

IOMod HT

Humidity and Temperature sensor



Features

- Temperature measurement in 0.1°C resolution
- Humidity measurement in 0.1% resolution
- Modbus, IEC-60870-5-103 communication over RS485
- 2 normally open relay outputs (advanced version)
- Automatically configurable relay switching on temperature or humidity change
- Configuration over USB console
- Drag and Drop firmware upgrade over USB mass storage
- LED indication for input/output and data transmission
- Spring contact connectors
- Easy connection with **WCC Lite** gateway and **CloudIndustries.eu** platform



Concept

IOMod HT is a stand-alone Modbus (RTU) and IEC 60870-5-103 temperature and humidity sensor device. Designed to measure indoor thermal statistics with high accuracy, IOMod HT can be used for numerous applications where user requires temperature and humidity monitoring. IOMod HT also can be used as thermostat that controls relay outputs according to user configuration on humidity and temperature limits.

IOMod HT is an ideal solution for such applications as data acquisition, observation, control, process monitoring, testing and measurement remotely. It is controlled over Modbus or IEC 60870-5-103 protocol, and can be connected in parallel with other Modbus or IEC 60870-5-103 equipment in a multi-drop installation scheme such as any SCADA system.

Characteristics

System

Relay outputs
PC USB connection
Output connectors

Basic

0
Mini USB
Spring contact connectors

Advanced

2
Mini USB
Spring contact connectors

Software

Configuration
Firmware upgrade

Over USB console
Over USB mass storage

Communication

Communication standard
Communication protocol
Speed

RS485
Modbus (RTU) and IEC 60870-5-103
300 – 256000 baud

Electrical Characteristics

Termination resistor
Power supply

Basic

Software selectable, 120Ω
12-24VDC, 8mA (nominal)
5-33VDC (full range)

Advanced

Software selectable, 120Ω
24VDC, 25mA (nominal)
18-27VDC (full range)
2 (normally open)

Relays

-

Relay Output Characteristics

Resistive load ($\cos\phi=1$)
Inductive load ($\cos\phi=0.4$, L/R=7ms)
Max. switching power

Basic

-
-
-

Advanced

5 A at 250 VAC, 5 A at 30 VDC
2 A at 250 VAC, 2 A at 30 VDC
1,250 VA, 150 W

Mechanical Characteristics

Operating temperature
Humidity
Casing
Dimensions
Warranty

-40 ÷ +85°C
5 – 95%RH (non-condensing)
IP20, ABS, white
26 (H) x 71 (W) x 71 (L), mm
2 years

Application

When using **IOMod HT** with **WCC Lite** gateway it is possible to monitor temperature, humidity, relay status, also control relays and their settings over Ethernet LAN's or 3G/4G(LTE)/GSM/GPRS networks. It is a powerful solution for remote monitoring and control, alarm management and data logging of I/O's on **CloudIndustries.eu** cloud platform.

ELSETA is a company focused on smart city and smart grid technologies. We specialize in substation and industrial automation, as well as innovative project development.

Simplifying complexity is our key to cutting-edge product development. More about **ELSETA** products: www.elseta.com

