



THM88MAX

Industrial dew point transmitter with display



| Features |

- Large digital display, 330° rotatable for convenient monitoring
- Real-time display, on-screen buttons to adjust dew point offset
- A new generation of sensors, faster response to low humidity
- Temperature compensation mechanism to reduce the influence of ambient temperature on dew point value

| Applications |

Compressed air system / Air separation equipment / Freezer / Adsorption machine / Plastic dryer /
Industrial drying process / Paper / Chemical process monitoring

Specifications

Input

Input sensor	Capacitive humidity sensor & Pt100
Operating range of dew point	-40 ... +20 dp°C

Output

Max. scaling range	Dew point : -40 ... +20 dp°C
Dew point switch to another(UI)	Frost point : -40 ... 0 fp°C
	Absolute humid.(Volume) : 0 ... 50000 ppm/v
	Absolute humid.(Weight) : 0 ... 50000 ppm/w
Output signal	Standard 4 ... 20 mA+RS-485 / 0 ... 10 V+RS-485 on request
Signal connection	3-wire
Load resistance	Current output 500 Ω Voltage output 100 K Ω
Output calibration	Software
(ZERO & SPAN)adjustment range	
Response time t90(Temp. at+25°C)	<20 sec

Accuracy

Accuracy	± 1 dp°C (at -20 ... +20 dp°C)
	± 1.5 dp°C(at -40 ... +20 dp°C)

Electrical

Power supply	DC 24 V $\pm 10\%$
Current consumption	DC 24 V / 50 mA
Electrical connection	M12 connector

Environmental

Measuring medium	Air
Operating Temp.(With body and display)	0 ... +60°C
Operating Humid.(With body and display)	0 ... 95%RH(Non-condensing)
Probe operating Temp.	-40 ... +60°C
Storage Temp.	-20 ... +60°C

Installation

Duct type	1/2"G, 1/2"PT
	1/2"PT movable thread

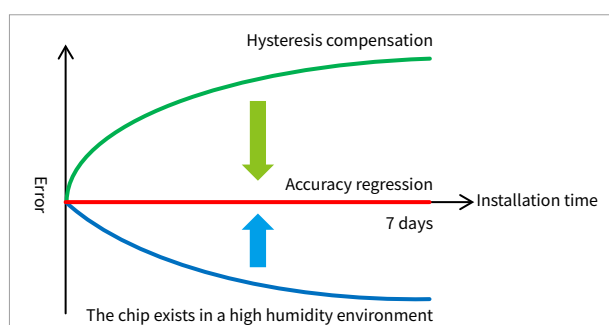
Protection

IP rating	Housing IP65
	Filter : IP20
Electrical protection	■ Reverse polarity
	■ Over-voltage
	■ Short-circuit

Material

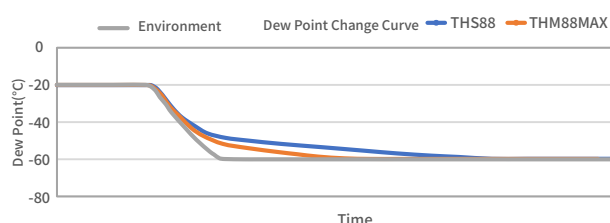
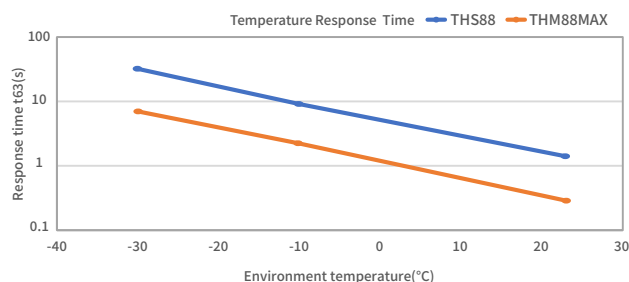
Cover	PC
Housing	SUS 304
Probe	Sintered SUS316
Weight	168 g

Hysteresis Compensation



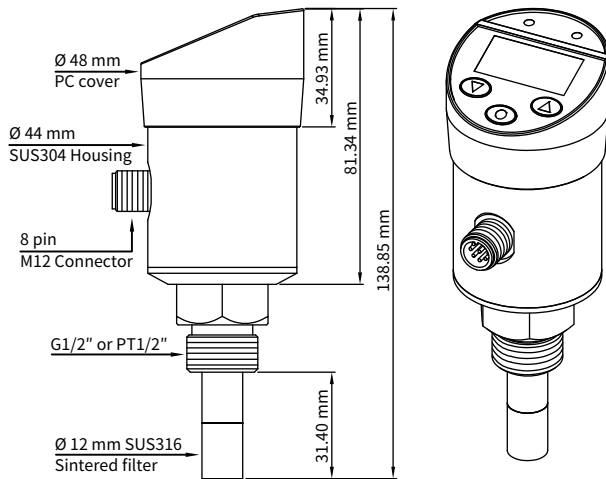
In the application of low dew point temperature, continuous drying of the wafer may cause the measurement value such as the blue curve to cause the accuracy of the initial use to not meet the product standard. The firmware is relieved by the compensation (hysteresis compensation) of the green curve so that the product accuracy standard can be reached at the initial stage of installation.

