



Temperature & Humidity

EX-Series Temp. and Humidity Transmitter

THM14EX

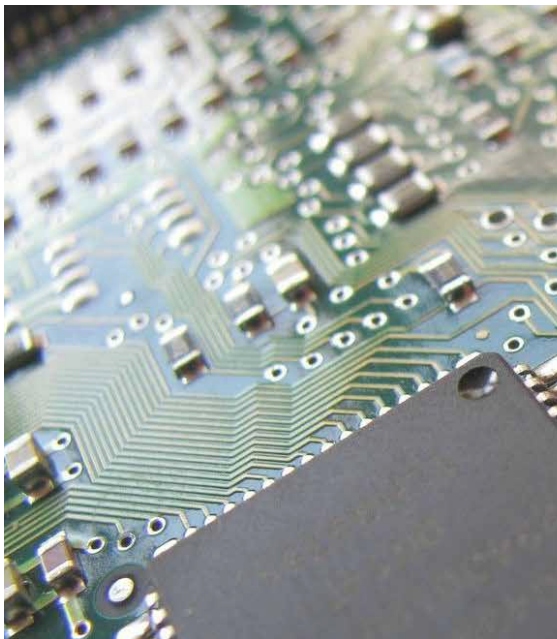
Stable & Accurate
Performance in Explosion
Hazardous Areas

| Features |

- Protection rating : IP 66
- Rugged aluminium case
- Stainless steel probe
- High measurement accuracy
- High long-term stability

| Introduction |

The **THM14EX** is used to measure relative humidity or temperature or relative humidity and temperature in air and other non-aggressive gases in explosion hazardous areas and in locations with inflammable dust.



Applications :

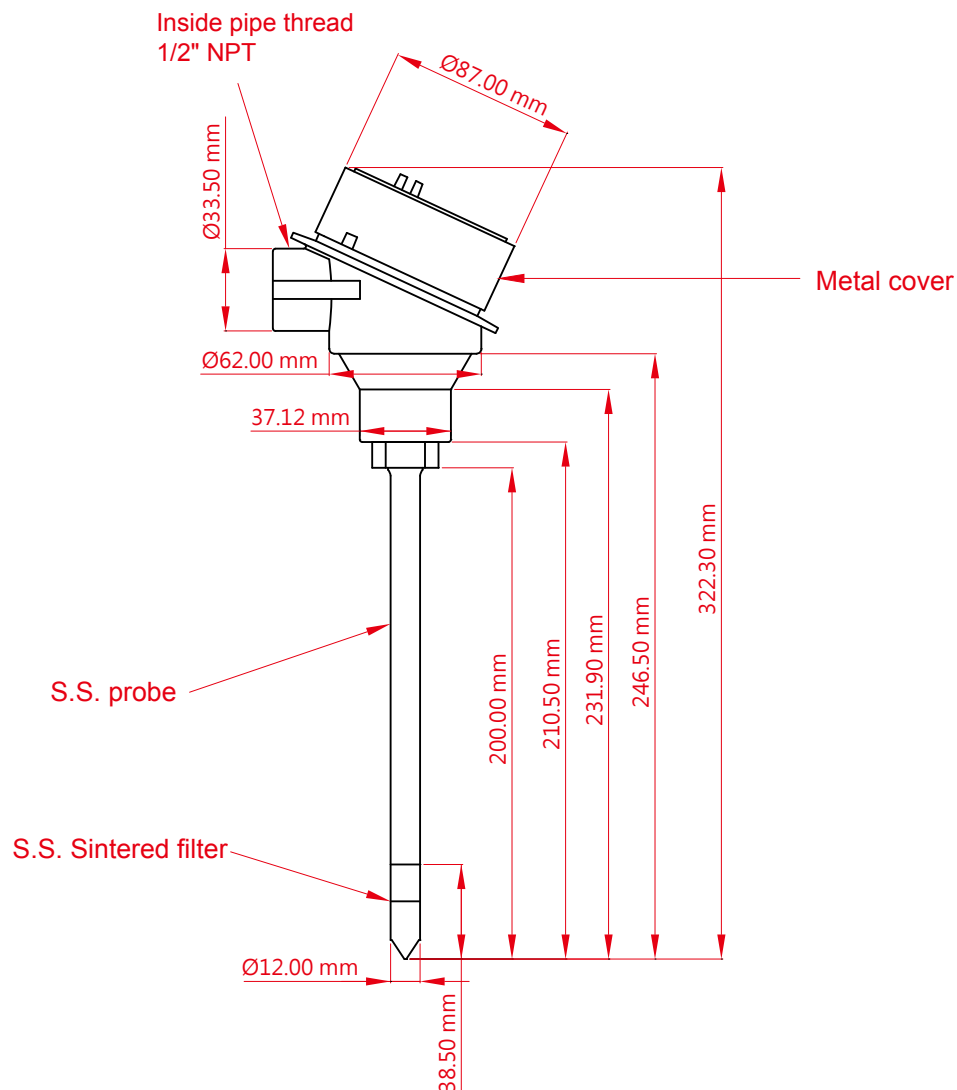
Semiconductor / Electronics /
Steel Industry / Food, Chemical,
Pharmaceutical, Biotechnology
Industries



