



THS17

Temp. &amp; Humidity Transmitter ( Digital / Analog )

Temp &amp; Humid.-THS17

[www.eyc-tech.com](http://www.eyc-tech.com)

## | Features |

- Real-Time data of temperature & humidity
- PC fire-proof class plastic and SUS304 metal housing
- Economic price, high accuracy, nicer long-term stability
- MEMS semiconductor sensor
- Anti-condensation protection
- Digital : RS-485 ; Analog : 4 ... 20 mA or 0 ... 10 V
- Compact size and elegant outlook and easy to install

## | Applications |

Monitoring for HVAC process / Air conditioning / Environmental ventilation control / Building / Factory / Clean room / Laboratory / Storeroom / Crisper / Agriculture / Food industry / Machinery / Equipment

## | Specification |

### Input

Temperature	MEMS
Humidity	MEMS

### Measuring range

Temperature	0°C ... +50°C
Humidity	0 ... +100%RH (Non-condensing)

\*The measurement range is defined at the standard condition(1013 mbar, 25°C).

### Output

Output	4 ... 20 mA ; 0 ... 10 V ; RS-485
Signal connection	2-wire ; 3-wire
Warm-up time	< 2 min. stable time 20 mins.
Response time	t63 (15 ... 45°C/33 ... 75%RH) ≤ 10 sec
Sampling time	About 3 sec
Temperature influence	Max. -0.15%RH/°C (0°C ... 80°C)

### Accuracy (at +25°C)

Temperature	±0.5°C (Suggest range : 10°C ... 50°C)
Humidity (30 ... 80%RH)	Current output : ±3.0%RH
	Voltage output : ±2.0%RH
	Digital output : ±2.0%RH
Hysteresis error	±1.0%RH
Temp. influence	±0.15%RH/°C

### Electrical

Power supply	DC 10 ... 28 V (2-wire) / DC 19 ... 28 V (3-wire)
Current consumption	Max. 45 mA (2-wire) / DC : Max. 6 mA (3-wire)
Electrical connection	PVC cable 0.32 mm <sup>2</sup> x 4C

### Environmental

Medium	Air
Operating Temp.	+0°C ... +50°C
Operating Humid.	0 ... 100%RH (Non-condensing)
Storage temperature	-20°C ... +60°C

### Installation

Installation	Flange ( PVC / Metal )
--------------	------------------------

### Protection

IP rating	IP24 ( Sensor ) ; IP 65 ( Body )
Electrical protection	■ Polarity protection
	■ Over-voltage
	■ Short-circuit

### Certification

Certification	CE
---------------	----

### Material

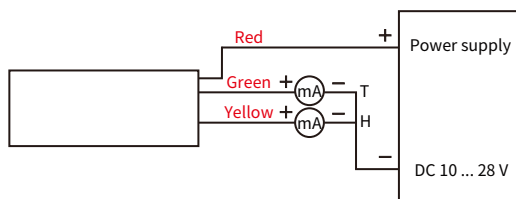
Housing	PC fire-proof ( UL94V-2 ) ( Plastic )
	SUS304 ( Metal )
Cable	PVC
Accessory	Plastic flange / Metal flange

### Weight

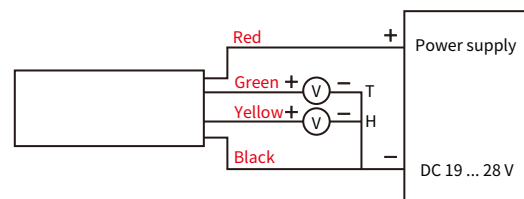
Plastic ( with cable )	105 g
Metal ( with cable )	146 g

## | Diagram |

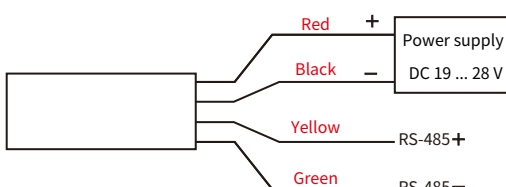
### ■ Plastic probe (2-wire)



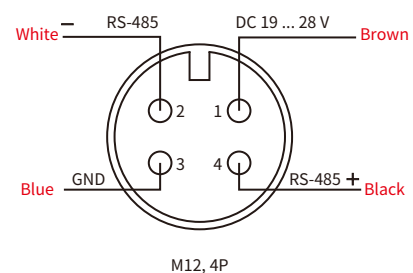
### ■ Plastic probe (3-wire)



