



eyc-tech Measuring Specialist

enhance your capability with **sensor** technology

# ANNUAL CATALOG



## SENSOR | TRANSMITTER

- Air flow
- Humidity
- Dew point
- Differential pressure
- Liquid flow
- Temperature
- Pressure
- Level
- Air quality
- Signal meter





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enhance your capability with **sensor** technology

## About eyc-tech

eyc-tech is dedicated to manufacturing measurement products.

With professional R&D team, certificated factory and decades of experience in field, eyc-tech keeps bringing innovation to sensor technology and measurement technology. We provide wide range of measuring products includes air flow, temperature and humidity, dew point, liquid flow, differential pressure, pressure, liquid level, air quality, signal meter, etc. Our products cover many industries such as industrial process, system integration, exhaust gas removal, compressed dry air and HVAC.

In the future, we will continually challenge ourselves in the professional and develop innovative products to exceed the high standard of our customers.

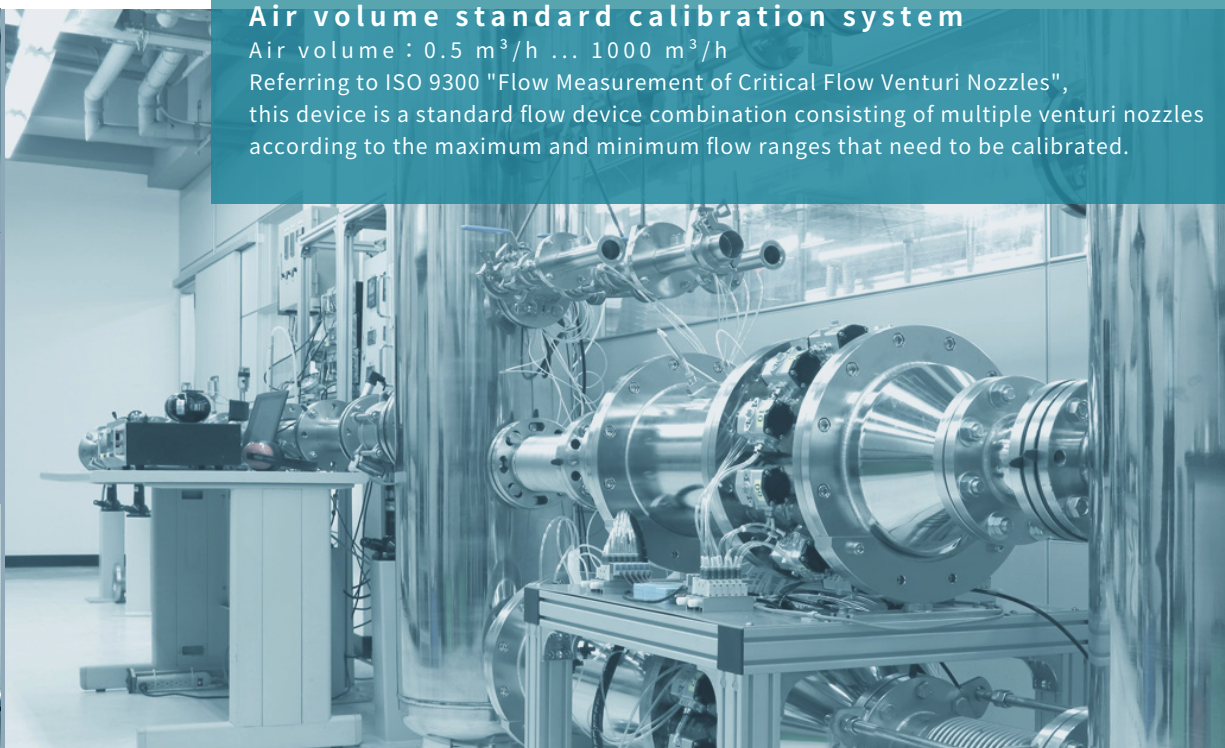
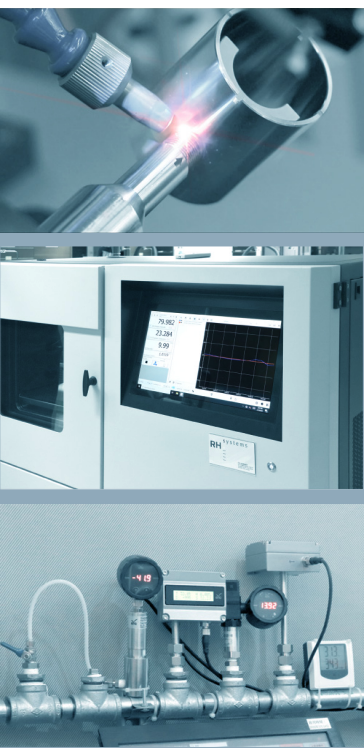


Since eyc-tech was founded in 2009, we have continuously improved our production quality and manufacturing capacity. We obtained ISO-9001 quality management systems certification in the same year of founding, then keep implementing high-end inspection equipment and international standard manufacturing process. To ensure the best quality we can provide, we dedicate to improvement in every aspect.

Starting from product design, our professional R&D team has focused on improving not only product performance but also the stability of each manufacturing process. Through well-designed manufacturing process and inspecting process, we can provide high accuracy products with stable quality

In order to further improve product quality, follow international trends, and increase production line capacity, we expand our factory in 2022. At the same time, we also introduced automatic dew point calibration equipment, automatic temperature and humidity calibration equipment, and airflow calibration system equipment. The scale of the production line is further increased, and the scale of the site have reached 3,000 square meters.

We adhere to the core concept of "accuracy, quality and stability", and strive to provide our best sensors and services, so that customers can trust us and depend on us.



