



THM14EX

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EX-Series Temp. and Humidity Transmitter



| Features |

- IP 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

Input	Capacitive Humidity Sensor & Pt 1000
Measuring range	Temperature : -20 ... +80°C
	Humidity : 0 ... 100%RH

Output

Output	4 ... 20 mA
Signal connection	2-wire
Accuracy	Temperature : $\pm 0.3^{\circ}\text{C} + 0.002^{\circ}\text{C} \times t_{\text{actual}}$
	Humidity : $\pm 2\% \text{RH}$ (20 ... 80%RH)
Temperature error	0.2%RH/°C
Load resistance	4 ... 20 mA $\leq 500 \Omega$
Output calibration(ZERO & SPAN)	10%of zero-point and full-scale
Adjustment Span	
Response time	t90< 20 sec
(Temp. : +25°C ; Air velocity ≥ 1 m/s)	

Electrical

Power supply	DC 24 V $\pm 10\%$
	$U_i=24\text{V}$ $I_i=100\text{mA}$ $P_i=0.78\text{W}$ $C_i \approx 0$ $L_i \approx 0$
Current consumption	DC < 43 mA
Electrical connection	1/2" NPT Internal thread

Environment

Medium	Air
Operating Temp.	-20 ... +80°C
Operating Humid.	0 ... 100%RH (Non-condensing)
Storage temperature	-20 ... +80°C

Installation

Installation	Metal quick connector (Suggested option)
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Protection

IP rating	IP66
Electrical protection	<input checked="" type="checkbox"/> Polarity reversal protection <input checked="" type="checkbox"/> Over voltage <input checked="" type="checkbox"/> Short circuit

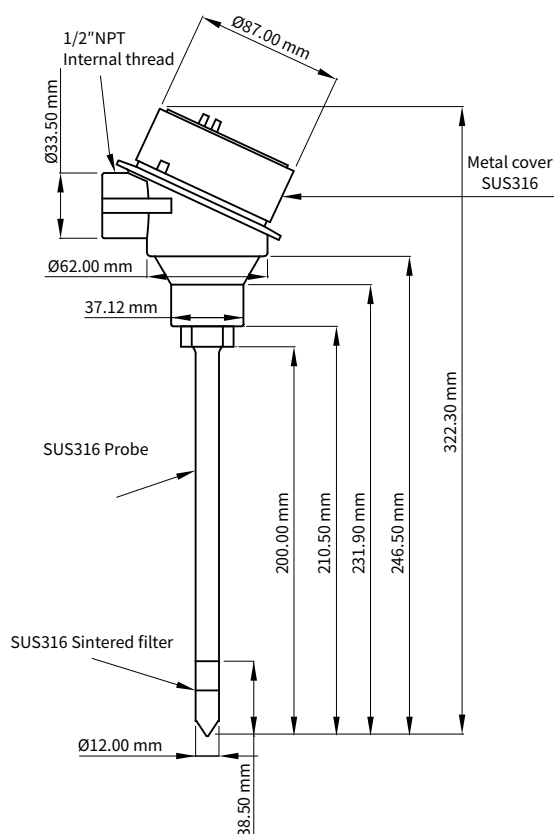
Certification

Certification	NEPSI
Explosion-proof mark	Ex ia IIC T4 Ga; Ex tD A21 IP66 T95°C

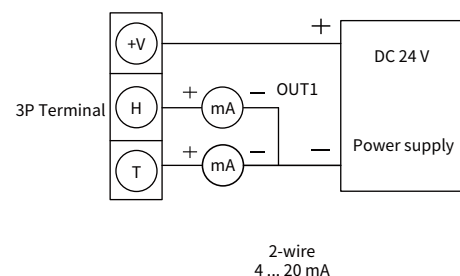
Material

Material	SUS304/ Rugged aluminum
Weight	Metal : 650 g (without wire)

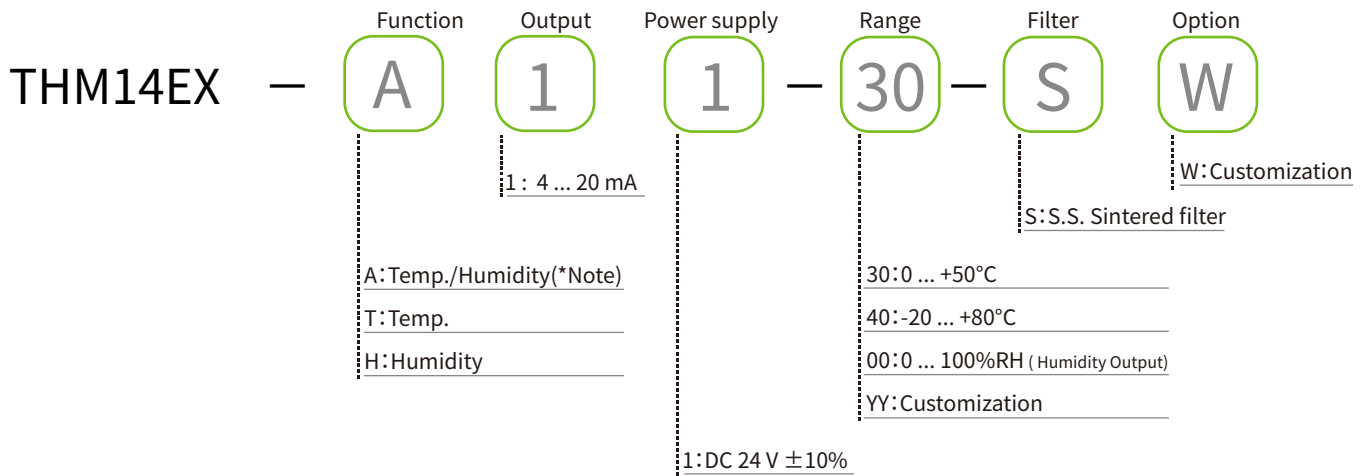
| Dimension |



| Diagram |



| Ordering Guide |



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

| Suggested option |

	<p>8203104012 Installation: Fitting thread</p>		<p>Material : SUS304</p>
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| 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
Hygrometer	Temperature : 0°C ... 69.5°C
	Humidity : 10% ... 95%

■ ISO 9001

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