

## RH-5U-R Room Humidity transmitter

### Features

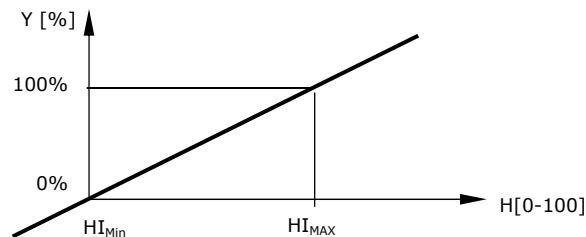
- Indoor Humidity measurement.
- Wide range of temperature probes
- 0...10V or 4...20mA measuring signals
- Compact size and modern design

### Applications

- Indoor humidity measurement for comfort control

### Humidity Transmitter

The transmitter measures the humidity by the honeywell humidity sensor HIH-3610. The transmitter analog output may be 0-10V or 4-20mA. And the transmitter include a noise filter.the power supply is large range VDC18V----VDC30V.The humidity transmitter measurement range is 5%-95%. linearity Signal output:



### Ordering

Ordering number:RH-5U-R or RH-5U-R-T

- 5 indicates the humidity transmitter accuracy is 5%; -3 indicates 3%, -2 indicates 2%.
- U indicates the humidity transmitter signal out is 4-20mA or 0-10V optional.
- T indicates the humidity transmitter integration with temperature signal out.

For example:RH-5U-R-T

The room humidity and temperature transmitter signal out is 4-20mA or 0-10V optional .

### Installation

Mount the humidity transmitter on a flat interior wall of the room to be controlled. Do avoid obstructions such as shelves, curtains and recesses. Do not place near heat sources, draft channels. Do not expose to direct sunlight.

- When installing the unit, fix the base plate first, connect the electrical connections then hook on the cover and secure it.
- The end of the conduit at the sensor must be sealed to prevent false measurements due to draughts through the conduit.
- Connect the wires according to the wiring diagram to the measuring circuit in the cover:
  - If only humidity, the transmitter need three terminal connections,DC24V,Ground and humidity signal out.
  - If humidity and temperature, the transmitter need four terminal connections, DC24V,Ground , humidity signal out and temperature signal out .
  - The connection signal cable should be shield wires.

### Technical Specification

Power supply	Option voltage	VDC18V---VDC30V
	Power Consumption	Max 2 VA
Signal out	signal	4-20mA or 0-10V
	Humidity accuracy	5%
	Humidity range	0%-100%
	Temperature accuracy	0.5°C
	Temperature range	0 – 50 °C
Sensing element	Capacitive Element: Range Accuracy	5%---95% 2%
Connection	Connection Terminals	2.5 mm <sup>2</sup>
Environment	Operation Climatic Conditions Temperature Humidity	To IEC 721-3-3 class 3 K5 -40...70°C <95% r.h.
	Transport & Storage Climatic Conditions Temperature Humidity Mechanical Conditions	To IEC 721-3-2 and IEC 721-3-1 class 3 K3 and class 1 K3 -40...80°C <95% r.h. class 2M2
Standards	<b>CE</b> conform according to EMC Standard 89/336/EEC EMEI Standard 73/23/EEC	EN 61 000-6-1/ EN 61 000-6-3
	Automatic electrical controls for household and similar use	EN 60 730 – 1
	Special requirement on temperature dependent controls	EN 60 730 – 2 - 9
	Pollution Class	Normal acc. To EN 60 730,RoHS compliant
	Degree of Protection	IP56 to EN 60 529
	Safety Class	III (IEC 60536)
Housing Materials	Cover & Mounting Plate	Fire proof ABS plastic
General	Dimensions [mm]	Cover: 42 x 112 x 88 (H x W x D) probe: ø 10 x 200 (Diameter x L)
	Weight (including package)	135g

### Wire diagram

<table border="1"> <tr> <td>24V</td> <td>G</td> <td>H</td> <td>T</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> </tr> </table>	24V	G	H	T					1	2	3	4	<p>Termenal connections:</p> <p>1---VDC24 power supply</p> <p>2---ground</p> <p>3---Humidity signal out 4-20mA or 0-10V optional</p> <p>4---Temperature signal out 4-20mA or 0-10V optional</p> <p>Note: if RH-5U-R, the 4 terminal connections no signal out. If RH-5U-R-T,the 4 terminal connections is temperature signal out</p>
24V	G	H	T										
1	2	3	4										
RH-5U-R or RH-5U-R-T													

### dimension [mm]

