

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/m³] 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 E+E 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

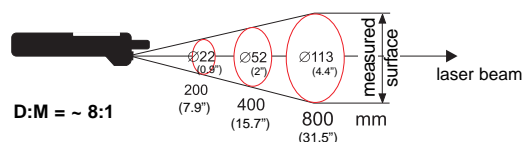
| Functions | HUMIPOINT 05 | HUMIPOINT 05 IR | HUMIPOINT 10 | HUMIPOINT 20 | Comment |
|---|--------------|-----------------|--------------|--------------|----------|
| measurement: - relative humidity and temperature - surface temperature | ✓ | ✓ | ✓ | ✓ | |
| calculation: - dew point temperature [°C or °F] - absolute humidity [g/m ³] - 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 |
|---|-----------------------------|--|---|--|
| Measuring values | | | | |
| 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) | ± (4.46...0.64°C) ± (8.03...1.15°F) | | ± (4.33...0.45°C) ± (7.79...0.81°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 _{obj} > 0°C (32°F); T _{amb} > 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) | |
| General | | | | |
| 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 ¹⁾ | | | ~ 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 (5.5x1.9x1") | housing: 140 x 48 x 25mm (5.5x1.9x1") | housing: 145 x 85 x 37mm (5.7x3.3x1.5") HUMIPOINT 20: cable length: approx. 1.5m (4.9ft) |
| Weight | | ca. 200g (0.5 lbs) | ca. 200g (0.5 lbs) | ca. 400g (1 lbs) |

1) 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) | | |