Response Characteristic

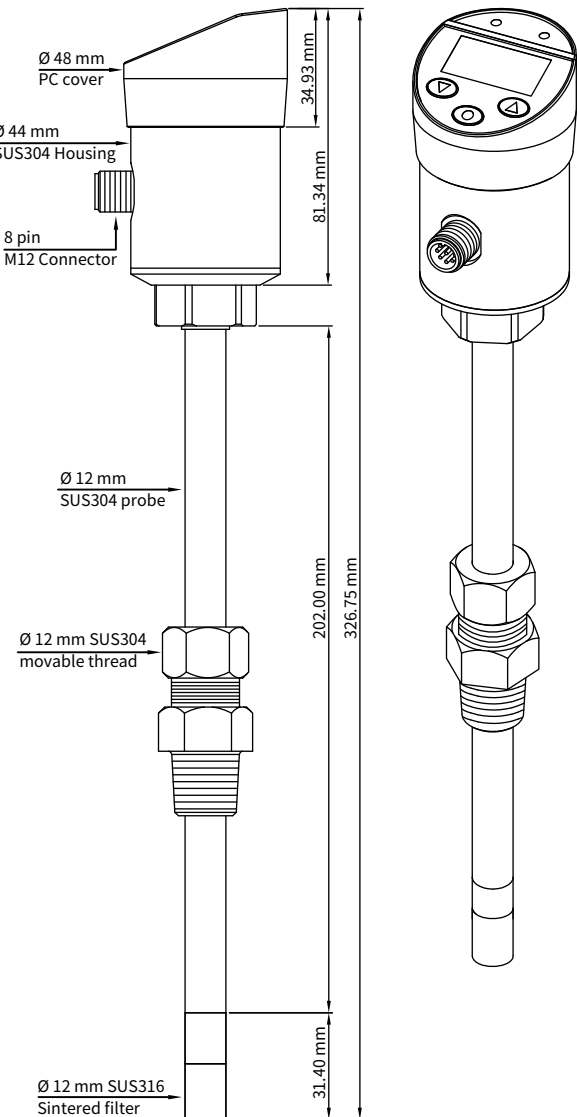


| Dimension |

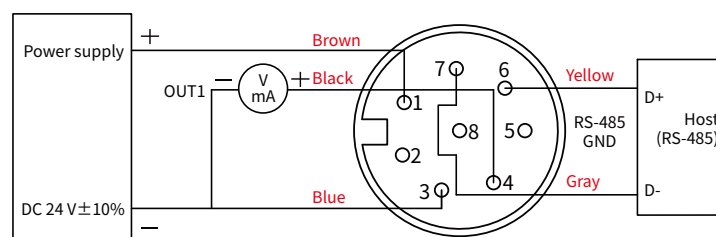
Standard type



Long probe type



| Diagram |



M12 connector

| Ordering Guide |

THM88MAX	—	Dew point measuring range B A : -20 ... +20°C B : -40 ... +20°C	Connector 1 1 : 1/2"PT 2 : 1/2"G 3 : 1/2"PT movable thread (Long probe type only)	—	Optional W L : Long probe type W : Customized
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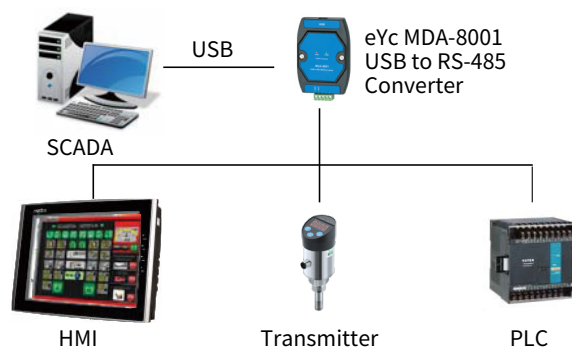
| Dew Point Automatic Inspection System |



■ System Facility

- Humidity generator
- Dew point mirror
- Laboratory level facility to produce products, and automatic QC inspection sheet printing and factory report

| USB to Isolated RS-485 Application |



■ Require Device

- PC / RS-485 to USB Converter / Power supply / UI software

| Additional Option Test Report |

For more detailed information please contact us.

■ ILAC / TAF

YUDEN-TECH CO.,LTD. Calibration Laboratory - (ILAC / TAF) Test report.

(TAF accreditation : 3032, complying with ISO / IEC 17025) TAF has mutual recognition arrangement with ILAC MRA

Project	Measurand level or range
Dew point transmitter	$\geq -80 \text{ dp}^{\circ}\text{C} \dots \leq 60 \text{ dp}^{\circ}\text{C}$

■ ISO 9001

Project	Measurand level or range
Dew point	$\geq -95 \text{ dp}^{\circ}\text{C} \dots \leq 60 \text{ dp}^{\circ}\text{C}$