

## **Technical Datasheet**

# TEMPERATURE & HUMIDITY TRANSMITTER PLX RHT 50







## **TRANSMITTER PLX RHT 50**

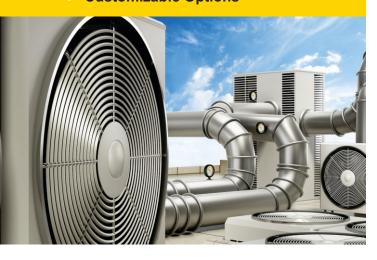
The top technologies are used in the PLX RHT 50 transmitter series. excellent precision, outstanding stability, relative humidity, and temperature gauges The measured values are transformed into linear signals from 4 to 20 mA.

Full setup of the microprocessor-based circuit is possible. using the POLWAX\_Confi PC interface and the output range Software that runs on Windows®. The humidity signal can be set to either relative humidity or absolute humidity. or dew point production. The wall-mounted applications are the exclusive focus of the PLX RHT 50 variant.



## **Features**

- With and without Display
- 4~20mA/ 0~10VDC output for temperature & humidity
- Modbus RTU RS485
- Duct mounted
- Excellent linearity
- Wide sensing range
- Good long term stability
- High reliability
- Easy installation
- High Accuracy
- Low Power Consumption
- Compact Design
- Customizable Options



## Configuration

Utilizing an interface connected to a PC and the POLWAX\_Confi software, the PLX RHT 50 is configured. The configuration allows one to select the sensor failure conditions, adjust measuring deviations (zero correction), and configure the transmitted output range (upscale or downscale). The programming software menu can also digitally provide sensor internal data such as the serial number, product version, and model. The default parameters are as follows: Humidity measuring range: 0 to 100%; Temperature measuring range: -40 to 100°C; Upscale signal outputs when sensor break or failure.

## Installation

This little electrical module separates the sensor from internal module self-heating while performing quick and accurate measurements. The sensor probe must be mounted with the tip facing downward. To access the electrical terminal connectors and the two wall mounting



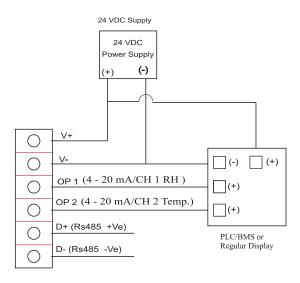


## **Technical Details**

Channels	Temperature & Humidity
Accurary	Temperature: ± 0,4 °C (0 °C to 60 °C)
	Relative humidity: ± 1.8 % RH to 23 °C (0 % to 90 % RH)
	Temperature effect over 550 °C and 10–90 % rH
Measuring Range	Temperature : -40110 °C
	Humidity : 0100 %
Measuring Units	°C, % rH
Measurement Elements	External temperature sensor,
	thermoset polymer capacitive sensing element for humidity
Supply Voltage	thermoset polymer capacitive sensing element for humidity  12 Vdc to 30 Vdc; maximum consumption 70 mA +/- 10% @ 24 Vdc
Supply Voltage Output Signal 1	. , , ,
	12 Vdc to 30 Vdc; maximum consumption 70 mA +/- 10% @ 24 Vdc
Output Signal 1	12 Vdc to 30 Vdc; maximum consumption 70 mA +/- 10% @ 24 Vdc 0/210 V or 420 mA (linear to rH) (2–10 V output: display required)
Output Signal 1 Output Signal 2	12 Vdc to 30 Vdc; maximum consumption 70 mA +/- 10% @ 24 Vdc 0/210 V or 420 mA (linear to rH) (2–10 V output: display required) 0/210 V or 420 mA (linear to Temp) (2–10 V output: display required)
Output Signal 1 Output Signal 2 Modbus RTU Output	12 Vdc to 30 Vdc; maximum consumption 70 mA +/- 10% @ 24 Vdc  0/210 V or 420 mA (linear to rH) (2–10 V output: display required)  0/210 V or 420 mA (linear to Temp) (2–10 V output: display required)  Rs485 Modbus RTU

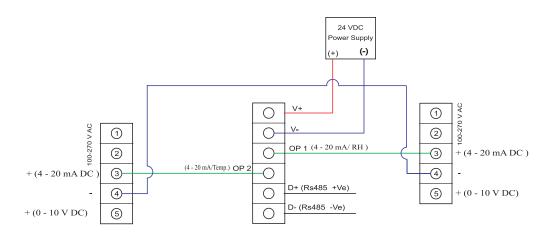


## Input Supply: 24VDC Output Signal: 4-20 mA (3wire)



Temperature-Humidity Transmitter RHT 50 / 100

## Input Supply: 24VDC Output Signal: 4-20 mA (3wire)



Indicator 1 Indicator 2

Temperature-Humidity Transmitter RHT 50 / 100



## **Temperature & Humidity Transmitter Polwax RHT**

**Unlimited Applications** 

## Typical application fields of the Polwax CLIMA Data loggers

- 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, meteorologyand hydrology)
- Monitoring of solar panels
- Museums and document archives
- Transportation of perishable goods
- Air conditioning
- Clean rooms
- Laboratories
- Industrial processes
- Buildings, offices, schools















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