## Air volume standard calibration system

Air volume : 0.5 m<sup>3</sup>/h ... 1000 m<sup>3</sup>/h

Referring to ISO 9300 "Flow Measurement of Critical Flow Venturi Nozzles", this device is a standard flow device combination consisting of multiple venturi nozzles according to the maximum and minimum flow ranges that need to be calibrated.





## YUDEN-TECH CO.,LTD. Calibration Laboratory

International Laboratory Accreditation Cooperation; ILAC  
TAF ( ISO / IEC 17025 ) Accreditation No.3032



YUDEN-TECH CO.,LTD. is from TAIWAN TAIPEI. The calibration laboratory of YUDEN-TECH CO.,LTD has the TAF (ISO/IEC 17025) certification (certification number: 3032) of the professional calibration laboratory for temperature and humidity, dew point, air velocity, flow, and pressure.

The National Accreditation Foundations (TAF) a certification body, accredited by the International Laboratory Accreditation Alliance (ILAC), has signed an inspection mutual recognition agreement with ILAC. It provides accurate calibration services through TAF on behalf of Internationally recognized grade standards and can be traced back to the SI unit. Our calibration laboratory has the measurement uncertainty evaluation report and calibration procedures for each system. We believe that after our service will help our clients to maintain the best quality and stability of your sensor and instrumentation standards.



Air Velocity



Flow



Dew Point



Humidity



Temperature



Pressure



Measure the temperature and humidity of the tunnel dryer

# eYc THM06

Temperature and Humidity Transmitter  
Industrial / High accuracy / Precise measurement



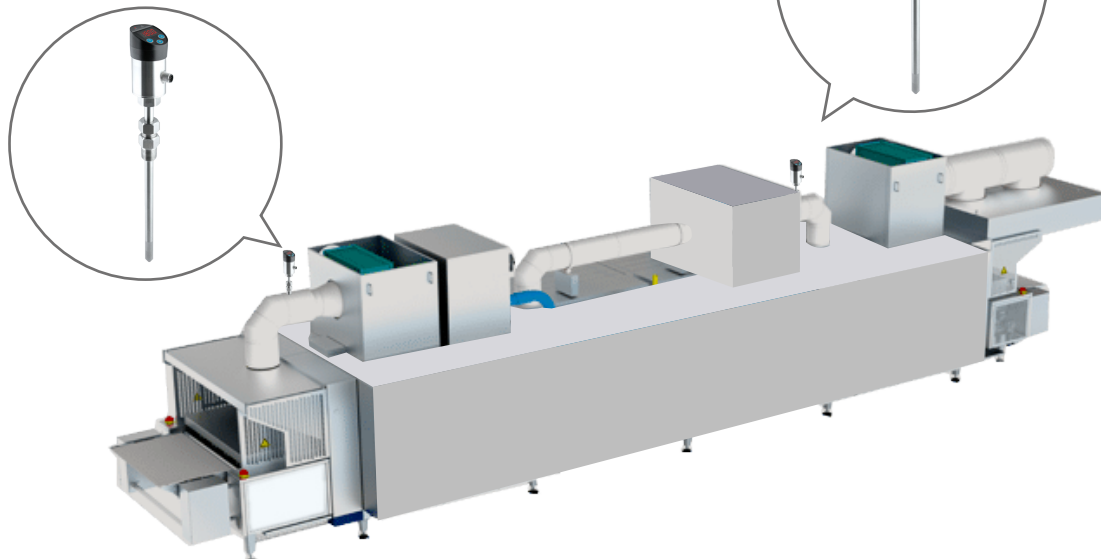
## Measurements temperature and humidity of of Tunnel dryer eYc THM06 Industrial Temperature and Humidity Transmitter

The Tunnel dryer is to dry the raw materials to control the moisture content. Excess water will evaporate, and the water vapor will be discharged through the moisture exhaust outlet. Since it is not possible to directly measure the moisture content of the raw materials, it is necessary to measure the absolute temperature and humidity at the inlet and outlet of the hot air circulation pipe of the Tunnel dryer to control the moisture content of the raw materials.

### Product features:

eYc Industrial Temperature and Humidity Transmitter is good to use in high temperature environment, measuring temperature -40... 180°C (optional 200°C), resist 16 bar, IP65, adopting temperature and humidity calibration equipment quality inspection calibration production verification (IEC 61298). eYc THM06 specially designs temperature compensation and computer linear correction temperature and humidity function, accuracy is highly, accuracy: temperature  $\pm 0.15^{\circ}\text{C} + 0.002^{\circ}\text{C} \times \text{tactual}$ , humidity (0...90%) Nonlinear error:  $\pm 1.2\% \text{RH}$  / Hysteresis error:  $\pm 0.8\% \text{RH}$  / Repeatability error:  $\pm 0.4\% \text{RH}$ .

### THM06 Temperature and Humidity Transmitter Suggested installation location



The casing is made by one-piece stainless steel, resist corrosive gas environments. It is lightweight and easy to use with various equipment and machines. It can be adjusted with the display panel for on-site monitoring. The casing can be rotated by 330 degrees to meet multiple viewing angles on the site. Suitable for a variety of applications, such as: semiconductor / electronics industry / steel industry / process control (drying or humidification) / environmental control / high humidity storage / chemical / pharmaceutical / biotechnology industry / tobacco industry / food industrial, etc.





