

### **PRODUCT DESCRIPTION**

**DigiH/E-xx probe with the l<sup>2</sup>C output** is designed to measure air temperature and relative humidity in chemically non-aggressive environments. It is designed for connection to inputs of devices **COMET** series **Uxxxx**, **Wx7xx** and **Wx8xx**. The probe is interchangeable (calibration constants are saved in the probe).

**The probes are supplied** in several variants depending on the cable length (last digit of probe name indicates the cable length) and they are suitable for stationary or portable applications.

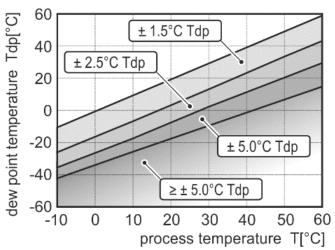
## **TECHNICAL PARAMETERS**

- Temperature
  Range:
  - Accuracy: Response time:
- Relative humidity
  - Range: Accuracy of the humidity sensor: Hysteresis: Linearity error: Response time:
- -10 to +60 °C ± 0.4 °C t90 < 3 min (temperature step 20 °C, air flow 1 m/s) 0 to 100% RH (without condensation)
- ±1.8 %RH in the range of 0 to 90 %RH at 23 °C
  - < ±1 %RH
  - < ±1 %RH

t90 < 10 s (humidity step 60% RH, constant temperature)

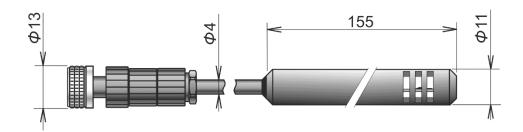
- Calculated humidity quantities
  - 1/ Dew point temperature Range: Accuracy:

-60 to +60 °C



	2/ Absolute humidity Range: Accuracy:	0 to 130 g/m³ ±1.5 g/m³ for ambient temperature T < 25 ℃		
	3/ Specific humidity Range: Accuracy:	0 to 130 g/kg ±2 g/kg for ambient temperature T < 35 °C and atmospheric pressure of 1013 hPa		
	4/ Mixing ratio Range: Accuracy:	0 to 150 g/kg ±2 g/kg for ambient temperature T < 35 °C and atmospheric pressure of 1013 hPa		
	5/ Specific enthalpy Range: Accuracy:	0 to 450 kJ/kg ±5 kJ/kg for ambient temperature T < 35 °C and atmospheric pressure of 1013 hPa		
•	Operating temperature range: Operating relative humidity range:	-10 to +60 °C 0 to 100% RH (without condensation)		
•	Power: Current consumption:	2.7 to 5.5 V 50 μA @ 5 V		
•	Recommended calibration interval:	1 year		
•	Storage temperature: Storage relative humidity:	-10 to +60 °C 0 to 100% RH (without condensation)		
•	Electromagnetic compatibility:	EN 61326-1 Emission: Immunity:		
•	Protection: Working position: Cable length: Weight (with cable): Material:	IP30 without restriction 1m, 2m, 5m 55g / 1m, 80g / 2m, 155g / 5m ABS		

#### DIMENSIONS



#### INSTALLATION

The probe place to area of measurement and connect it to the device.

The probe does not require any special service or maintenance. We recommend you periodically to verify the accuracy of measurement by calibration.

## **TECHNICAL SUPPORT AND SERVICE**

Technical support and service is provided by distributor. For contact see warranty certificate. If needed, you can also use the discussion forum at <a href="http://www.forum.cometsystem.cz/">http://www.forum.cometsystem.cz/</a>.

#### WARNING



• It is not recommended to use the probe for long time under condensation conditions.

It is not recommended to use the probe for long time in a dusty environment.

- Don't connect or disconnect the probe cable while the device is turned on incorrect values could be recorded to the device memory.
- The probe contains electronic components, it needs to liquidate them according to legal requirements.

# Warranty certificate

This product has three years warranty since the date of sale to the end user. Defects due defective materials, defective manufacturing or design will be repaired free of charge by the manufacturer. The location of repair is at manufacturer's. No warranty is given to products operated in conditions not matching the conditions specified by the manufacturer in instruction manual. Also no warranty is given to products which were modified by the user, products with broken seal, products which were connected to power or input signals not matching the technical specification (Instruction manual). No warranty is given to consumables, e.g. batteries, fuses and eventual changes of parameters created by wear (influence of aggressive environment etc.).

Serial number:

Sale date:

DISTRIBUTOR