



THS88 High Pressure Dew Point Transmitter



Application

〈 Feature 〉

- High accuracy and long-term stability.
- Capable of temperature compensation and linear adjustment.
- Industry sensor with non- cond. Bearable pressure : 16 bar
- Analogue output : 0-1V/0-5V/1-5V/0-10V/2-10V/0-20mA/4-20mA
- Standard MODBUS RTU protocol, RS-485 communication interface
- More size of connector for different environment to be easily installed.
- High pressure, low humidity. Dew point measuring range : -100~+60 dp °C
- Free programmable software which can adjust dew point range and provide more physical quantities, dew point, frostpoint, absolute humidity and so on to choose

〈 Application Field 〉

- Compressed air system / freezer / adsorption machine
- Plastic Dryer / industrial drying process
- Paper / Chemical Process Monitoring

Specification

Input

Input type	Capacitive Humidity Sensor & PT 100 Ω
Working range of dew point	-60~+60 dp °C

Output

Max. scaling range	dew point : -100~+60 dp °C
Dew point switch to another physical quantity range	frost point : -60~0 fp °C ; Absolute humidity(volume) 0~50000 ppm/v Absolute humidity(weight) 0~50000 ppm/w
Output signal	standard RS-485 & 1 analogue output 0~20mA/4~20mA/0~1VDC/0~5VDC/0~10VDC
Signal connection	3-wire
Modbus	standard RS-485 & 1 analogue output
Linear accuracy	±2 dp °C (at +25 °C) ± (0.02%F.S/°C)
(working range of dew point : -60~+60 dp °C)	
Load resistance	current output : max. 500Ω / voltage output : min. 10KΩ
Output calibration(ZERO & SPAN) adjustment range	software
Response time t90 (temp. at +25 °C)	< 20S

Environment

Media measured	air
Working temp. for housing	-40~+80 °C
Working humidity for housing	0~95 RH % (non-cond.)
Working temp. for probe	-70~+80°C
Storage temperature	-25 ~ +60 °C
Bearable pressure	16 bar

Electrical

Power supply	8~35VDC & 10~30VAC
Current consumption	DC24V, 50mA
Electrical connection	M12 connector

Installation

Installation	metal conector
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Protection

Protect degree	body IP : 65 (probe : IP 20) ◎Polarity protection ◎over-voltage ◎short circuit
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Material

Housing	S.S. (SUS304)
Probe	S.S. (SUS304) / SUS sintered filter (SUS316)
Weight	233g

Factory setting

Measuring range of dew point : -100~+20°C ; Output : 4~20mA & standard RS-485

Ordering Guide

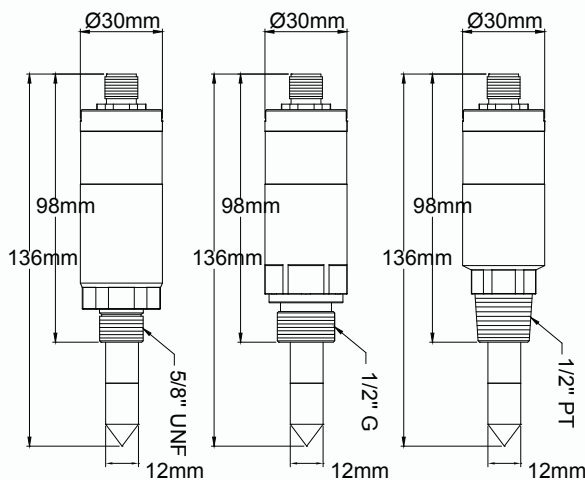
Ordering code ---> **THS 88 - C 1**

connector

【Ordering item】

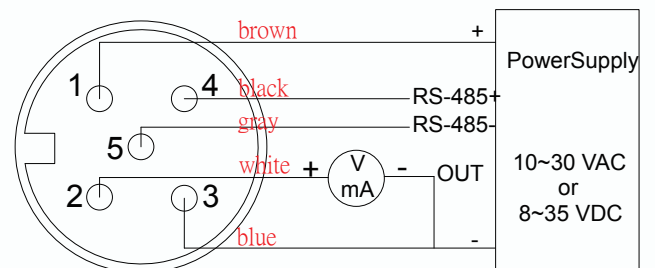
connector	code
1/2" PT	1
1/2" G	2
5/8" UNF	3

Dimension




※ standard – PVC-5PIN 2M waterproof cable

Diagram

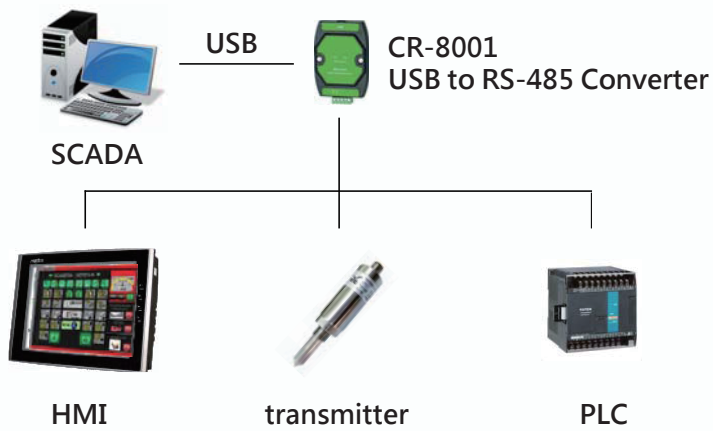


M12 connector

Fitting List

Product	Order No. / Name	Statement	Feature
	M12-F5N-200 M12 Waterproof Length : 2M	5 PIN female Material : oil-proof PVC OD : 22AWG(0.08mmx60)X5C	working voltage : 125V AC/DC working current : 4A woring temp. : -20°C~+85°C waterproof degree : IP67 wire of max. temp. : 105°C

USB to Isolated RS485 Application



※ Require Device

1. PC
2. RS-485 to USB Converter
3. power supply
4. THS88 UI software