

Technical Datasheet

Duct-Mounted Temperature & Relative Humidity Transmitter POLWAX RHT150 / RHT300 / RHT400



DUCT-MOUNTED TEMPERATURE & RELATIVE HUMIDITY TRANSMITTER POLWAX RHT150 / RHT300 / RHT400

The POLWAX RHT Series Duct-Mounted Temperature & Humidity Transmitters are designed for continuous and reliable measurement of air temperature and relative humidity in ventilation ducts, HVAC systems and industrial air-handling applications. The transmitter combines a temperature sensing element and a capacitive humidity sensing element with microprocessor-based signal-processing electronics. The measured parameters are converted into standard industrial output signals for connection to Building Management Systems (BMS), HVAC controllers, PLCs, SCADA systems, data acquisition systems and monitoring panels.

The POLWAX RHT transmitter family is designed with emphasis on measurement accuracy, long-term stability, reliable operation, easy installation and low power consumption. The supplied POLWAX documentation identifies duct mounting, excellent linearity, wide sensing range, high reliability, easy installation and low power consumption as key characteristics.

Features

- **High accuracy digital Temperature & RH sensor**
- **Dual parameter measurement (Temperature + Humidity)**
- **User-Friendly Interface**
- **Compact & Lightweight Design**
- **Fast response time**
- **Compact, rugged industrial design**
- **Easy installation (Wall / Duct Mount)**
- **long-term stability and low drift**
- **Bright Color display**
- **Cost-effective solution for environmental monitoring**



RHT150 is designed various applications, including:

- **HVAC systems & BMS integration**
- **Cleanrooms & pharmaceutical environments**
- **Warehouses & cold storage**
- **Laboratories & research facilities**
- **Hospitals & healthcare facilities**
- **Food & beverage industry**
- **Data centers & server rooms**





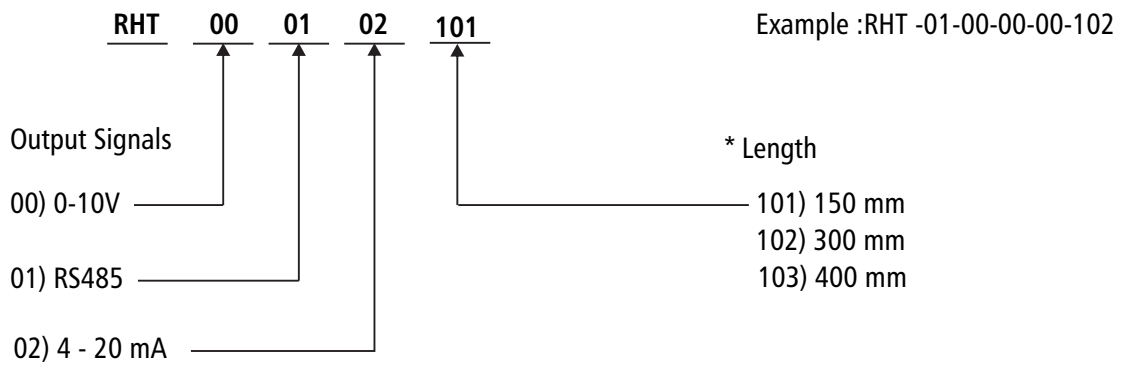
Technical Details

Parameters	Temperature & Humidity
Accuracy	Temperature: $\pm 0.3\text{ }^{\circ}\text{C}$ Relative humidity: $\pm 1.8\text{ \%RH}$ to $23\text{ }^{\circ}\text{C}$ (0 % to 90 %RH) Temperature effect over $5\text{...}50\text{ }^{\circ}\text{C}$ and 10–90 %RH
Measuring Range	Temperature : $-40\text{...}125\text{ }^{\circ}\text{C}$ Humidity : 0....100 %
Measuring Units	$^{\circ}\text{C}$ / $^{\circ}\text{F}$ & %RH
Probe Length	150 mm / 300 mm / 400 mm
Temperature Drift	$\leq 0.1^{\circ}\text{C}/\text{year}$
Supply Voltage	12 VDC to 30 VDC; maximum consumption 70 mA +/- 10% @ 24 Vdc
Output	4-20 mA / 0-10V / RS485 MODBUS RTU
Color	White Grey
Dimensions:	120 x 80 x 55 mm
Protection Standard	IP54 (Standard)
Mounting	Duct Mount with SS Probe
Operating Temperature	-20°C to $+60^{\circ}\text{C}$
Storage Temperature	-40°C to $+85^{\circ}\text{C}$
Operating Humidity	0–95% RH (Non-condensing)
Compliance & Standards	CE Certified, EMC Compliance (Industrial Environment), RoHS Compliant

Subject to change. Please note that all information in this document is correct at the time of publication.
Due to our policy of continuous product development, we reserve the right to change this information without prior notice.

Model Selection Chart

Polwax RHT



* Customized Range available on request

Temperature & Humidity Transmitter ClimaTRANS

Unlimited Applications

Typical application fields of the ClimaTRANS RHT150

- Food services (refrigerated containers, cold storage, production and carriage of food)
- Health (storage of medicines, vaccines, blood, monitoring of incubators and operating rooms)
- Greenhouses and agriculture
- Environmental analyses (Air quality, meteorology and hydrology)
- Monitoring of solar panels
- Museums and document archives
- Transportation of perishable goods
- Air conditioning
- Clean rooms
- Laboratories
- Industrial processes
- Buildings, offices, schools

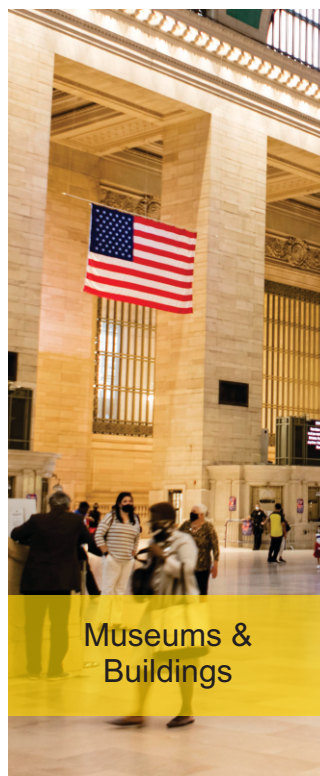
Agriculture & Greenhouses



Storage &
Warehouse



Food &
Hotels



Museums &
Buildings



Other
Industries



POLWAX Group has got an experienced, highly-qualified project team conducting extensive R&D operations. Owing to that, goods holding the POLWAX brand feature customer-tailored flexibility and meet requirements of various industries.

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