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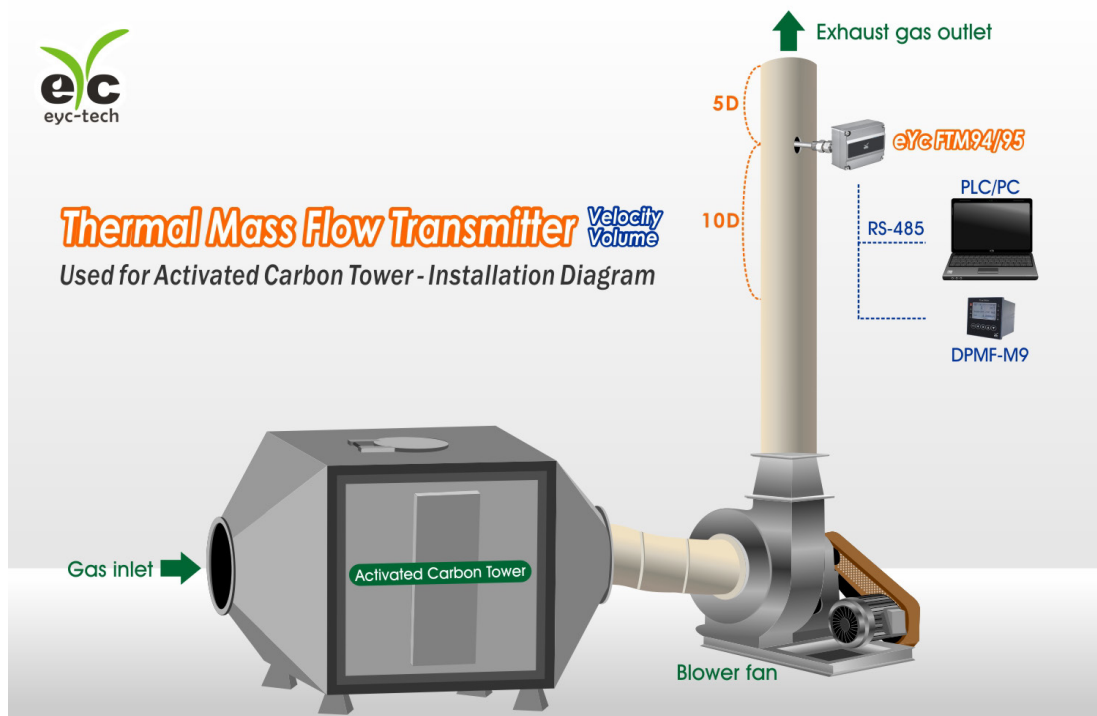
## How applied eYc air velocity /volume transmitter in the activated carbon tower Exhaust gas emission solution

Industrial exhaust gas is one of the largest pollution of environmental air pollution. The urgent for improvement is not only because of regulatory compliance , but also includes the health considerations of on-site workers, odor and community safety issues. In the exhaust, the volatile organic compounds (VOCs) have been listed as the main domestic air pollution control items.

### Benefits:

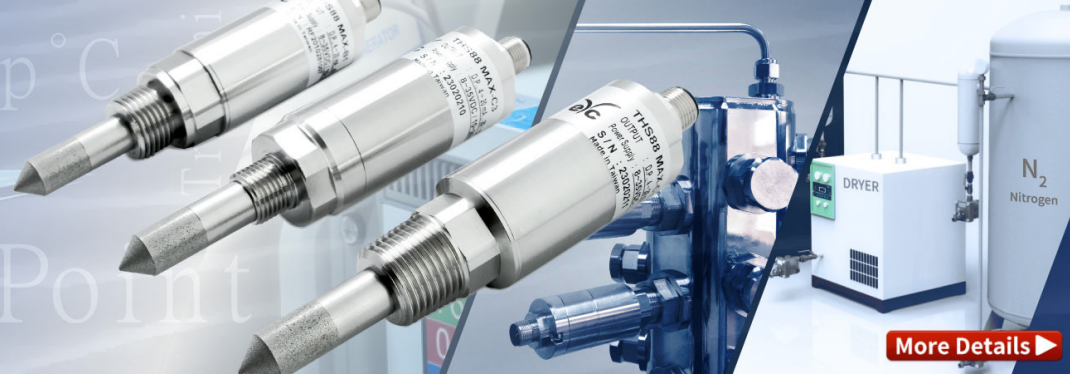
Exhaust emission need to consider the flue gas flow rate, volume, temperature and pressure of the pipeline, as well as the characteristics of the exhaust gas such as: emission type, density, , corrosivity, water content, odor, flammability, corrosion resistance and dust resistance ect,.

After evaluation eYc FTM94/95 Industrial grade high accuracy thermal air velocity transmitter, it is suitable for severe industrial process environments and high accuracy, special double PT probe, high temperature resistance, dust resistance, can be used for micro-corrosion compressed air, measurement range up to 120 Nm/s (N: working condition (definition: 20°C at 1013 hPa), unit can be converted to Nm/s (Air velocity) or Nm3/h (Air volume) (optional), probe operating temperature to 120°C(Option 150°C), LCD Display(Top row: air velocity, Bottom row: temperature), aluminum alloy housing, housing IP65, probe IP67, can be directly installed on the pipeline to measure to reduce pressure loss and make the measurement more accurate.



# UPGRADE MAX eYc THS88

Industrial High Pressure Dew Point Transmitter  
High Accuracy/Quickly Response/Long-term Stability



eYc THS88MAX dew point transmitter is suitable for refrigerated air dryer / adsorption dryer of dew point monitoring, reduce insensitivity temperature zone, quickly response

### Refrigerated air dryer case study :

The refrigerated air dryer uses the principle of freezing and dehumidification to initially cool the compressed air, and then freeze the moisture in the compressed air to below the dew point to remove the moisture contained in the air, and then obtain clean compressed air.

