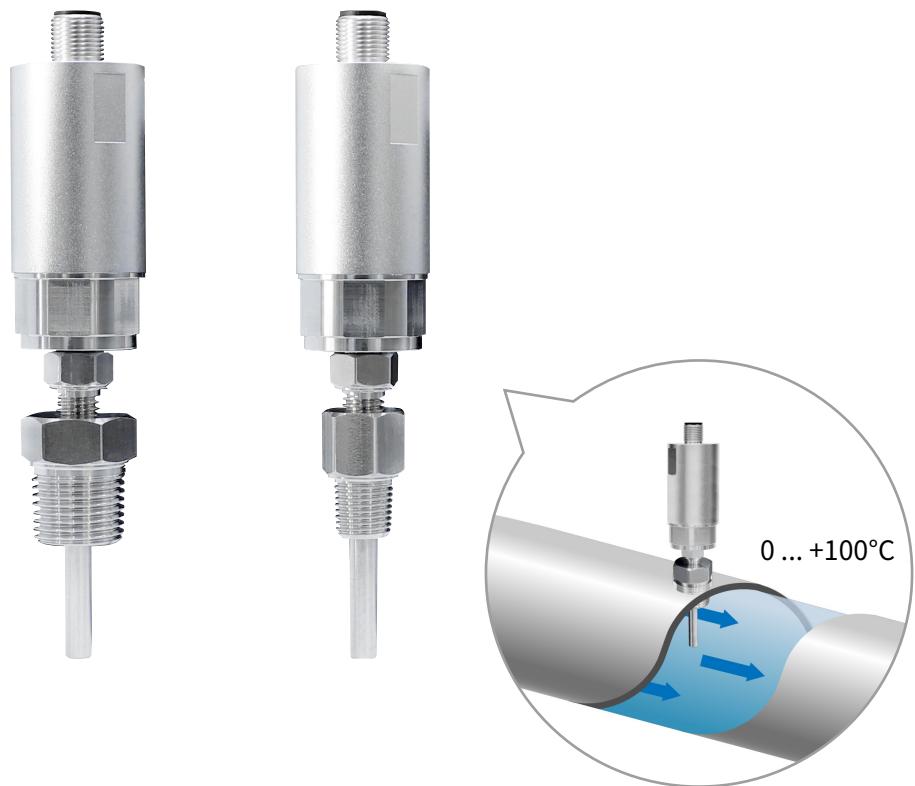




TP05

# Temperature Transmitter

Temperature-TP05

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

## | Features |

- Rugged aluminum alloy housing for harsh environments
- Temperature range configurable via RS-485
- RS-485 configuration software enables setting of measurement range, analog output, and device address
- Built-in data logging supports up to 65,535 records with graphical analysis
- Measures temperature of various media, including air and liquid

## | Applications |

Semiconductor / Electronics / Chemical / Pharmaceutical / Steel industry / Biotechnology / Industrial process monitoring / Air conditioning / Cleanroom / Laboratory / Weather station / Hospital / Buildings / Dryers / Factories / Storage rooms / Environmental ventilation control / Environmental test chambers / Greenhouses

## | Specifications |

### Input

Sensor type Pt 100 Class A

Measuring range -40 ... +200°C

### Output

Output 4 ... 20 mA / RS-485

Load resistance Current output :  $\leq 500 \Omega$

Response time (at +25°C)  $t_{90} < 3$  sec

Filter response 0 ... 100 adjustable

Sampling time 1 cycle/sec

### Accuracy (at +25 °C)

Accuracy  $\pm 0.1^\circ\text{C}$

Temperature drift  $< \pm 0.02\%$  F.S. / °C

### Communication

Comm. Interface & Protocol RS-485 Modbus RTU

RS-485 Baud Rate 9600, 19200, 38400, 57600, 115200 bps

### Electrical

Power supply DC 24 V  $\pm 10\%$

Current consumption 24 V : 40 mA

Electrical connection M12 5P connector

### Environmental

Medium Air / liquid

Operating Temp. (Housing) -20 ... +60°C

Operating Humid. (Housing) 0 ... 90% (Non-condensing)

Storage temperature -25 ... +60°C

Probe pressure resistance 2 bar

### Installation

Installation 1/4"PT or 1/2"PT movable thread

### Certification

Certification CE

### Protection

IP rating IP65 (Housing)

Electrical protection ■ Reverse polarity ■ Over-voltage

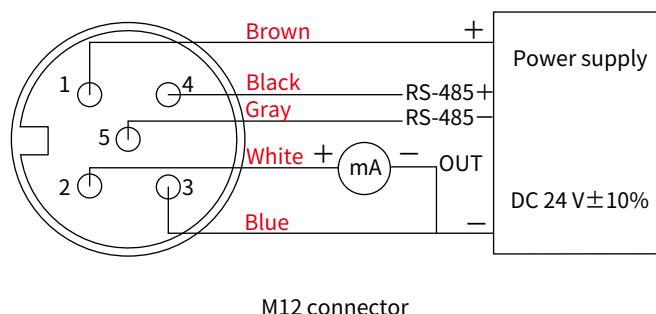
### Material

Probe SUS304

Housing Aluminum alloy

Weight About 180g

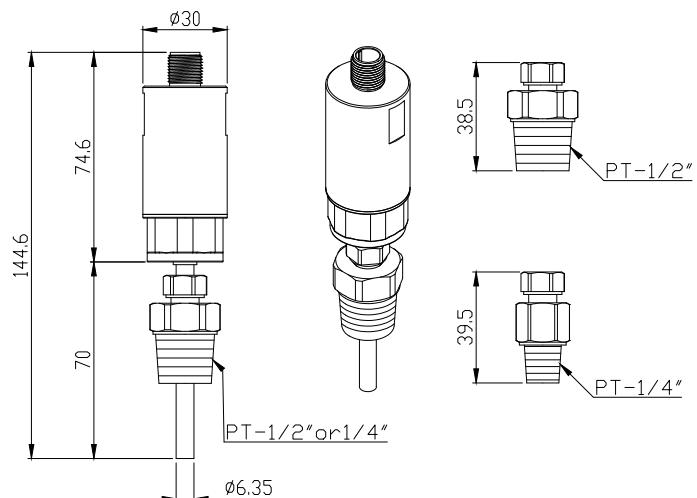
## | Diagram |



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

## | Dimension |

Unit : mm



## | Ordering Guide |

Product ordering number	Product Specifications
TP05-A1	I/P : Pt100Ω Class A, O/P : 0... 100°C to 4... 20 mA + RS-485, w/o outside thread, Probe : 70 mm (Option : connection with movable thread)

\*Recommended Optional Accessories

8100140016 : 1/4" PT Movable Male Thread, SUS304

8100140017 : 1/2" PT Movable Male Thread, SUS304

T-6.4D(F)x4FPF(M)x304 : 1/2G" Movable Male Thread, SUS304

## | 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

### ■ ISO 9001

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