THS17 Digital Temperature & Humidity Transmitter for Probe Type

Introduction

EYC THS17, digital Temperature & Humidity Transmitter, which is probe type to monitor temperature and humidity, provides plastic or metal case, and embeded MEMS sensor. That is why THS17 has nicer long-term stability of measuring, react quickly, easy to install and featured with compact size. THS17 provides free exclusive programmable software to monitor and record the data via RS-485, and switch the measured value to be other kinds of physical quantities such as dew-point, frost point, etc.

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
- 【Nicer stability】MEMS sensor
- 【Sensor protected】Anti-condensation protection
- 【Operate easy】Remote monitoring data via Modbus RS-485 digital output
- 【Install quickly】Compact size and elegant outlook and easy to install
- 【Data logger software and physical quantities switched】Free programmable software to monitor and record local data via RS-485, and switch the measured value to be other kinds of physical quantities such as dew-point, frost point, wet-bulb temperature, vapor pressure, mixture ratio, absolute humidity, and specific enthalpy.

Applications

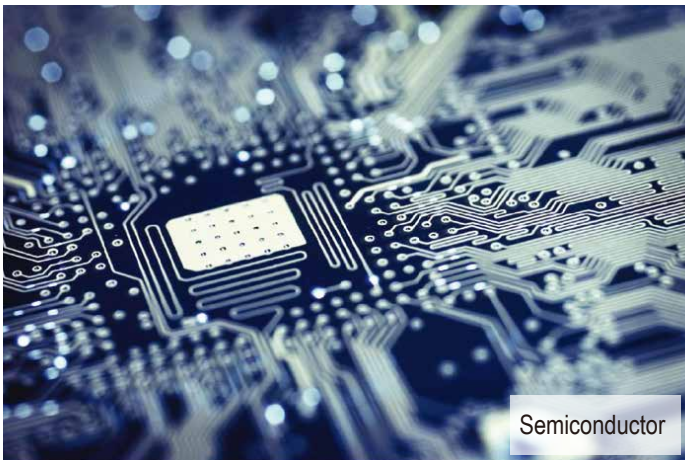
- Monitoring for HVAC process / Air conditioning / Environmental ventilation control
- Environmental monitoring for building / Factory / Clean room / Laboratory
- Monitoring for storeroom / Crisper / Agriculture / Food industry
- Temperature and humidity measuring in machinery or equipment

Building

Food industry

Laboratory

Clean room


Semiconductor

Specification

Input

Temperature	MEMS
Humidity	MEMS

Measuring Range

Extremely Working Range	0 ... 100 ℃ ; 0 ... 100 %RH

Output

Signal Output	RS-485
Protocol	Protocol
Interface	Modbus RTU

Warm-up Time

< 2 min. · stable time 20 mins.

Response Time

t63 (15 ... 45 ℃ / 33 to 75 % RH) ≦ 10 secs.

Sampling Time

about 3 secs.

Temperature Influence

max. - 0.15 %RH / ℃ (0 ... 100 ℃)

Accuracy (at + 25 ℃)

Temperature	± 0.3 ℃
Humidity	± 2 %RH (20 ... 80 %RH)

Environment

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

Electric

Power Supply	10 ... 28 VDC
Current Consumption	8 mA
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	PC radiation shield / Metal fitting
	Thread / Metal flange

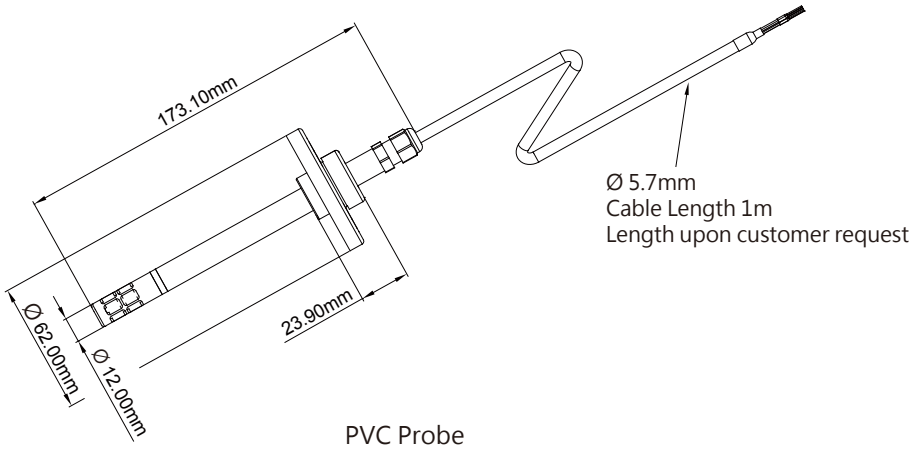
Weight

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

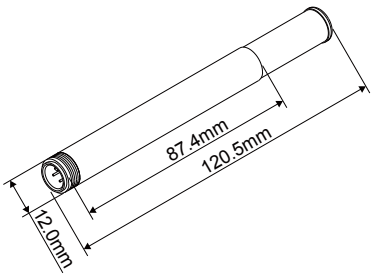
Ordering Guide

Item	THS	17	-	A	P	1	-	00	00	-	2
Installation	Probe Type	17									
Function	Temperature / Humidity Output		-	A							
Output	RS-485 (PC Probe) RS-485 (Metal Probe + M12 Connector)				P M						
Power Supply	10 ... 28 VDC					1					
Temperature	0 ... 100 °C						-	00			
Humidity	0 ... 100 %RH								00		
Options	2m Cable									-	2

Dimension

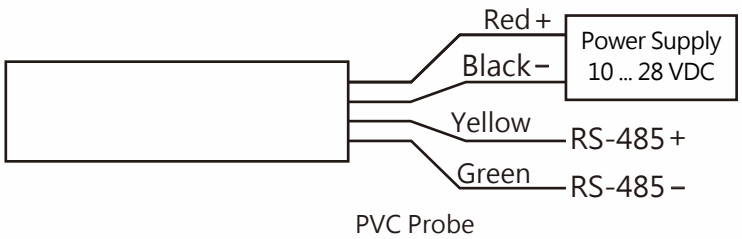


PVC Probe

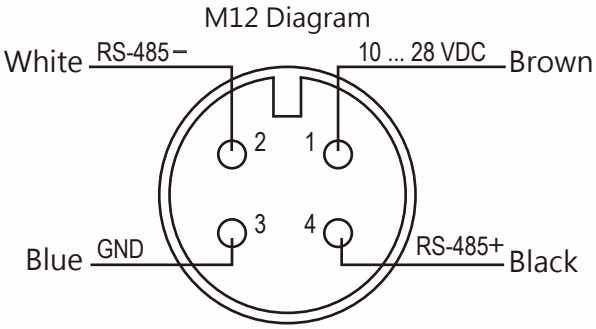


Metal Probe

Diagram



PVC Probe



Metal Probe