THS17
Temperature and humidity transmitter (Digital / Analog)

Introduction

eYc THS17, Digital Temp. & Humidity Transmitter,which is probe type to monitor Temp. and humidity 【2 in 1】, provides plastic or metal case. Embedded semiconductor MEMS sensor that is the reason of THS17 has nicer long-term stability of measuring and react quickly feature, compact size easy to install. Also you can choose output type , 4 ... 20mA (2-wire), 0 ... 10 V(3-wire) or RS-485.

Feature

- 【2-in-1】Real-Time data of temperature & humidity
- 【2-kind housing】PC fire-proof class plastic and SUS304 metal housing
- 【High C/P ratio】Economic price, high accuracy, nicer long-term stability
- 【MEMS】Semiconductor sensor
- 【Sensor protected】Anti-condensation protection
- 【Output Type】Digital : RS-485 ; Analog : 4 ... 20 mA or 0 ... 10 V.
- 【Install quickly】Compact size and elegant outlook and easy to install

Applications

- Monitoring for HVAC process / Air conditioning / Environmental ventilation control
- Environmental monitoring for building / Factory / Clean room / Laboratory
- Monitoring for storeroom / Crisper / Agriculture / Food industry
- Temperature and humidity measuring in machinery or equipment

Specification

Input

Temperature	MEMS
Humidity	MEMS

Measuring Range

Temperature	+ 0 ... + 50 °C
Humidity	+ 0 ... + 100 °C (non-cond.)

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 to 75 % RH) ≦ 10 secs.

Sampling Time

about 3 secs.

Temperature Influence

max. - 0.15 %RH / °C (0 ... 80 °C)

Accuracy (at + 25 °C)

Temperature	± 0.5 °C(Suggest range : 10 ... 50 °C)
Humidity	± 5 %RH (30 ... 80 %RH)

(May vary according to actual environmental conditions)

Environment

Media Measured	Ambient
Working Environment	+ 0 ... + 50 °C / 0 ... 100 %RH (non-cond.)
Storage Temperature	-20 ... + 60 °C

Electric

Power Supply	10 ... 28VDC(2-Wire) ; 19 ...28VDC(3-Wire)
Current Consumption	2-Wire DC : max. 45mA
	3-Wire DC : max. 6mA
Electric Connection	PVC Cable 0.32 mm^2 x 4C

Installation

Installation	Flange (PVC / Metal)

Protection

Protection Rating	IP 24 (Sensor) ; IP 65 (Housing)
Electric Protection	◎Polarity protection ◎Over-voltage
	◎Short-circuit

Certification

CE	Emission :
	EN 61326-1:2013
	CISPR11:2015 Group 1 Class B
	Immunity :
	EN 61326-1:2013
	IEC 61000-4-2:2008
	IEC 61000-4-3:2006+A1:2007+A2:2010
	IEC 61000-4-8:2009

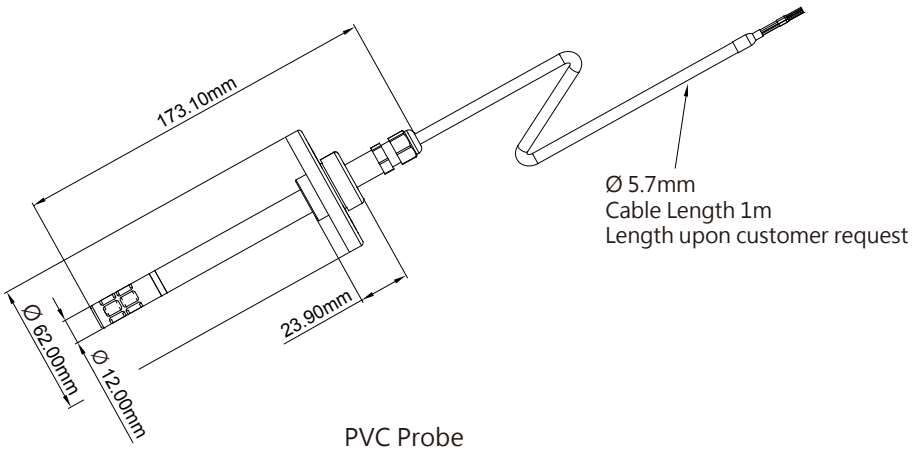
Material

Housing	Plastic : PC fire-proof class (PC-110)
	(UL94V-2) ; Metal : SUS304
Cable	PVC
Optional Accessory	Metal fitting Thread / Metal flange

