



More than **sensors + automation**

JUMO Wtrans E01

Measuring probe for humidity, temperature, and CO₂ with wireless data transmission



Refreshingly pure

- Designed for stationary and mobile measurement through modern wireless technology with 868.4 MHz
- High measuring accuracy across all measuring ranges
- Easy-to-use configuration and parameterization by means of setup program via USB interface
- The mounting rail receiver of the device is available with serial interface and/or analog output with/without relay contact
- Additional transmitters for pressure and temperature are available within the JUMO Wtrans series
- Up to 16 Wtrans transmitters can be detected per receiver depending on the number of measurands and measuring points



Type 902928

Brief overview

The digital JUMO Wtrans E01 is designed for demanding room monitoring applications. Probes for the measurands of humidity, temperature, and CO₂ can be connected to the wireless measuring probe. A separate input can also be used to connect a Pt1000 temperature sensor. Due to the multipoint CO₂ and temperature adjustment, the transmitter offers outstanding CO₂ measuring accuracy across the whole temperature range. The voltage is supplied either by the customary AA batteries or by a 24V power supply unit. An easy-to-read alphanumeric-

cal display alternates between all the measured values. The measured values are transmitted wirelessly to a receiver up to 600m away. It has a selection of analog outputs, relay contacts, and a digital Modbus interface, thereby providing the measurement data for further processing on measurement and control technology equipment. Up to 16 Wtrans-series transmitters can be detected per receiver depending on the number of measurands and measuring points.

Probe for humidity and temperature

	Measuring range	Measurement uncertainty
Humidity measurand	0 to 100 % RH (RH = relative humidity)	±2% (0 to 90 % RH) ±3% (90 to 100 % RH)
Temperature measurand	-40 to +80 °C	±0,2 K at 20 °C
Response times (in air 2 m/s) Humidity Temperature	t0.9: approx. 30 s t0.63: approx. 240 s	

Probe for CO₂

	Measuring range	Measurement uncertainty
CO ₂ measurand	0 to 2000 ppm	±(50 ppm + 2 % of the measuring range)
CO ₂ measurand	0 to 5000 ppm	±(50 ppm + 3 % of the measuring range)
CO ₂ measurand	0 to 10000 ppm	±(100 ppm + 5 % of the measuring range)
Response time (in air 2 m/s)	t0.9: approx. 195 s	

RTD temperature probe Pt1000

	Measuring range	Measurement uncertainty
RTD temperature probe Pt1000, class A according to DIN EN 60751	-50 to +150 °C	±(0.15 K + 0.002 × t) t = measured temperature in °C without prefix sign
Connection type	Four-wire electrical circuit	
Sensor current	≤ 500 µA	
Lead wire resistance	Maximum 11 ohms per wire	
Response times (with 4 mm protection tube)	in water (0.4 m/s): t0.5: approx. 3 s; t0.9: approx. 7 s in air (3 m/s): t0.5: approx. 25 s; t0.9: approx. 80 s	

Wireless measuring probe

Voltage supply	4 AA batteries or 24V power supply unit
Protection type	IP65
Radio frequency	868.4 MHz
Application areas	Heating, ventilation and air-conditioning technology, warehouses, laboratories, the food industry, kitchen manufacturers, cooling systems, greenhouses, ambient air monitoring, agriculture, and a number of other indoor and outdoor applications