

# AIR HUMIDITY MEASURING TECHNOLOGY

## Hygro-Thermo Transmitter compact

Part number: 1.1005.54.1xx

The data are output as electrical analogue signals The transmitters consist of a capacitive humidity element and a Pt 100 resistance thermometer. For outdoor installation we recommend the use of the weather- and thermal radiation shield.

Order no.: 1.1025.55 xxx



## Specification

Part number: 1.1005.54.1xx

### Temperature

Meas. element	Pt 100 acc. to DIN IEC 60751 1/3 class B
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### Rel. Humidity

Measuring range	0 ... 100 % rel. h.
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Accuracy	± 2% rel. h. ( @ 5 ... 95 % rel. h. and 10 ... 40 °C )
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Meas. element	Capacitive
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### General

Electr. connection	5 m cable
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Protection	IP 30 for sensors IP 65 for electronic
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Dimension	Ø 20 x 124 ( 180 ) mm
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Weight	0.45 kg
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## Versions

As per 1.1005.54.1xx, but:

Product number 1.1005.54.000

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**Temperature**

Measuring range	-30 ... +70 °C
Accuracy	±0,1 K (PT100)
Electr. output	PT100

**Rel. Humidity**

Electr. output	0 ... 1 V
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**General**

Power supply	6 ... 30 V DC
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**Product number 1.1005.54.160**
**Temperature**

Measuring range	-30 ... +70 °C
Accuracy	±0,2 K
Electr. output	0 ... 1 V

**Rel. Humidity**

Electr. output	0 ... 1 V
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**General**

Power supply	6 ... 30 V DC
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**Product number 1.1005.54.161**
**Temperature**

Measuring range	-30 ... +70 °C
Accuracy	±0,2 K
Electr. output	0 ... 10 V

**Rel. Humidity**

Electr. output	0 ... 10 V
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**General**

Power supply	15 ... 30 V DC
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**Product number 1.1005.54.173**
**Temperature**

Measuring range	-30 ... +70 °C
Accuracy	±0,2 K
Electr. output	0 ... 5 V

**Rel. Humidity**


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Electr. output	0 ... 5 V
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#### General

Power supply	10 ... 30 V DC
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#### Product number 1.1005.54.241

#### Temperature

Measuring range	-30 ... +70 °C
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Accuracy	±0,3 K
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Electr. output	4 ... 20 mA
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#### Rel. Humidity

Electr. output	4 ... 20 mA
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#### General

Power supply	12 ... 30 V DC
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#### Product number 1.1005.54.441

#### Temperature

Measuring range	-40 ... +60 °C
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Accuracy	±0,3 K
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Electr. output	4 ... 20 mA
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#### Rel. Humidity

Electr. output	4 ... 20 mA
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#### General

Power supply	12 ... 30 V DC
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#### Product number 1.1005.54.461

#### Temperature

Measuring range	-40 ... +60 °C
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Accuracy	±0,2 K
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Electr. output	0 ... 10 V
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#### Rel. Humidity

Electr. output	0 ... 10 V
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#### General

Power supply	15 ... 30 V DC
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## Accessories

Product	Product name	Brief description
	Teflonfilter with gauze ZE 20 1.1005.54.901	This hood is placed over the sensor and protects the measurement element from coarse dirt.
	Sinter Filter ZE 21 1.1005.54.902	This basket is placed over the sensor and protects the measurement element from high wind speed (>5 m/s) and increased dust. A necessity for sensors in use in exposed areas, eg. in marine climates, desert, mountains.
	Wall Holder 1.1005.54.903	for mounting the temperature ( 2.1280.xx.xxx ) or hygrothermo Sensor ( 1.1005..xx.xxx ) onto a wall, radiation- and precipitationprotected use (for ex. indoor)
		<b>General</b>
		Clamping range                      Ø 20 mm
		Mounting                                      plate with with drillings 3 x Ø 6,5 mm
		Material                                      plastic, grey flange
		Dimension                                      96 mm lang
		Weight                                              0.075 kg
	Weather and Thermal Radiation Shield, compact 1.1025.55.000	Protective case for the temperature and humidity sensors ( 2.1280.xx.xxx and 1.1005.54.xxx )sensor compact for outdoor installation without artificial ventilation.
		<b>Material</b>
		Laminations                                      plastic, white
		Mast holder                                      stainless stell
		<b>General</b>
		Mounting                                      at tube Ø 35 ... 50 mm
		Dimension                                      Ø 120 x 275 mm
		Weight                                              0.8 kg



Weather and Thermal Radiation Shield, compact  
1.1025.55.100

Protective case for the preceding temperature sensor compact for outdoor installation with artificial ventilation.

**Material**

Laminations	plastic, white
Mast holder	stainless stell

**General**

Power supply	12V DC, 2 W
Electr. connection	5 m cable
Mounting	at tube Ø 35 ... 50 mm
Dimension	Ø 120 x 275 mm
Weight	0.8 kg