Temperature Humidity CO_2 VOC Barometric pressure Ambient light

Indoor air quality sensors

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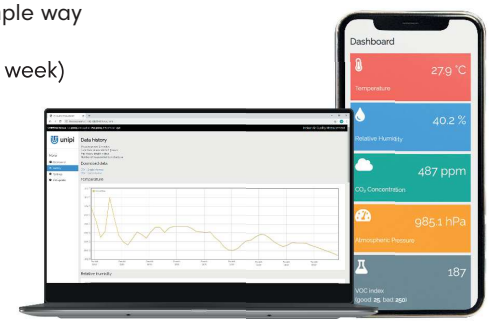
Indoor air quality sensors

Model name	Temperature	Humidity	CO_2 concentration	VOC	Barometric pressure	Ambient light	LoRaWAN	WiFi host / AP	RS485, Modbus RTU
RW-TH	✓	✓	✗	✓	✓	✓	✗	✓	✓
RLW-TH	✓	✓	✗	✓	✓	✓	✓	✓	✓
RW-THC	✓	✓	✓	✓	✓	✓	✗	✓	✓
RLW-THC	✓	✓	✓	✓	✓	✓	✓	✓	✓

- The sensor monitors important parameters of air quality and displays the status in a simple way
- Indication of air quality via an RGB LED
- All values are displayed in a web interface (current overview, historical data for the last week)
- Data are relayed to MaR control systems
- Easy configuration through Wi-Fi
- **Communication protocols**
  - » LoRaWAN (ABP support, OTAA activation)
  - » Modbus TCP, MQTT, HTTP/REST (WiFi)
  - » Modbus RTU (RS485)



Web interface preview

Examples of use and communication

Temperature
Humidity
CO_2
VOC
Barometric pressure
Ambient light

LoRaWAN

WiFi

Modbus TCP
MQTT
REST

RS485

Modbus RTU

Technical parameters

General

Power supply - svorkovnice - micro USB	5–24 V DC, avg. power consumption 0,6 W 5 V DC, max. 1 A (typ. 120 mA)
Rozměry	120 × 80 × 25 mm
Instalace	Wiring box (KU 68)

Communication interface

WiFi (AP/klient)	802.11 b/g/n 2,4 GHz
LoRaWAN	Class A, 14 dBm, SF 7-12, 868 MHz
RS485	Modbus RTU

Outputs

Digital output	Galvanically isolated open collector, max. 20 mA / 24 V

Measuring and parameter accuracy

Air temperature	-40 až +85 °C, ±0,5 °C accuracy
Relative air humidity	0–90 % RH non-condensing, ±2 % accuracy (in range of 20–80 %)
CO_2 concentration	300–5 000 ppm, ±30 ppm accuracy, ±3 % from the value
VOC concentration	AQ Index 0–500, indicative value
Barometric pressure	300–1 100 hPa, ±5 hPa accuracy
Ambient light	0–7 500 lx, indicative value

Standards

In accordance with	EN 300 328; EN 300 220; EN 301 489; EN 60730; EN 60950; EN 62311; EN 62479; RoHS; WEEE

MORE ABOUT AIR QUALITY SENSORS