



THR23

Indoor Temperature & Humidity Transmitter

Temperature & Humidity-THR23

www.eyc-tech.com

| Features |

- Measuring temperature and humidity
- Analog outputs and RS-485
- Quick easy installation and maintenance due to well designed
- Cost-efficient and reliable
- Data can be logged and transferred to PC via RS-485 function link free software

| Applications |

Monitoring indoor environments HVAC / Air conditioning / Museums / Testing environments work places / Supermarkets / Data centers / Production warehouses / Indoor public places to regulate the ventilation system to save energy

| Specification |

Display

Display	LCD without backlight
Display readout	Double-row (Up : Humidity ; Down : Temp.)
Digit	3 digits and 1 decimal
Digit height	17.84 mm

Input sensor type

Temperature	MEMS
Humidity	MEMS

Measuring range

Temperature	0 ... 50°C
Humidity	0 ... 100%RH(Non-condensing)

Output

Analog output	0 ... 10 V / 4 ... 20 mA
Modbus	RS-485+analog
Signal connection	3-wire
Load resistance(Voltage)	Voltage output : $\geq 100 \text{ K}\Omega$ Current output : $< 250 \Omega$
Warm-up time	$< 2 \text{ min}$; Stable time 20 min
Temp. influence	Max. $-0.15\% \text{RH}/^\circ\text{C}$ ($0^\circ\text{C} \dots 80^\circ\text{C}$)
Response time	$t_{63}(15 \dots 45^\circ\text{C} / 33 \dots 75\% \text{RH}) \leq 10 \text{ sec}$
Sampling time	About 3 sec
Data logger	Via RS-485 by using eYc free software

Accuracy(at +25°C ; DC 24 V)

Temperature	$\pm 0.5^\circ\text{C}$
Humidity	$\pm 5\% \text{RH}$ (30 ... 80%RH)

Environment

Medium	Air
Operating environment	0 ... +50°C 0 ... 100%RH(Non-condensing)
Storage environment	-20 ... +60°C

Electrical

Power supply	DC 12 ... 36 V & AC 24 V $\pm 10\%$
Power consumption	DC : Max.100 mA ; AC : Max.150 mA
Electrical connection	Analog & Communication : 4P Connector

Installation

Installation	Indoor & Wall mount
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Protection

IP rating	IP20
Electrical protection	■ Polarity protection ■ Short-circuit

Certification

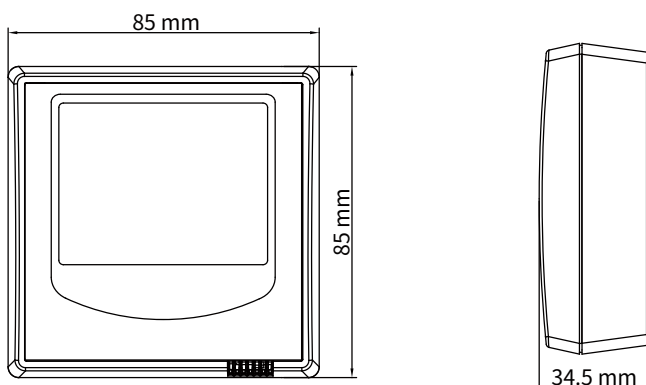
Certification	CE
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Material

