



## Dewchecker 0.2

### Features:

The dew point measurement instrument Dewchecker 0.1 is a portable device used to measure the dew point of gases. Per definition, the dew point is the temperature of a body marking the start of condensation of water vapor on its surface respectively the balance adjusted between condensing and evaporating water.

The gas sampling occurs via a gas sampling fitting furnished in the hot zone to the furnace wall with a ceramic inner tube.

Due to a steel tube length of at least 150 mm, outside the furnace wall, the sample gas is cooled quickly and guided at a gas dew point temperature below room temperature through a dense gas hose to the gas inlet port of the device.

The Dewchecker 0.1 is equipped with a capacitive on-line sensor used accordingly for continuous measurements. The measurement result can be forwarded by an universal analog output or a digital RS-485 / RS-422 interface.

### Advantages:

- Easy handling
- High measuring certainty and accuracy
- Insensitivity to gases containing dust and corrosive gases
- Robust construction

### Technical Data

#### Design:

Portable steel housing

#### Dimensions:

330x310x320 mm (WxHxD)

#### Weight:

Approx. 17 kg

#### Degree of Protection:

Housing IP 20 according to IEC 60529

Front panel IP 40 according to IEC 60529

#### Ambient Temperature:

10...40°C during operation

0...50°C during storage

#### Power Supply:

230 or 115 VAC ±10% 50...60 Hz (please specify)

**Measuring Gas Connectors** (hose connectors):

Input: Tube outer diameter 5...6 mm  
Output: Tube outer diameter 5...6 mm  
Built-in measuring pump

**Measuring Gas Pressure:**

±50 mbar

**Measuring Range:**

-80...+20°C (indirect measurement with capacitive sensor)

**Measuring Accuracy:**

±2°C (indirect measurement with capacitive sensor)

**Resolution in steps of:**

0,1°C

**Maintenance Interval:**

Every year

**Analog Output:**

-80...+20°C, 0...20 mA or 4...20 mA or 0...10 V  
galvanic isolated, 4...20 mA is the predefined setting

**Pin Assignment:**

Current output: Pin 6, GND = Pin 2  
Voltage output: Pin 7, GND = Pin 3

**Digital Output:**

Either RS-485 / RS-422 four-wire or RS-485 two-wire (please specify)  
Isolated interface with Modbus-protocol

**Pin Assignment:**

Four-wire: GND = Pin 1, TxA = 9, TxB = 5, RxA = 8, RxB = 4  
Two-wire: GND = Pin 1, A = 9, B = 5

## Accessories

Power cord	product code	011-0520
Connection pipe yellow 8 mm with adapter approx. 3 m	product code	015-7103
Connection pipe yellow 6 mm approx. 3 m	product code	015-7102
In-line filter	product code	24382
Filter material	product code	24221
Spare fuse (230V)	product code	027-0005
Spare fuse (115V)	product code	027-0011
Spare sinter filter insert	product code	24180