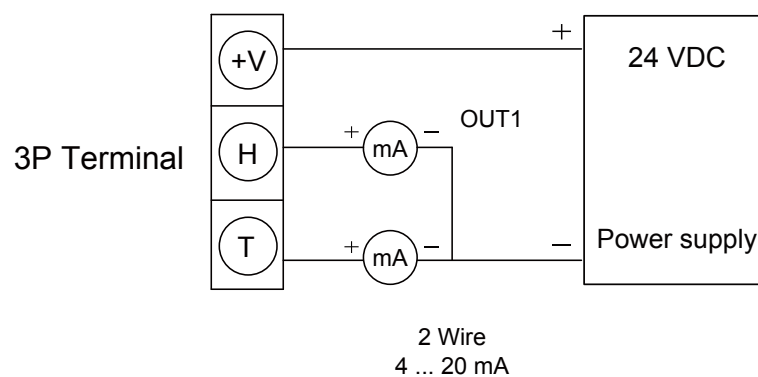
| Specification |

Input	Capacitive humidity sensor & PT 1000Ω
Measuring Range	Temperature:-20 ... +80°C Humidity: 0 ... 100 %RH
Output	4 ... 20mA
Signal Connection	2 Wire
Accuracy	Temperature:±0.3°C+0.002°C x t actual Humidity:±2% RH(20 ... 80 %)
Temperature Error	0.2% RH/°C
Load resistance	4 ... 20mA ≤ 500Ω
Output Calibration(ZERO & SPAN) Adjustment Span	10%of zero-point and full-scale
Response Time	t90 (Temp.: +25°C;Flow≥1 m/s) < 20 sec.
Medium	Air
Operating Temp.	-20 ... +80°C
Operating Humidity	0 ...100%RH (non-cond.)
Storage Temp.	-20 ... +80°C
Power Supply	24±10%VDC Ui=24V Li=100mA Pi=0.78W Ci≈0 Li≈0
Current Consumption	<43mA
Electrical Connection	1/2" NPT Internal Thread
Installation Connection	Metal quick connector (Suggested option)
Protection Rating	IP66
Electrical Protection	•Polarity reversal protection •Over voltage •Short circuit
Certification	NEPSI
Explosion-proof Mark	Ex ia IIC T4 Ga; Ex tD A21 IP66 T95°C
Material	SUS304/Rugged aluminum
Weight	Metal:650g(without wire)

| Dimension |



| Analog Diagram |



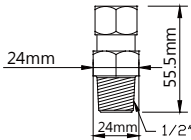
| Ordering Guide |

THM14EX-

Function	Output	Power Supply	Range	Filter	Option
A	1	1	30	S	W
A : Temp./Humidity(*Note) T : Temp. H : Humidity	1 : 4 ... 20 mA	1 : 24±10%VDC	30 : 0 ... +50 °C 40 : -20 ... +80 °C 00 : 0 ... 100%RH(Humidity Output) YY : Customization	S : S.S. Sintered filter	W : Customization

*Note : THM14EX - A · Humidity default : 0 ... 100% RH, select the temperature range only.

| Suggested option |

	8203104012 Installation: Fitting thread		Material : SUS304
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| 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
Resistance thermometer	-40°C ... +300°C
Thermocouple thermometer	-20°C ... +300°C
Project	Measurand level or range
Hygrometer	3 basic points(25°C. 30%. 50%. 80%)
	Temperature : 0°C ... 70°C
	Humidity : 10% ... 95%