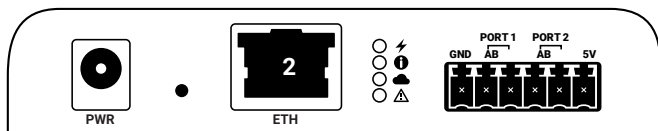


Figure 2: Ethernet pinout (marked as number 2)

| PIN no. | Function |
|---------|----------|
| 1 | TX+ |
| 2 | TX- |
| 3 | RX+ |
| 4 | PoE |
| 5 | PoE |
| 6 | RX- |
| 7 | PoE |
| 8 | PoE |

- Data rate: 10/100 Mbps.
- Category: CAT5.
- Green light indicates connection.
- Orange light indicates traffic .
- Automatic crossover.

2.3.4. Communication interfaces

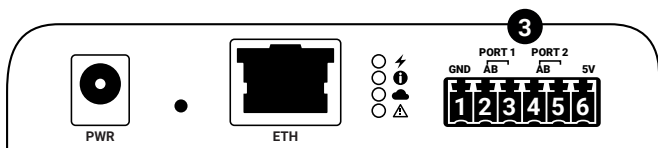






Figure 3: Communication interfaces pinout (marked as number 3)

1. Common ground
2. A + (port 1)
3. B - (port 1)
4. A + (port 2)
5. B - (port 2)
6. Auxiliary +5V DC output

- Data rate: 921600 BAUD.
- Half duplex.
- Voltage level: 0 V - 5 V.

There are also additional adapters available for 3rd-party communication support. Please contact us for a list of currently available add-ons and prices.

2.3.5. LED Indicator Lights

-  **First from the top LED** - Green light: Power ON.
-  **Second from the top LED** - Green light: System is running.
-  **Third from the top LED** - Green light: Connected to Reduxi Cloud.
-  **Fourth from the top LED** - Red light: Error.

3. INSTALLATION CONNECTION INFORMATION

- For first setup you need to connect Reduxi to your local network router using ethernet cable.
- If available, connect devices to RS485 port.
- Connect AC-DC adapter to Reduxi DC jack and plug it to power outlet; First top LED should go ON – Green light.

For software configuration/installation please refer to Reduxi Local online manual:

<https://www.reduxi.eu/en/knowledge-base>.

4. GENERAL INSTRUCTIONS FOR USE

- Read these instructions. Keep these instructions. Follow and abide by all the warnings.
- Install the product according to the producer's instructions.
- The product must not be exposed to vibration.
- Remove all packaging before plug in the product to an electricity supply.
- Do not place the product on an unstable ground.
- Do not place any objects such as lamps, books, vases of water, tablecloths, etc. on the product. Do not cover the ventilation slots.
- Do not expose the product to liquids, rain or moisture.
- Unplug the product before cleaning. Do not use liquid or spray cleaning agents to clean the product. Use a soft, dry cloth for cleaning.
- Do not insert objects into the openings of the product. This may cause a short circuit and lead to electric shock or fire.
- Do not open or repair the product yourself. Opening the product will make you warranty invalid. This product contains no user-replaceable parts.
- Always unplug the product when you plan to move it.

- Avoid procedures that may cause a short circuit.
- Do not remove the original labels from the product.
- Do not use the product near water.
- Do not install the product near heat sources such as radiators, heaters, etc.
- Protect the electric cable and route it in such a way that it will not be walked on and that there are no objects next to it that could pinch or twist it.
- Only use accessories/additional equipment specified by the producer.
- Unplug the product during storms or when not in use for a long time.
- All repairs should be performed by qualified service personnel.
- The correct voltage for this product is specified in these instructions. You can only connect the product to a socket with the voltage and frequency specified in these instructions. If you do not have information about the voltage, contact your service provider or electricity distribution company.
- The power input on the device must always be accessible and operational.
- Do not overload electrical socket or extension cords or electrical enclosures.

Producer

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Document

Purpose: Reduxi Controller - User Manual

Version: V1.2 11.2022

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