



## 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 : 16BAR
- 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°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 】

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

## Specification

### Input

Input type	Capacitive Humidity Sensor & PT 100 $\Omega$
Working range of dew point	-60~+60°C

### Output

Max. scaling range	dew point : -100~+60°C
Dew point switch to another physical quantity range	frost point : -60~0°C ; Absolute humidity(volume) 0~50000ppm/v Absolute humidity(weight) 0~50000ppm/w
Output signal	standard RS-485 & 1 analogue output 0~20mA / 4~20 mA / 0~1VDC / 0~5VDC / 0~10VDC
Signal connection	3-wire
Modbus	standard RS-485 & 1 analogue output
Linear accuracy	$\pm 2^\circ\text{C}$ (at +25°C) $\pm (0.02\%F.S/^\circ\text{C})$ (working range of dew point : -60~+60°C)
Load resistance	current output : max. 500 $\Omega$ / voltage output : min. 10K $\Omega$
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 % (non-cond.)
Working temp. for probe	-70~+80°C
Storage temperature	-25 ~ +60 °C
Bearable pressure	16bar

### Electrical

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

### Installation

Installation	metal connector
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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

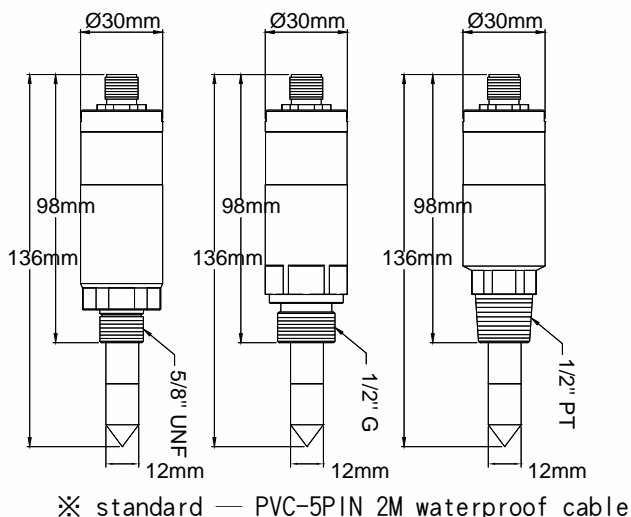
Ordering code-----> **THS88 - C 1**  
connector

### 【Ordering item】

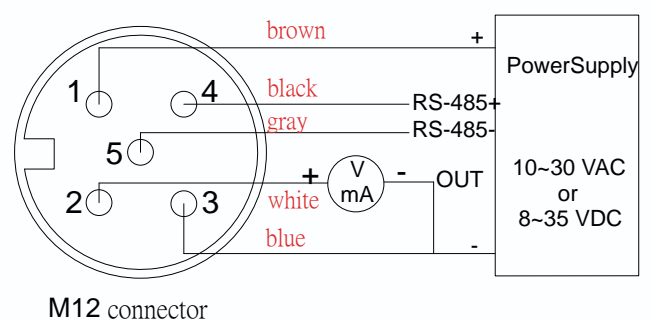
#### connector code

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


## Dimension



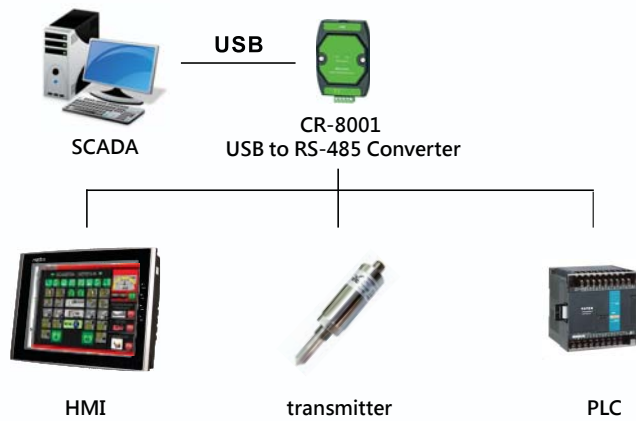
## Connector



## 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 working 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