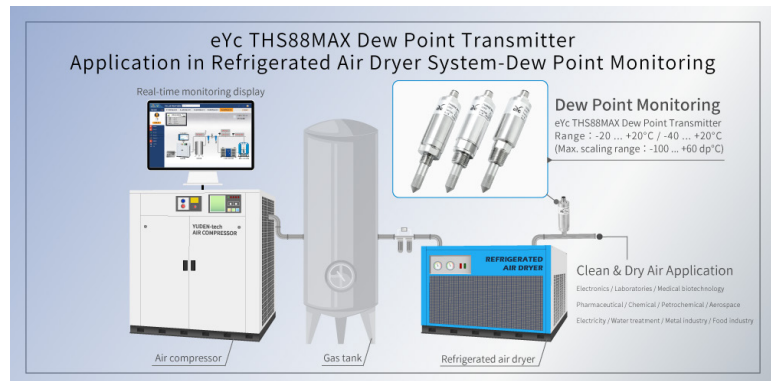
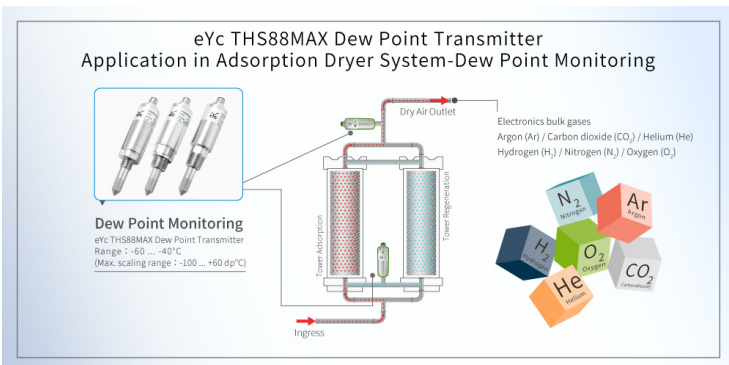
### Adsorption dryer case study :

The adsorption dryer principle is to force absorb via molecular sieve, activated alumina or silicone, these elements with strong water binding ability.

During the process, and industrial-grade high-accuracy dew point sensor could support monitoring pressure dew point up to -40 ... -60 dp°C, ensuring high quality dry compressed air.

### Product features:

eYc THS88MAX industrial high pressure dew point transmitter, use capacitive humidity sensor, 3-wire, standard RS-485 & 1 analog output, it can be connected to the client PLC and industrial computer and can be monitored at any time, low humidity environment withstand pressure resistance : 16 bar, operating range of dew point -60 ... +60 dp°C, accuracy (Operating range of dew point -60...+60 dp°C)  $\pm 2$  dp°C(at +25°C)  $\pm (0.02\%F.S./^{\circ}C)$ , dew point Max. scaling range : -100 ... +60dp°C, dew point calibration, highly accuracy. Reduce insensitivity temperature zone, quickly response. Hysteresis compensation, resistance to moisture, extreme high and low humidity impact. EMC anti-interference, anti-condensation, low-temperature influence, long-term stability. Three thread (1/2"PT, 1/2"G, and 5/8"UNF) mode can be selected.





Measuring Specialist

HVAC Applications  
**Accurate Measurement**  
**Energy Efficiency**



## eYc Industry Application-Measuring Transmitter for HVAC Energy Saving System in Smart Building

Excessive use of energy leads to the impact of climate change and the greenhouse effect. Energy conservation has become the main topic of today's architectural design. There are many high-rise buildings in cities around the world now, in order to improve huge energy consumption, many office buildings have been planned as building automation systems during construction. The purpose of reducing equipment energy consumption and costs is to manage energy use in the building.

In order to save energy and improve the design of the HVAC system, many engineering projects will choose Taiwan eYc transmitters.

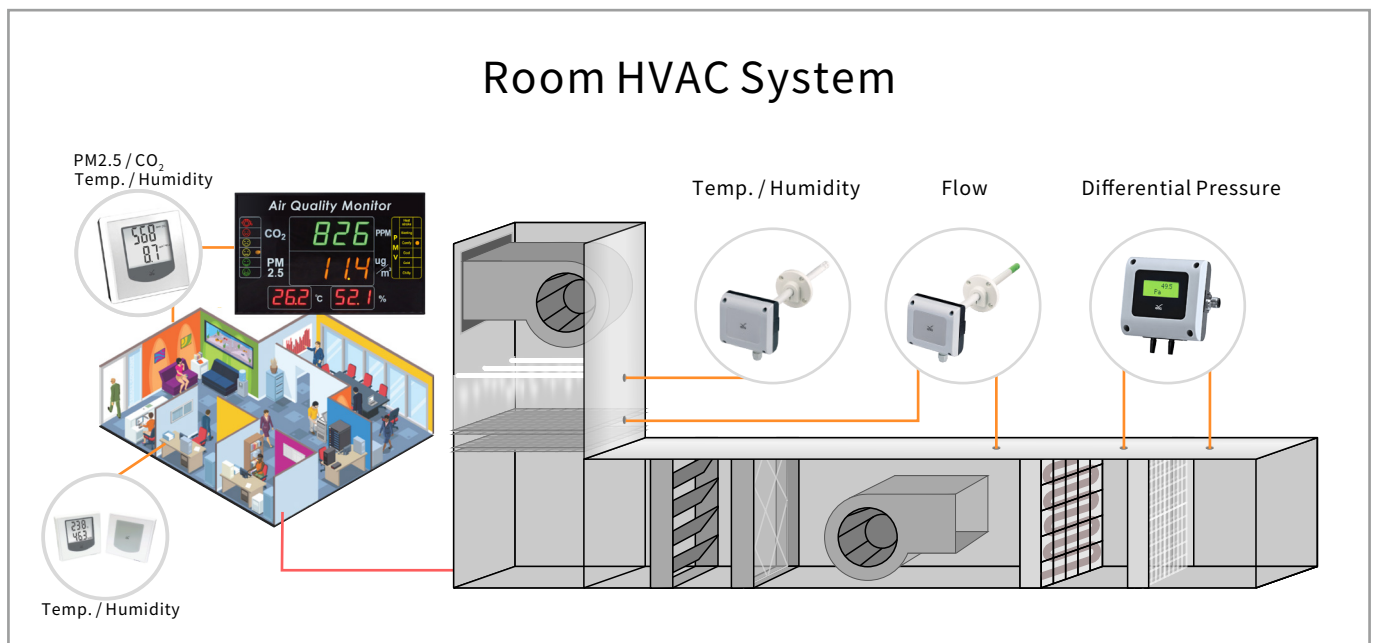
Its advantages include many physical quantities in terms of functions, economical, high accuracy, long-term stability, low power consumption, durable, and optional ISO/IEC 17025 (TAF/ILAC) calibration report.