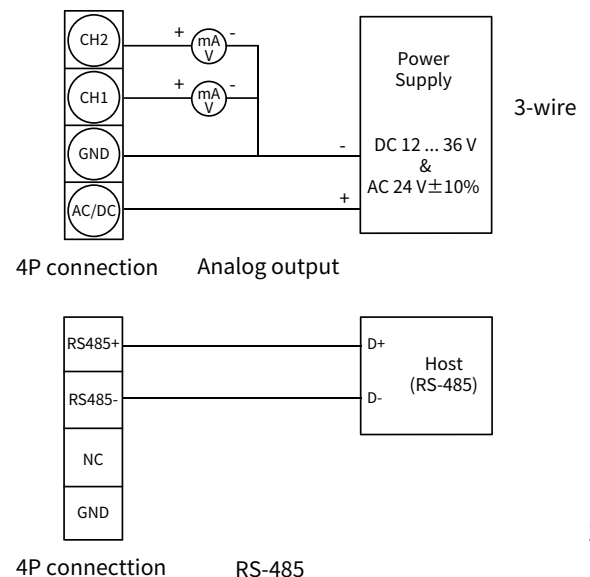
Housing	PC(PC-110)(UL94V-2)
Weight	95 g

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

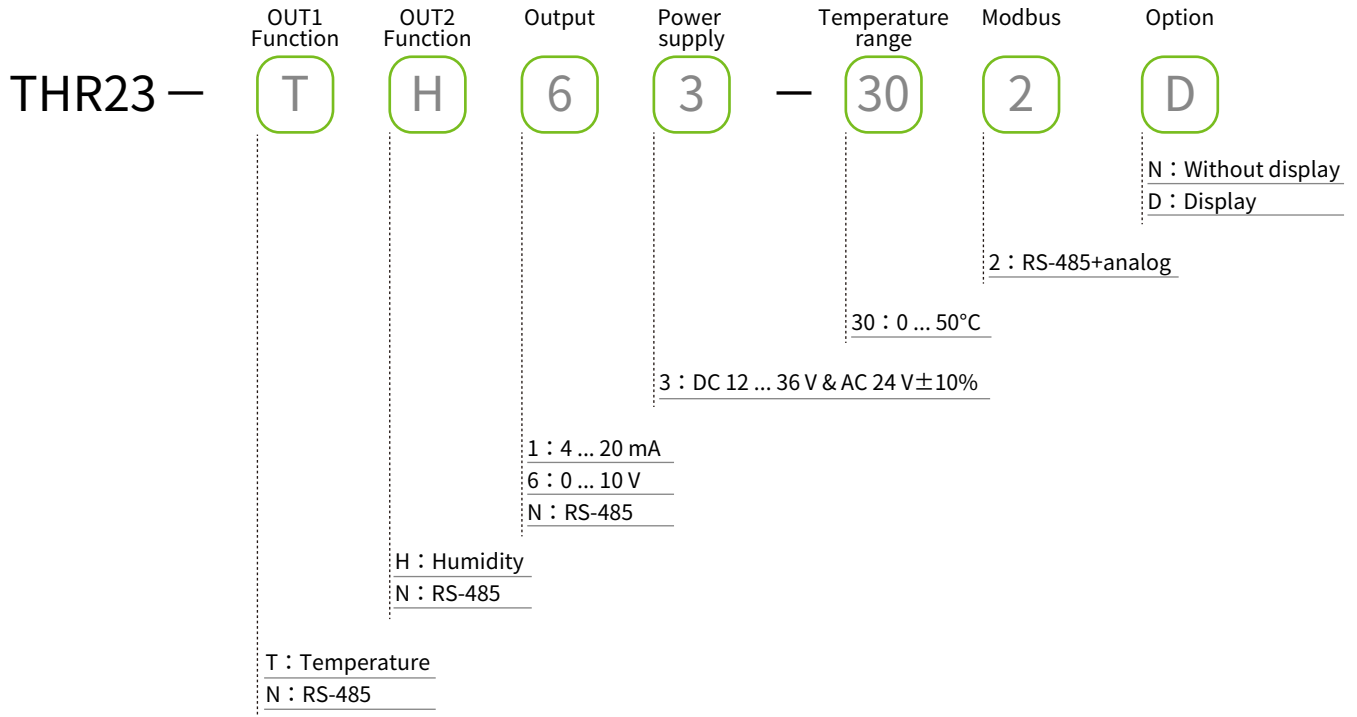
| Dimension |



| Diagram |



| Ordering Guide |



| 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%