#### COMET SYSTEM, s.r.o.



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# **H4331 Temperature transmitter with RS232 output**



code: H4331

Temperature transmitter for Pt1000 sensor with two relay outputs. Outdoor, indoor use.

For external Pt1000 temperature probe. Three two-state inputs.

# Included in delivery:

- H4331 sensor
- Traceable calibration certificate
- Quick start manual
- Technical support at discussion forum

## **Features**

Humidistat is designed for two-state control of e.g. heating, ventilation, humidifier, dehumidifier, etc.

Transmitter is equipped with two relay outputs for alarm indication or control of external devices. Each relay can be assigned to any measured or computed value. For each relay setting of delay, hysteresis, audible alarm is enabled.

Measured temperature and relative humidity is recalculated to other humidity interpretations - dew point temperature, absolute humidity, specific humidity, mixing ratio or specific enthalpy.

Parameters are easy adjustable from regulator keyboard or from the computer. Large dual line LCD for simultaneous display of temperature, relative humidity or other calculated humidity interpretation is an advantage.

State-of-the-art capacitive polymer sensor ensures excellent calibration long term stability, inertia against water and condensation. Transmitter is designed for use in non-aggressive environment.

Transmitter is also equipped with three binary inputs for detection of two-state events - e.g. water, smoke, glass break detection, door contact.

## **HUMIDISTAT APPLICATIONS**

- temperature control
- monitoring of temperature, humidity:
- building management and automation
- server rooms
- telecommunication devices
- warehouses, glasshouses
- manufacturers
- museums, archives, galleries
- air-conditioned rooms, HVAC

#### weather stations

The transmitter works with <u>ModBus RTU</u> communication protocol or with <u>Advantech ADAM</u> compatible protocol. Protocol is user selectable in special configuration mode by means of the PC. Serial link enables to read actual readings and modify transmitter configuration. Instrument works always in slave mode, i.e. responds only to master device query. Transmitters have the address space available from 1 to 255. Communication speed is 110 to 115200Bd.

## **SOFTWARE:**

#### Comet Database

Complex solution for data acquisition and analysing. Easy to use and high flexible database software for Comet Transmitters and Regulators.

#### • Sensor RS485/232 utility

allows communication of sensors with RS485/RS232 output and sending data to  $\underline{\textbf{Comet Database}}$ .

#### • T-Sensor software

 $\label{thm:complex} \textit{Free configuration utility for Comet Transmitters and Regulators}.$ 

### • SensorReader software

Basic data acquisition utility for Comet Transmitters and Regulators. Software is free for download.

# • 3rd party software

<u>ControlWeb</u>, <u>TIRS.NET</u>, <u>LabVIEW</u> etc. Support for this software is provided by the 3rd party companies.



# **Technical Data**

| Technical parameters                                      | Value  |
|---|--|
| Output  | RS232  |
| Measured Value  | Temperature  |
| Construction Type   | For External Temperature Probe Pt1000  |
| Design  | Industrial   |
| Temperature Measuring Range                               | -200 to 600 °C   |
| Relay Output  | Yes  |
| Two-State Input   | Yes  |
| Lcd Display   | Yes  |
| РоЕ   | No   |
| Maximum switching voltage, current, power of relay output | 50V, 2A, 60VA  |
| Audible alarm   | from built-in beeper - switchable  |
| Accuracy of temperature intput without probe              | ±0,2 °C  |
| Available temperature units                               | degrees Celsius, Fahrenheit  |
| Signal for binary inputs                                  | dry contact, open collector or two-state voltage signal. Inputs are not galvanically isolated. |
| Minimum pulse length at binary input                      | 500 ms   |
| Voltage at open contact                                   | 3.3 V  |

| Low voltage level                          | 0 to +0.5 V   |
|--|---|
| High voltage level                         | +3.0 to +30V  |
| Temperature operating range                | -30 to +80°C  |
| Temperature operating range of LCD display | readable to operating temperature +70°C, it is recommended to switch OFF the LCD over +70°C |
| Communication protocol                     | ModBus RTU and Advantech ADAM compatible protocol   |
| Communication speed                        | 110 to 115200 Bd  |
| IP protection                              | IP65  |
| Power                                      | 9-30Vdc, power consumption approximately 1W   |
| Dimensions                                 | 136 x 160 x 45 mm (W x H x D)   |
| Weight                                     | approximately 430g  |
| Warranty                                   | 3 years   |