eYc differential pressure transmitter uses a silicon chip on differential pressure module of MEMS integration technology, low-pressure monitoring, high pressure bearable, measuring range up to  $\pm 50 \dots \pm 2500$  pa, ambient temperature up to  $-20 \dots + 80^\circ\text{C}$ .

The temperature and humidity transmitter adopts imported industrial-grade MEMS semiconductor sensor. It is environmentally friendly, high stability, fast response, temperature compensation, and linear correction up to  $+ 0 \dots + 100\%$  RH.

Air velocity transmitter with temperature compensation and linear adjustment, the measurement range can reach  $40$  m / s, and the minimum measurement range can reach  $0.2$  m / s.

The above can be varied or customized according to the different design conditions of each building.





## THM80X Series

### Industrial High Accuracy Temperature & Humidity Transmitter



- Input : Capacitive humidity sensor & Pt 100 A class
- Measuring range : 0 ... 180°C, customized up to 200°C
- Output : 0 ... 20 mA / 4 ... 20 mA / 0 ... 1 V / 0 ... 5 V / 0 ... 10 V / RS-485
- Accuracy : Temperature  $\pm 0.15^{\circ}\text{C} \pm 0.002^{\circ}\text{C} \times \text{tactual}$

Humidity(90 ... 100%)  $\pm 2\% \text{RH}$

Humidity(0 ... 90%) Nonlinear error :  $\pm 1.2\% \text{RH}$

Hysteresis error :  $\pm 0.8\% \text{RH}$

Repeatability error :  $\pm 0.4\% \text{RH}$

- High accuracy and quick response at measuring Temp. & humidity
- Work well after temporary condensation. Long-term stability in high humidity environment
- Switch multifunction physical quantities : [%RH] 、 [°C] 、 [mbar] 、 [g/kg] 、 [g/m<sup>3</sup>] 、 [kJ/kg]

## THM06

### Industrial Temperature & Humidity Transmitter



- Input : Capacitive humidity sensor & Pt100
- Measuring range : 0 ... +180°C, customized up to 200°C
- Output : 4 ... 20 mA / 0 ... 10 V / RS-485
- Accuracy : Temperature  $\pm 0.15^{\circ}\text{C}$

Humidity(0 ... 90%) Nonlinear error :  $\pm 1.2\% \text{RH}$

Hysteresis error :  $\pm 0.8\% \text{RH}$

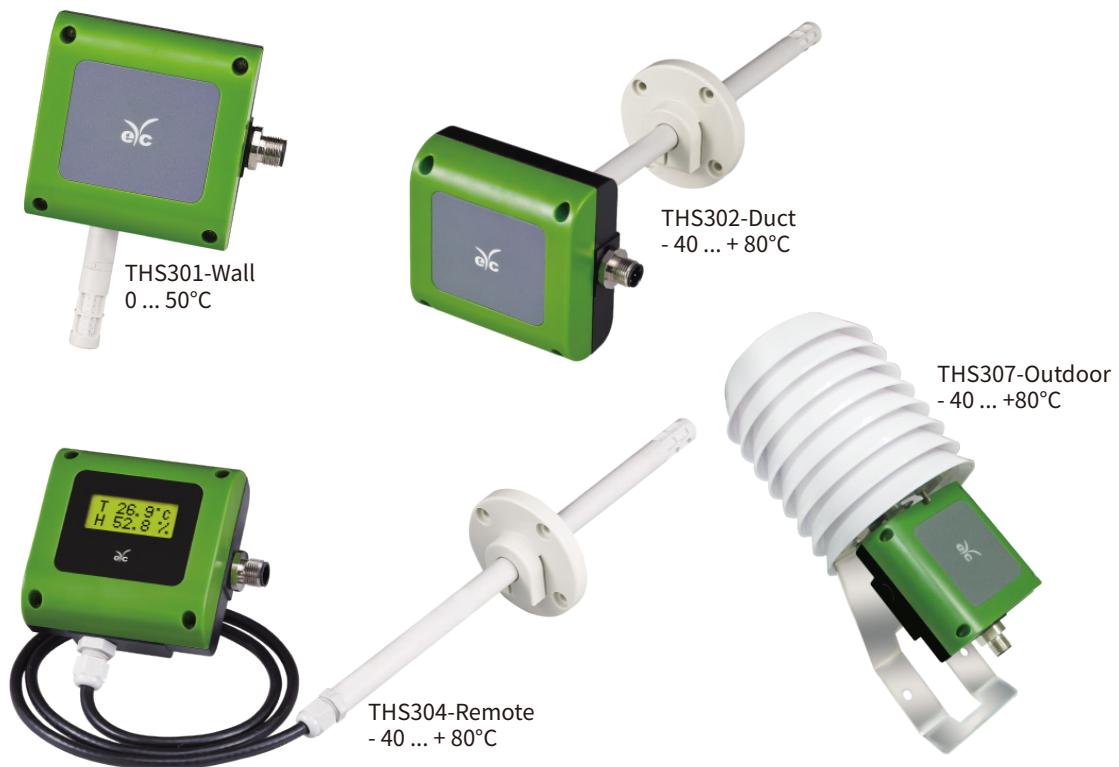
Repeatability error :  $\pm 0.4\% \text{RH}$