### ■ Plastic probe (RS-485)



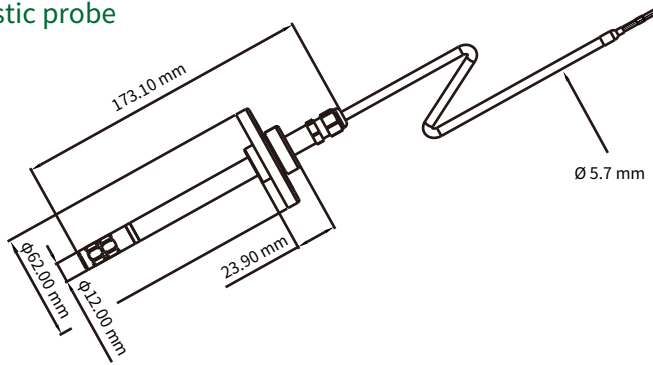
### ■ Metal probe (RS-485)



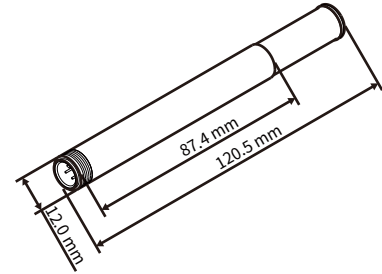
\*Please make sure the product and the device which connect with RS-485 are on common ground, avoid damaged product.

## | Dimension |

### ■ Plastic probe

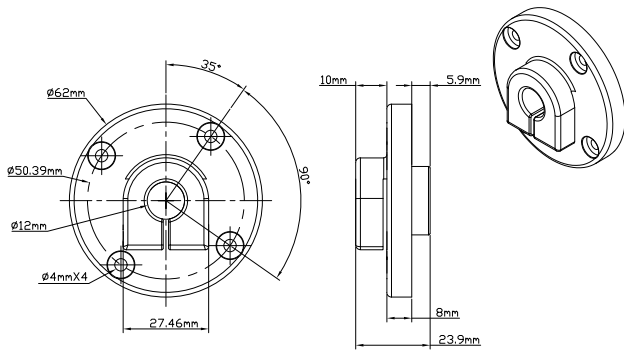


### ■ Metal probe

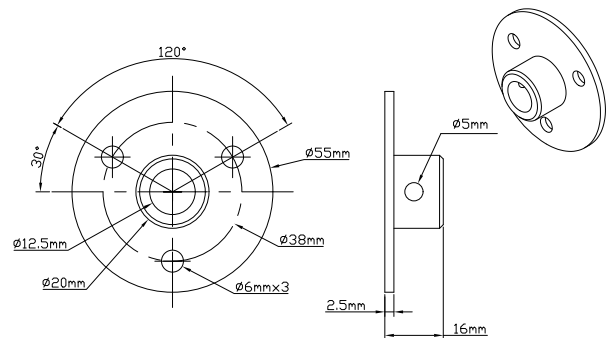


## | Accessory |

### ■ 8203104015 Plastic flange



### ■ 4415000022 Metal flange



## | Ordering Guide |

NO.	Product ordering number	Specification
1	THS17-AP11-3000-2	4 ... 20 mA / DC 10 ... 28 DC (2-wire) / 0 ... +50°C / 0 ... 100%RH / Plastic probe / 2m cable
2	THS17-AP62-3000-2	0 ... 10 V / DC 19 ... 28 V (3-wire) / 0 ... 50°C / 0 ... 100%RH / Plastic probe / 2m cable
3	THS17-APX2-XXXX-2	RS-485 / DC 19 ... 28 V (3-wire) / 0 ... 50°C / 0 ... 100%RH / Plastic probe / 2m cable
4	THS17-AMX2-XXXX-2	RS-485 / DC 19 ... 28 V (3-wire) / 0 ... 50°C / 0 ... 100%RH / Metal probe / 2m cable

## | 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
Resistance thermometer	-40°C ... +300°C
Thermocouple thermometer	-20°C ... +300°C

Project	Measurand level or range
Hygrometer	Temperature : 0°C ... 69.5°C
	Humidity : 10% ... 95%

### ■ ISO 9001

Project	Measurand level or range
RTD / Thermocouple	Resistance thermometer : -40°C ... +300°C
	Thermocouple thermometer : -20°C ... +300°C

Project	Measurand level or range
Temperature and Humidity	Temperature : 0°C ... 200°C
	Humidity : 0.1% ... 99.8%