

## Thermometer hygrometer with Ethernet interface and relays

code: H3530



Humidity, temperature, humidex Ethernet sensor with two relay outputs. Sensor H3530 is designed for online monitoring of temperature, relative humidity, humidex of air without aggressive substances. Three binary inputs to detection of two-states signals are the advantage. Other devices are controlled by two relay outputs.

High precision capacitive polymer sensor ensures excellent long term calibration stability and ultimate accuracy. Measured values are also converted to other humidity interpretation: humidex, dew point temperature, absolute humidity, specific humidity, mixing ratio and specific enthalpy.

### Processing and analysis of measured data:

- online in [COMET Cloud](#)
- [COMET Database](#) software
- [integration into 3-party systems](#)

### Technical data

|                                        |                                                                                                   |
|----------------------------------------|---------------------------------------------------------------------------------------------------|
| TEMPERATURE SENSOR                     |                                                                                                   |
| Measuring range                        | -30 to +80 °C                                                                                     |
| Accuracy                               | ±0.4 °C                                                                                           |
| Resolution                             | 0.1 °C                                                                                            |
| HUMIDITY SENSOR                        |                                                                                                   |
| Measuring range                        | 0 to 100 % RH                                                                                     |
| Accuracy                               | ±2.5 % RH from 5 to 95 % at 23 °C                                                                 |
| Resolution                             | 0.1% RH                                                                                           |
| DEW POINT                              |                                                                                                   |
| Measuring range                        | -60 to +80 °C                                                                                     |
| Accuracy                               | ±1.5 °C at ambient temperature T <25 °C and RH >30 %                                              |
| Resolution                             | 0.1 °C                                                                                            |
| RELAY OUTPUTS                          |                                                                                                   |
| Quantity                               | 2                                                                                                 |
| Maximal voltage                        | 50 V                                                                                              |
| Maximal current                        | 2 A                                                                                               |
| Maximal power                          | 60 VA                                                                                             |
| BINARY INPUTS                          |                                                                                                   |
| Quantity                               | 3                                                                                                 |
| Signal for binary inputy               | dry contact, open collector or two-state voltage signal.<br>Inputs are not galvanically isolated. |
| Minimum pulse duration on binary input | 500 ms                                                                                            |
| Voltage across open contact            | < 3,3 V                                                                                           |
| Low voltage level                      | 0 to +0,5 V                                                                                       |
| High voltage level                     | +3,0 to +30 V                                                                                     |

|                                                   |                                                                                           |
|---------------------------------------------------|-------------------------------------------------------------------------------------------|
| GENERAL TECHNICAL DATA                            |                                                                                           |
| Operating temperature                             | -30 to +80 °C                                                                             |
| Channels                                          | internal temperature and humidity sensor                                                  |
| Acoustic alarm                                    | from built-in beeper - switchable                                                         |
| Counted values                                    | humidex, dew point, absolute humidity, specific humidity, mixing ratio, specific enthalpy |
| Output                                            | Ethernet                                                                                  |
| Measuring interval                                | 2 s                                                                                       |
| Range of humidity sensor temperature compensation | all temperature range                                                                     |
| Available temperature units                       | degrees Celsius, degrees Fahrenheit                                                       |
| Communication protocol                            | WWW, ModbusTCP, SNMPv1, SOAP, XML                                                         |
| Alarm protocols                                   | E-mail (SMTP authentication is supported), SNMP Trap, Syslog                              |
| Power                                             | 9-30 Vdc                                                                                  |
| Protection class                                  | IP40                                                                                      |
| Dimensions                                        | 136 x 213 x 45 mm; stem length 75 mm                                                      |
| Weight                                            | approx. 360 g                                                                             |
| Warranty                                          | 3 years                                                                                   |