Humidity(90 ... 100%)  $\pm 2\% \text{RH}$

- IP67, stainless steel SUS304, pressure resistance 16 bar
- 330° rotatable, lightweight, unrestricted installation

## THS30X Series

### Multifunction Temperature & Humidity Transmitter



- Input : Capacitive humidity sensor & Pt100 class A
- Measuring range : Temperature 0 ... 50°C(THS301) ; - 40...+80°C(THS302 / 304 / 307)  
Humidity 0 ... 100%RH
- Output : RS-485 or 2 analog output / 4 ... 20 mA / 0 ... 10 V
- Accuracy : Temperature  $\pm 0.2^{\circ}\text{C} \pm 0.005^{\circ}\text{C} \times \text{tactical}$   
Humidity  $\pm 2\% \text{RH}$
- Industrial sensor comes with high accuracy and long-term stability
- Free programmable software - Physical quantities / Output / Data logger / Charts / Calibration
- Capable of temperature compensation and linear calibration



## THE120

### OEM Temperature and Humidity Transmitter



50 PCS/LOT

- Input : Capacitive humidity sensor & Pt100

- Measuring range : Temperature 0 ... 100°C

Humidity 0 ... 100%RH

- Output : 4 ... 20 mA / 0 ... 10 V / RS-485

- Accuracy : Temperature  $\pm 0.2^{\circ}\text{C} \pm 0.005^{\circ}\text{C} \times \text{tactical}$

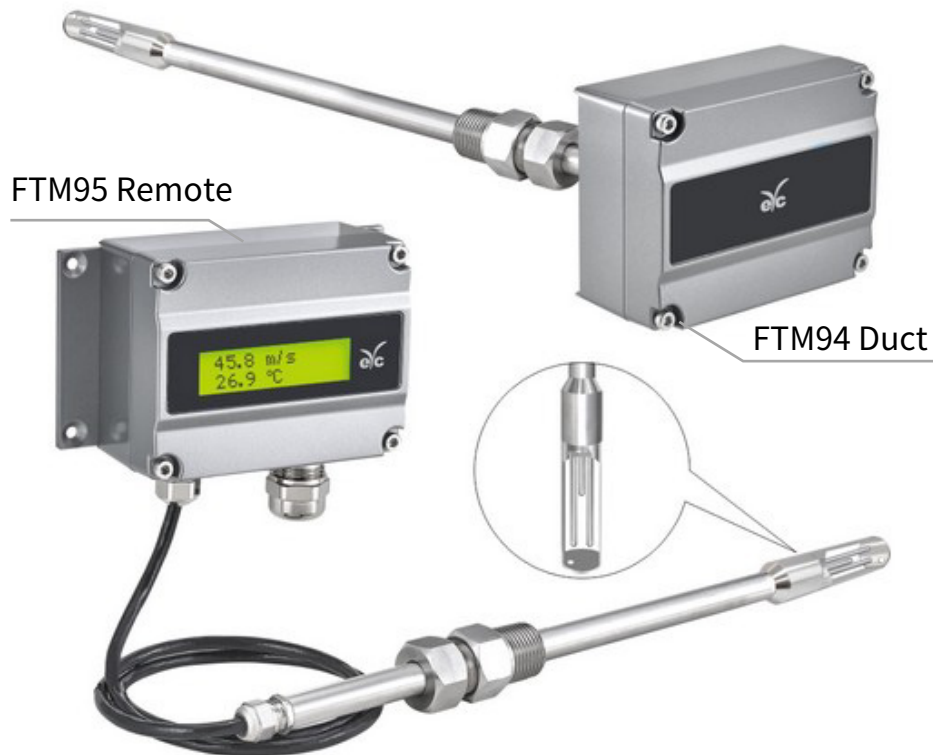
Humidity  $\pm 2\% \text{RH}$  (Temp. influence :  $0.05\% \text{RH}/^{\circ}\text{C}$ )

- Various installation method: Options from insertion probe with different lengths to inline type installation. Installation method can be customized according to demand

- RS-485 programmable software : Data logger / Charts

## FTM94/95

### Industrial High Accuracy Thermal Mass Flow Transmitter



- Input : Pt20 / Pt300(Air velocity)Pt1000(Temperature)
- Measuring range : 0 ... 120 Nm/s
- Output : 4 ... 20 mA / 0 ... 10 V / RS-485 / Impulse
- Accuracy :  $\pm 1.5\%$ (Option  $\pm 1\%$ )
- IP67, rugged aluminum alloy case, the sensing probe, which is fully covered by metal, allows transmitter to be used in dusty and slightly corrosive environment.
- Switchable physical quantities : [m/s]、[ft/s]、[Nm<sup>3</sup>/h]、[Nm/s]、[L/min]、[m<sup>3</sup>/min]
- LCD Display of cumulative flow : m<sup>3</sup>, L (Option)

