

Models: Unipi 1.1

PLEASE RETAIN THIS DOCUMENT FOR FUTURE REFERENCE

CAUTION

The unit can be powered only by a power source in compliance with the unit's specifications. Using unsuitable power supply can result in damage to the unit or connected devices. Unplug all power supplies and voltage sources before any manipulation with the unit – danger of electrical injury or component damage!

Do not use the controller in potentially explosive atmospheres! The controller can be installed only by trained personnel with sufficient qualification. The unit can be installed only in a suitable environment following the product's technical specifications (interior with suitable temperature and humidity, switchboards protected against water intrusion, etc.).

All connected peripherals should comply with all standards and regulations relevant to the country and the intended use.

Unipi 1.1 features

8× change-over relay	250 V AC / 30 V DC; 10 A Current value is given for resistive load
14× (12+2) digital input	0–3/7–24 V DC, Galvanically isolated Note: I13 and I14 are not accessible by default and require a custom connection. See the product documentation on Unipi KnowledgeBase for details.
2× analog input	0–10 V DC
1× analog output	0–10 V DC
1× 1-Wire port	RJ45 connector
1× I2C port	RJ11 connector For mounting extension modules
1× RTC (Real Time Clock) battery slot	Battery type CR2032
1× UART port	RJ11 connector For external serial communication
Power supply	5 V DC, 5.5 × 2.1 DC connector
Raspberry Pi GPIO connector	23-pin connector for Raspberry Pi 2–4 GPIO pins
12 V DC, 100 mA internal power supply	For digital inputs

WEEE Directive Statement for the European Union
Unipi 1.1 cannot be disposed of as household waste. Different rules for handling electric waste may apply in other jurisdictions.



Compliance Information
Unipi 1.1 complies with the requirements of EMC, LVD and RoHS directives relevant for European Union states.



First steps

CAUTION

Before using the board, insert the CR2032 into the battery holder. Powering the board up without the battery may result in damage to the RTC module or other components of the board.

1. Make sure you have properly configured the power jumper JP1 – see **Power requirements**.
2. Screw in the plastic spacers to the Unipi board mounting holes.
3. Connect the provided flat cable to the Unipi board P5 header.
4. Attach your Raspberry Pi to the Unipi board with provided screws.
5. Connect the other end of the flat cable to your RPi (make sure it is not twisted).
6. Plug in the power supply.

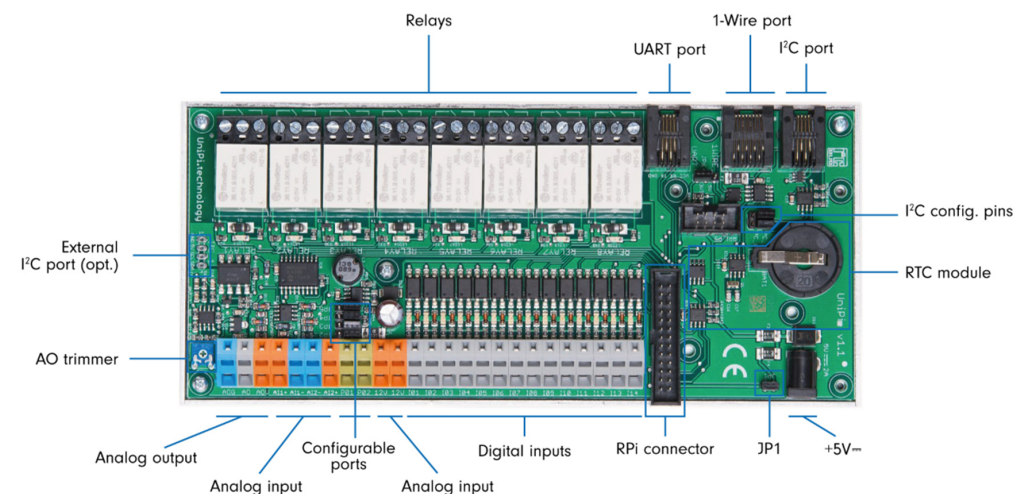
Power supply instructions

Common power supply (Rpi and Unipi are powered from the same power source)	Separate power supply (separate power sources for Unipi and RPi)
Jumper JP1 connected	Jumper JP1 disconnected
5 V DC, min. 2.4 A, through the Unipi power connector	5 V DC, min. 1 A, through the Unipi power connector
Raspberry Pi power connector disconnected	5 V DC, according to Raspberry Pi specification

Complete technical documentation is available at <https://kb.unipi.technology/>.

Software

Unipi 1.1 device is compatible with a variety of software. See our website for further details.



Software

MERVIS

Official software platform for programming Unipi controllers according to the IEC 61131-3 standard. Powerful, professional and a user-friendly tool. Detailed installation manual, tutorials and sample projects are available at <https://kb.unipi.technology/>.

API

The software openness of Unipi products and the wide range of options for communicating with hardware provide users with everything required when programming Unipi controllers in any programming language or software platform. For further information, please visit <https://kb.unipi.technology/>.

