



**COMET SYSTEM, s.r.o.**

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## H4431 Temperature transmitter with RS485 output



code: H4431

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

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

**Included in delivery:**

- H4431 sensor
- [Traceable calibration certificate](#)
- Quick start manual
- Technical support at [discussion forum](#)

### Features

Temperature transmitter and thermostat 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. For each relay setting of delay, hysteresis, audible alarm is enabled.

Measured values are converted to galvanically isolated RS485 serial output.

Degrees Celsius and Fahrenheit are user selectable.

Parameters are easy adjustable from regulator keyboard or from the computer. Large dual line LCD display is an advantage.

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

### APPLICATIONS

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

**Serial output RS485** is galvanically isolated from other circuitry to prevent collisions on the RS485 bus. The transmitter works with [ModBus RTU](#) communication protocol or with [Advantech ADAM](#) 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 0 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 **Comet Database**.

- **T-Sensor software**

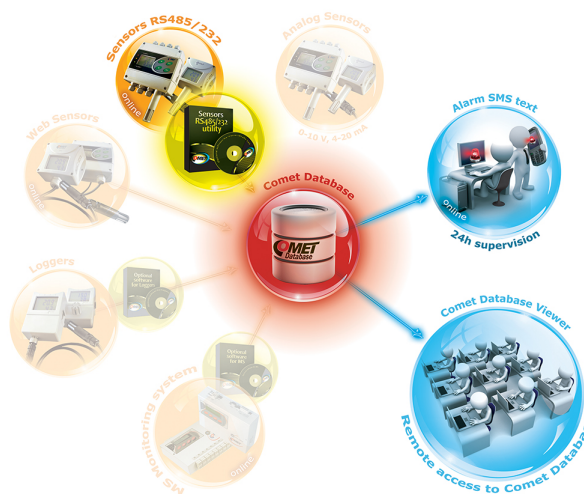
Free configuration utility for Comet Transmitters and Regulators.

- **SensorReader software**

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

- **3rd party software**

[ControlWeb](#), [TIRS.NET](#), [LabVIEW](#) etc. Support for this software is provided by the 3rd party companies.



## Technical Data

Technical parameters	Value
Output	RS485
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
PoE	No
Maximum switching voltage, current, power of relay output	50V, 2A, 60VA
Audible alarm	from built-in beeper - switchable
Accuracy of temperature input 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, ARION 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 350g
Warranty	3 years