## FTM06C-A

### Thermal Mass Air Velocity and Air Volume Transmitter



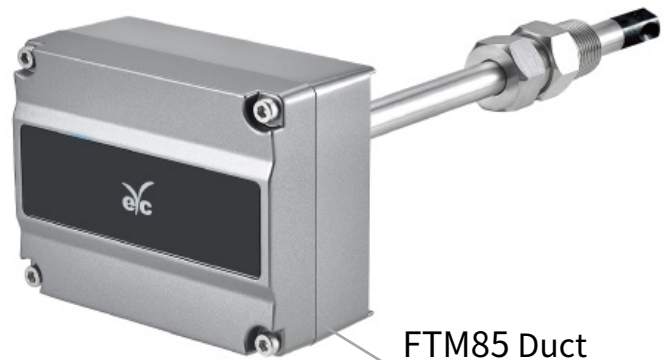
- Input : Pt20/Pt300 ((Air velocity) / Pt1000 (Temperature)
- Measuring range : 0 ... 5 m/s ~ 0 ... 60 m/s
- Output : 4 ... 20 mA & RS-485 / 0 ... 10 V & RS-485 / RS-485 & Impulse(1 ... 500 Hz)
- Accuracy :  $\pm 1.5\%$  F.S. (Option  $\pm 1\%$ )
- Turndown ratio 500:1, high accuracy at measuring low flow rate
- Display Instantaneous flow, the cumulative flow can be displayed in the software.
- IP65, stainless steel casing, the sensing probe, which is fully covered by metal, allows transmitter to be used in dusty and slightly corrosive environment



## FTM84/85

Industrial High Accuracy Thermal Air Velocity Transmitter

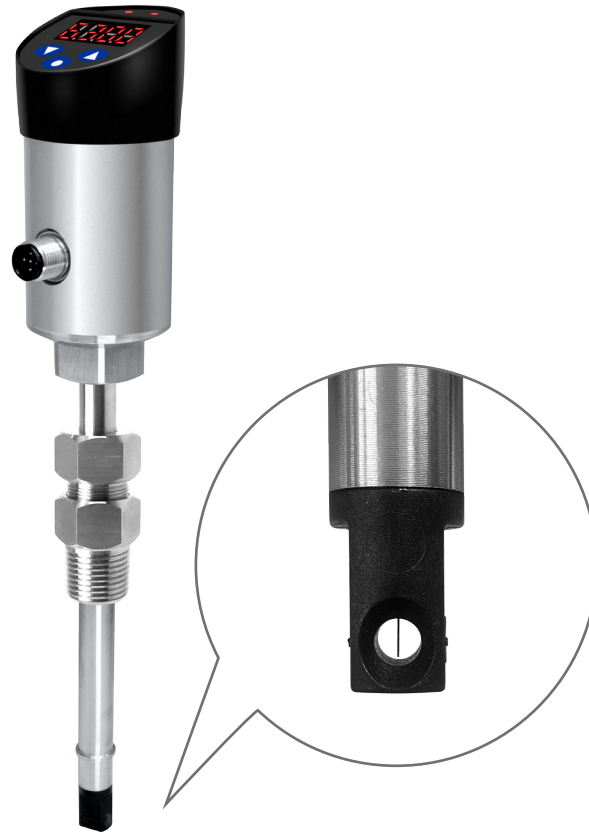
FTM84 Remote



- Input : Thermal mass flow sensor
- Measuring range : 1 ... 90 m/s
- Output : 0 ... 20 mA / 4 ... 20 mA / 0 ... 1 V / 0 ... 5 V / 0 ... 10 V
- Accuracy :  $\pm 1.5\%$  F.S.
- Linear calibration air velocity by computer, high-speed, high-accuracy measurement
- Switch multifunction physical quantities : [m/s] 、 [ft/s] 、 [km/h] 、 [mph] 、 [kont]
- LCD, display air velocity and temperature

# FTM06D

## Thermal Mass Flow Transmitter



- Input : Resistance temperature detector(RTD)
- Measuring range : 0 ... 120 Nm/s
- Output : RS-485+4 ... 20 mA / RS-485+0... 10 V / RS-485+Impulse (1 ... 500 Hz)
- Accuracy :  $\pm 1.5\%$  F.S.
- Built-in temperature compensation, accurate measurement. Using constant temperature anemometer(CTA) technology, good sensitivity
- Unit setting : [m/s] 、 [ft/s] 、 [Nm<sup>3</sup>/h] 、 [L/min] 、 [°C] 、 [°F]
- IP67, strong stainless steel housing, for a variety of harsh environments

## FTE120

### OEM Air Velocity Transmitter



- Input : RTD Thermal mass flow sensor
- Measuring range : 0.1 ... 30 m/s
- Output : 4 ... 20 mA / 0 ... 10 V / RS-485
- Accuracy :  $\pm 2\%$  F.S.
- 0.1 ... 5 m/s, low wind speed measurement
- Compact size and light weight, can be installed fast and easily
- Polycarbonate housing, great electrical insulation and flame-retardant properties
- RS-485 programmable software : Data logger / Charts



# THS88MAX

## Industrial High Pressure Dew Point Transmitter



- Input : Capacitive humidity sensor & Pt100
- Operating range of dew point : -60 ... +60 dp°C
- Output : : Standard 4 ... 20 mA+RS-485 / 0 ... 10 V+RS-485 on request
- Accuracy :  $\pm 1$  dp°C (at -20 ... +20 dp°C)  
 $\pm 1.5$  dp°C(at -40 ... +20 dp°C) /  
 $\pm 2$  dp°C (at -60 dp°C)  
Reference (at -100 ... -60 dp°C)
- Dew point calibration, high accuracy, reduce insensitivity temperature zone, quickly response
- EMC anti-interference, anti-condensation, low-temperature influence, long-term stability

# THM88MAX

Industrial dew point transmitter with display



- Input : Capacitive humidity sensor & Pt100
- Operating range of dew point : -60 ... +60 dp°C
- Output : Standard 4 ... 20 mA+RS-485 / 0 ... 10 V+RS-485 on request
- Accuracy :  $\pm 1$  dp°C (at -20 ... +20 dp°C) /  
 $\pm 1.5$  dp°C (at -40 ... +20 dp°C) /  
 $\pm 2$  dp°C (at -60 dp°C) /  
Reference (at -100 ... -60 dp°C)
- Lock pressure : 16 bar
- Large real-time digital display, on-screen buttons to adjust dew point offset
- Temperature compensation mechanism to reduce the influence of ambient temperature on dew point value