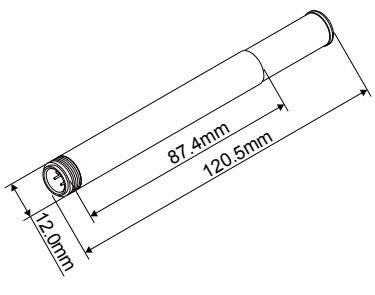
Weight

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

Dimension



PVC Probe

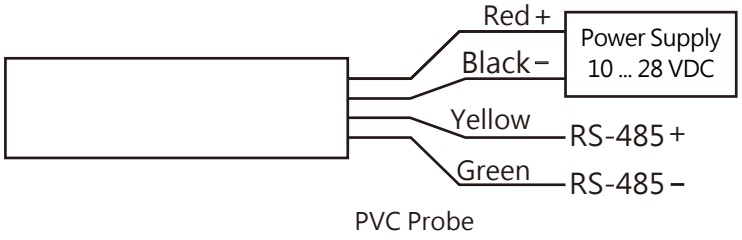


Metal Probe

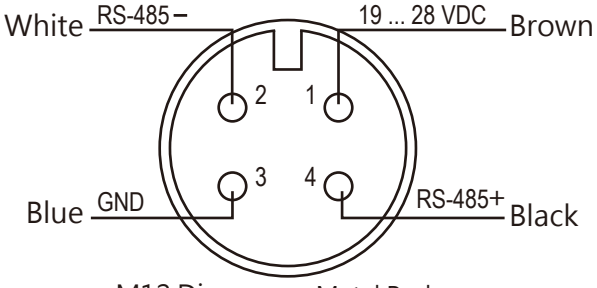
Ordering Guide

Item	THS	17	–	H	M6	2	–	30	00	–	N
Installation	Probe Type	17									
Function	Temperature / Humidity output Temperature output Humidity output		– – –	A T H							
Output	RS-485 (Plastic probe) RS-485 (Metal probe + M12 plug) 4 ... 20 mA (2-wire) Plastic probe 0 ... 10 V (3-wire) Plastic probe			– – – –	PX MX P1 P6						
Power Supply	10 ... 28 VDC (2-Wire) 19 ... 28 VDC (3-Wire)				– –	1 2					
Temperature	+ 0 ... + 50 °C Customize None						– – –	30 YY XX			
Humidity	0 ... 100 %RH None							– –	00 XX		
Options	2 m wire Other None									– – –	2 W N

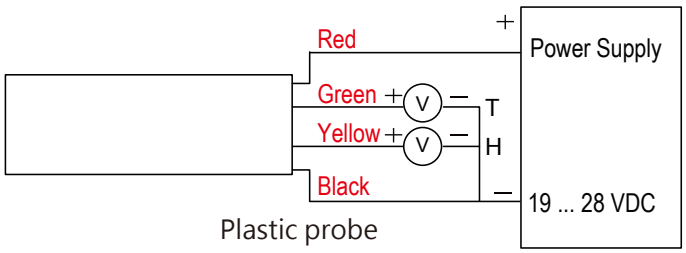
Diagram



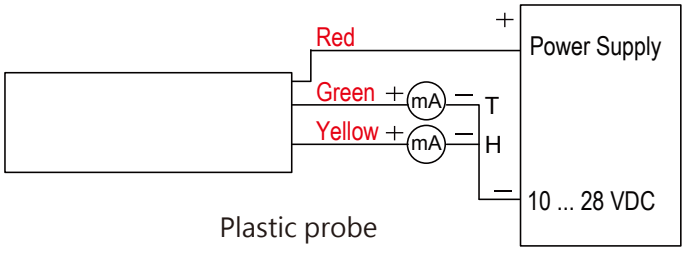
PVC Probe



M12 Diagram Metal Probe



Plastic probe



Plastic probe

| Additional option (ILAC / TAF) Test report |

Additional option：Yuden standard calibration laboratory test report (TAF accreditation: 3032) complying with ISO /IEC 17025. TAF has mutual recognition arrangement with ILAC MRA

Project	Measurand level or range
Hygrometer	3 basic points(25°C. 30%. 50%. 80%)
	Temperature : 0°C ... 70°C
	Humidity : 10% ... 95%