

# HUMIPOINT

## Humidity / Temperature Hand-Helds

Hand-held measurement of relevant climatic data is becoming more and more important. Thermo-Hygrometers of the HUMIPOINT series set new standards because of the combination of the latest technology and design.

Excellent readability of the large and illuminated display, the simple thumbwheel operation and the robust case allow the use in tough industrial environments. Latest technology and the well proven E+E humidity sensor guarantee highest accuracy and long term stable measurements.

The HUMIPOINT measures relative humidity [% RH] and temperature [°C or °F] and calculates dew point temperature [°C or °F], absolute humidity [g/m<sup>3</sup>] and mixing ratio [g/kg or gr/lb].

HUMIPOINT10/20 Thermo-Hygrometers are available in a practical carrying case. The set contains a HUMIPOINT incl. an **factory certificate and a humidity calibration device with 5 ampoules calibration fluid (80% RH)**.

Thermo - hygrometer and laser pyrometer of the HUMIPOINT 05 IR series provide 3 operation modes:

- TH-mode:
  - Temperature / humidity measurement
  - In this mode the hand-held offers you all functions of the HUMIPOINT 05 series.
- IR-mode, infrared:
  - Contact-free surface temperature measurement with measurement position marking
- DP-mode:
  - Dew point temperature / surface temperature measurement
  - Dew point detection on walls



## Product Comparison HUMIPOINT Series

Functions	HUMIPOINT 05	HUMIPOINT 05 IR	HUMIPOINT 10	HUMIPOINT 20	Comment
measurement: - relative humidity and temperature - surface temperature	✓	✓	✓	✓	
calculation: - dew point temperature [°C or °F] - absolute humidity [g/m <sup>3</sup> ] - mixing ratio [g/kg or gr/lb]	✓	✓	✓	✓	
dew point detection on walls		✓			
alarm function		✓			
HOLD / MIN / MAX / AVG readout	✓	✓	✓	✓	
SI- / US- units selectable	✓	✓	✓	✓	
easy thumb-wheel operation	✓	✓	✓	✓	
1 point humidity and temperature calibration	✓	✓	✓	✓	
2 point humidity calibration			✓	✓	
illuminated display			✓	✓	
auto power off	✓	✓	✓	✓	
real time clock			✓	✓	
probe fixed	✓	✓	✓		
remote probe 1.5m (5ft)				✓	
HUMIPOINT 10/20 Set (carrying case incl. HUMIPOINT, humidity calibration device, 5 ampoules with calibration fluid (for 80% RH) and an E+E factory certificate)			✓	✓	optional
protection cover	✓	✓			optional

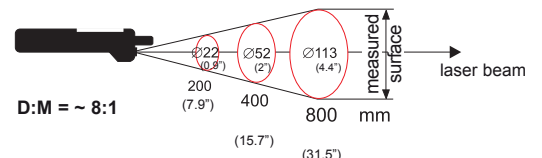
## Technical Data

		HUMIPOINT 05	HUMIPOINT 05 IR	HUMIPOINT 10/20
<b>Measuring values</b>				
Sensor type	relative humidity	HC101	HC101	HC101
	temperature	NTC	NTC	NTC
	surface temperature		Thermopile	
Measuring range	relative humidity	5...95% RH	5...95% RH	0...98% RH
	temperature	-20...50°C (-4...122°F)	-20...50°C (-4...122°F)	-20...50°C (-4...122°F)
	dew point at 20°C (68°F)	-15...19°C (5...66°F)		-20...19°C (-4...66°F)
	mixing ratio at 20°C (68°F)	1.18...14g/kg (8.26...98gr/lb)		0.78...14g/kg (5.46...98gr/lb)
	surface temperature		-20...60°C (-4...140°F)	
Accuracy	relative humidity	±2% RH	±2% RH	±2% RH
	temperature	±0.4°C (0...40°C) (±0.7°F at 32...104°F)	±0.4°C (0...40°C) (±0.7°F at 32...104°F)	±0.3°C (0...40°C) (±0.54°F at 32...104°F)
		±0.7°C (-20...50°C) (±1.3°F at -4...122°F)	±0.7°C (-20...50°C) (±1.3°F at -4...122°F)	±0.5°C (-20...50°C) (±0.9°F at -4...122°F)
	dew point at 20°C (68°F) <sup>1)</sup>	± (0.64...4.46°C) ± (1.15...8.03°F)		± (0.45...4.33°C) ± (0.81...7.79°F)
	mixing ratio at 20°C (68°F)	± (0.44...0.57g/kg) ± (3.08...3.99gr/lb)		± (0.29...0.4g/kg) ± (2.03...2.8gr/lb)
	surface temperature		±2°C (±3.6°F) (T <sub>obj</sub> > 0°C (32°F); T <sub>amb</sub> > 10°C (50°F))	
Resolution	relative humidity	0.1% RH	0.1% RH	0.1% RH
	temperature	0.1°C (0.18°F)	0.1°C (0.18°F)	0.1°C (0.18°F)
	surface temperature		0.1°C (0.18°F)	
<b>General</b>				
Supply voltage		9V battery	9V battery	4x 1.5V AA battery
Battery lifetime		typ. > 150h	max. 200h - TH mode 10h - IR/DP mode	typ. > 500h
Working temperature range		housing: 0...50°C (32...122°F)  probe: -20...50°C (-4...122°F)	housing: 0...50°C (32...122°F)  probe: -20...50°C (-4...122°F)	housing: 0...50°C (32...122°F)  probe: -20...50°C (-4...122°F)
Storage temperature range		-30...60°C (-22...140°F)	-30...60°C (-22...140°F)	-30...60°C (-22...140°F)
Display		LCD, 45x32mm (1.8x1.3")	LCD, 45x32mm (1.8x1.3")	LCD, 90x50mm (3.5x1.9") illuminated
Measuring optics <sup>2)</sup>			~ 8:1	
CE compatibility according		EN61000-6-2 EN50147-3	EN61000-6-2 EN50147-3	EN50081-2 EN50082-2 EN61000-4-2 EN61000-4-3 EN55011
Housing / protection class		ABS / IP40	ABS / IP40	ABS / IP40
Dimensions (HxWxD)		housing: 140 x 48 x 25mm (5.5.x1.9x1")	housing: 140 x 48 x 25mm (5.5.x1.9x1")	housing: 145 x 85 x 37mm (5.7x3.3x1.5")  HUMIPOINT 20: cable length: approx. 1.5m (4.9ft) 12mm
Probe diameter		12mm	12mm	
Weight		ca. 200g (0.5 lbs)	ca. 200g (0.5 lbs)	ca. 400g (1 lbs)

1) Depending on the humidity

2) Distance : Measured surface (D:M)

For accurate measurements, the target must be at least twice as big as the measured surface (red spot of the laser beam). The determined temperature is the average temperature of the measured surface.



## Order information

MODEL	ACCESSORIES
HUMIPOINT 05 (HUMIPOINT 05)	Metal grid filter for average pollutions (HA010106)
HUMIPOINT 05 IR (HUMIPOINT 05 IR)	Stainless steel sintered filter for strong pollutions (HA010103)
HUMIPOINT 10 (HUMIPOINT 10)	Protection cover for HUMIPOINT 05 and HUMIPOINT 05 IR (HA040903)
HUMIPOINT 20 (HUMIPOINT 20)	
HUMIPOINT 10 Set (HUMIPOINT 10-Set)	
HUMIPOINT 20 Set (HUMIPOINT 20-Set)	