



Indoor Thermohygrometer



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Indoor Thermohygrometer



WARNINGS



This instrument must be utilized only for the application it has been designed for, OTR declines all responsibility for any improper use.



Do not put the instrument in potentially explosive gases.



During the installation disconnect the instrument from the measuring devices or appliances connected to the electricity grid;



Do not connect the instrument to the readout unit with wet hands;



Use protective gloves.

Furthermore

- Do not open the instrument, contact the manufacturer for checks and repairs;
- Keep out of reach of children;
- The probe should not be damaged during the following situation:
 - o Reverse connection of power supply polarity;
 - o Wrong electrical connection (power supply on signals).
- Incorrect and improper connections are traceable and void the warranty.

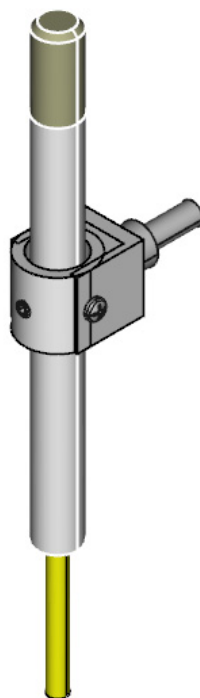
Applications

The indoor thermo-hygrometer can be used for monitoring environmental parameters in:

- Buildings
- Museums
- Laboratories



Description



Wire in the following way:

Color	Function
Green	Positive Power Supply
Grey	Power supply
White	Rh% output (0-1V 0-100%) (maximum load 1 KOhm)
Brown	Temperature output (-40 + 60 ° C) (maximum load 1 KOhm)
Shield	Negative analog output

Identification

Each thermohygrometer has an identification plate showing:

- Serial Number

Technical Features

	Humidity	Temperatour
Range	0....100 % rh	+50.....+100 °C
Outputs	0....1 V (-40/+60°C)	0....100% rh
Pre-ignition time	1.5 sec	1 sec
Supply voltage	5....24 Vdc	
Load	> 1 KOhm	
23 °C accuracy	± 1.5 % rh	±0.2 °C PT100 4 fili
Cable	3 metri, PUR	



Installation

Proceed in the following way:

Disassemble the cylindrical body of the sensor by loosening the fixing dowel;

Disassemble the fixing cylinder by loosening the two Phillips screws;

Fix the U-shaped bracket to the wall with the plug provided;

Reassemble the fixing cylinder with the screws and then the sensor body with the dowel (Don't exceed with fixing force to avoid the cut of the plastic body of the sensor).



Calculations & Formulas

Output and conversion of electrical values

rh % Output:

0.55 Volt -> 55% rh

Temperatour Output:

0.55 Volt -> $55 - 40 = 15\text{ }^{\circ}\text{C}$