## PMD330

Differential Pressure Transmitter(Indoor)



- Input : Piezoelectric differential pressure module
- Measuring range :  $\pm 50 \dots \pm 10000$  pa
- Output : 4 ... 20 mA / 0 ... 10 V
- Accuracy :  $\pm 2.0\%$  F.S
- Silicon chips on differential pressure module of MEMS integration technology
- Low-pressure monitoring, high pressure resistance
- Physical unit switch (User Interface) : mbar / Pa / hPa / kPa / mmH<sub>2</sub>O / mmWS / inH<sub>2</sub>O / mmHg

## PHD330

### Industrial Temperature & Humidity Transmitter



- Input : Piezoelectric differential pressure module
- Measuring range :  $\pm 300 \dots \pm 10000$  pa
- Output : 4 ... 20 mA / 0 ... 10 V
- Accuracy :  $\pm 2.0\%$  F.S.
- RS-485 communication interface(Optional), Modbus RTU protocol
- Physical unit switch(User Interface) : mbar / Pa / hPa / kPa / mmH<sub>2</sub>O / mmWS / inH<sub>2</sub>O / mmHg
- Square root function

## AFMT

Average Flow Measuring Tube ( Pitot tube )



- Operating pressure : Max.10 bar, Operating temperature : Max. 250°C, Installation : Tube type
- Medium / Coefficient : Air / Flow coefficient (K) : 1
- Material : Measuring tube : SUS316, connection screw : Copper or stainless steel(Optional),
- Connecting pipe length : 100 ... 1000 mm
- Stainless steel housing, high temperature resistant, corrosion resistance, dust resistance,  
can measure micro flow rates
- Applied in harsh environments, exhaust gas emission, environmental protection engineering,  
installation location is not restricted
- Can used with eYc industrial differential pressure transmitter PHD330 or PMD330 for air  
velocity measurement



## L051

### Submersible Pressure Transmitter



- Sensor type : Piezoresistive diaphragm
- Measuring range : 0 ... 10 bar
- Output : 4 ... 20 mA
- Accuracy :  $\pm 0.5\%$  F.S.
- Housing SS316 outer, diameter 27  $\varnothing$
- Compact and rugged design and easy to install
- High accuracy and good stability in a long-run

# GS43/44

CO<sub>2</sub> Transmitter(Indoor / Duct Type)



- Sensor type : NDIR sensor
- Measuring range : 2000 / 5000 / 10000 PPM
- Output : 4 ... 20 mA / 0 ... 10 V
- Accuracy : 400 ... 2000 PPM :  $\pm 40$  PPM  $\pm 3\%$  of reading  
2000 ... 10000 PPM :  $\pm 250$  PPM  $\pm 3\%$  of reading
- Accurate and excellent long-term life cycle
- Free software configuration, voltage or current output and optional RS-485, and display

# THG03

CO<sub>2</sub> Temperature & Humidity Transmitter(Indoor)



- Sensor type : CO<sub>2</sub> : NDIR / Temperature & Humidity : MEMS
- Measuring range : CO<sub>2</sub> 0 ... 2000 PPM / Temperature 0 ... 50°C / Humidity 0 ... 100%RH(Non-condensing)
- Output : 0 ... 10 V / 4 ... 20 mA
- Accuracy : CO<sub>2</sub> : ±40 PPM ±3% of reading / Temperature : ±0.5°C / Humidity : ±5%RH(30 ... 80%RH)
- Integrated 3 sensors in 1 device with LCD display, measuring temperature, humidity and carbon dioxide
- Quick easy installation and maintenance
- Cost-effective and reliable

# THR23

## Indoor Temperature & Humidity Transmitter



- Input sensor type : MEMS
- Output : 0 ... 10 V / 4 ... 20 mA / RS-485
- Accuracy(at+25°C ; DC 24 V) :  $\pm 0.5^{\circ}\text{C}$  /  $\pm 5\% \text{RH}$  (30 ... 80%RH)
- Measuring range : 0 ... 50°C / 0 ... 100%RH(Non-condensing)
- Interface : RS-485+analog
- 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

# SD05

## Integrated Signal Indicator



- Input : 4 ... 20 mA(2-wire) / 0 ... 10 V(3-wire)
- Display range : -1999 ... +9999
- Display method : 4-Digit LED(Height of word : 9.2 mm)
- Accuracy : 0.2%F.S.
- 330° turnable, the direction of panel is changeable, good monitoring angle without blind corner
- Programmable by pressing 2 buttons, easy to operate, high performance, good stability and functionality



# DPT02

## Signal Converter



- Input : Current / Voltage
- Display readout : 3 digits(-199 ... +999)
- Output : Analog output / Relay / RS-485
- Accuracy : 0.2%F.S.±1 digital
- Local display, easy keypad programming the signal output and scale,LED for working status
- DIN rail installation, high safety & stability, fire-proof case, moisture-proof cover

# DPM02

## Multifunction Signal Display Monitor



- Input : Current / Voltage
- Display readout : 5 digits(-9.9.9.9 ... +9.9.9.9.9)
- Output : Analog output / Relay / RS-485
- Accuracy : 0.1%F.S.±1 digital
- Signal isolation, preventing noise, filtering function : Provide safe and stable measuring
- Programmable, high safety & stability, fire-proof case, moisture-proof cover
- Plug-in installation design for easy maintenance



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*enhance your capability with **sensor** technology*  
**Sensor | Transmitter**

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