#### CZAKI THERMO - PRODUCT

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# INSTRUCTION MANUAL FOR AIR TEMPERATURE AND HUMIDITY SENSOR WITH TRANSMITTER HTT-951/A

# Application

The HTT-951/A sensor with transmitter is an electronic device that measures the temperature and relative humidity of the surrounding air and converts it into standard 4-20mA or 0-20mA current signals...

## Structure description

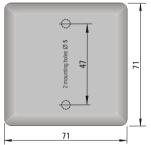




Fig. 1

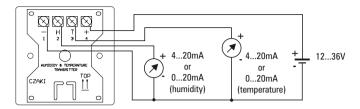
Basic dimensions of the sensor with the transmitter

The circuit board of the transmitter integrated with the temperature and humidity detector is placed in a housing made of ABS plastic. Slots are made in the bottom and top walls to allow free gravitational air flow.

## Programming of the transmitter

The transmitter is configured by a PC via the interface IF-2013U and the E-config application v.2.1 or later. For a description of the software installation and how to use it, please refer to the IF-2013U interface manual.

## **Connection diagrams**



<u>Fig. 2</u> Connection of power supply and current outputs

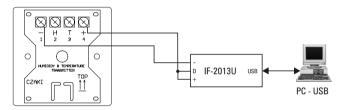


Fig. 3
Connecting the IF-2013U interface for programming time

#### Notes for installation

The connection cable is routed through the central hole made in the back panel and connected to the terminals located inside the transmitter housing as shown in Figure 2.

The terminals and mounting holes are accessible by removing the front of the housing. The sensor attaches to a vertical flat surface with 2 screws up to 4.8mm in diameter. There is a pictogram on the circuit board indicating the spatial orientation of the device (arrows show the upward direction). When applying the front part of the case, remember that the ventilation slots should be at the bottom and top. Other orientation of the housing can cause the detector to heat up and erroneously indicate the measured quantities.

#### **Technical data**

Temperature processing range programmable,

 $max -40^{\circ}C ... +80^{\circ}C$ (upper - lower  $\geq 10^{\circ}C$ )

Processing range of relative humidity programmable,

maksymalnie  $0\% \dots 100\%$  (upper - lower  $\geq 10\%$ )

Processing range of dew point temperature progr

(calculated on the basis of measured temperature and relative humidity)

programmable,

max  $-40^{\circ}$ Cdp ...  $80^{\circ}$ Cdp (upper - lower  $\geq 10^{\circ}$ Cdp)

Output signals programmable within 0...20 mA,

deafult 4...20mA,

referenced to the supply minus

Temperature processing error max.  $0.5^{\circ}$ C for  $0^{\circ}$ C  $\leq T \leq 60^{\circ}$ C

and max. 1,5°C outside this range

Relative humidity processing error  $$\text{max.} \ 3\%$ for 20\% \leq $\text{RH} \leq 80\%$$ 

and max. 5% outside this range

Power supply 12 ... 36 V DC / 55 mA

Operating temperature  $-40^{\circ}\text{C...} + 80^{\circ}\text{C}$ Dimensions  $71 \times 71 \times 27 \text{ mm}$ 

Weight approx. 50 g

Programowanie via the IF-2013U interface

to USB of the computer (to be ordered

Separately)

### Maintenance and service

The sensor with transmitter does not require periodic maintenance. In case of damage, contact the CZAKI Sales Department.

## **Package contents**

The sensor kit includes:

Sensor with transmitter

User manual with warranty card