



Air Velocity-FTM06 Series

Hot Wire Thermal Air Velocity Transmitter



Semiconductor / industry / compressed air and other industries the best solution

FTM06D

| Features |

- Thermal mass flow sensor
- Can measure air velocity and air volume
- Analog / RS-485 / Impulse output
- Built-in temperature compensation, accurate measurement
- Using constant temperature anemometer(CTA) technology, good sensitivity
- Display velocity / temperature , Measure cycle display every 3 sec(Light identification)
Unit setting : [m/s], [ft/s], [Nm³/h], [L/min], [°C], [°F]
Output options: 0 ... 10 V / 4 ... 20 mA; Pipe setting range: 20 ... 9999 mm
- Strong stainless steel housing, for a variety of harsh environments

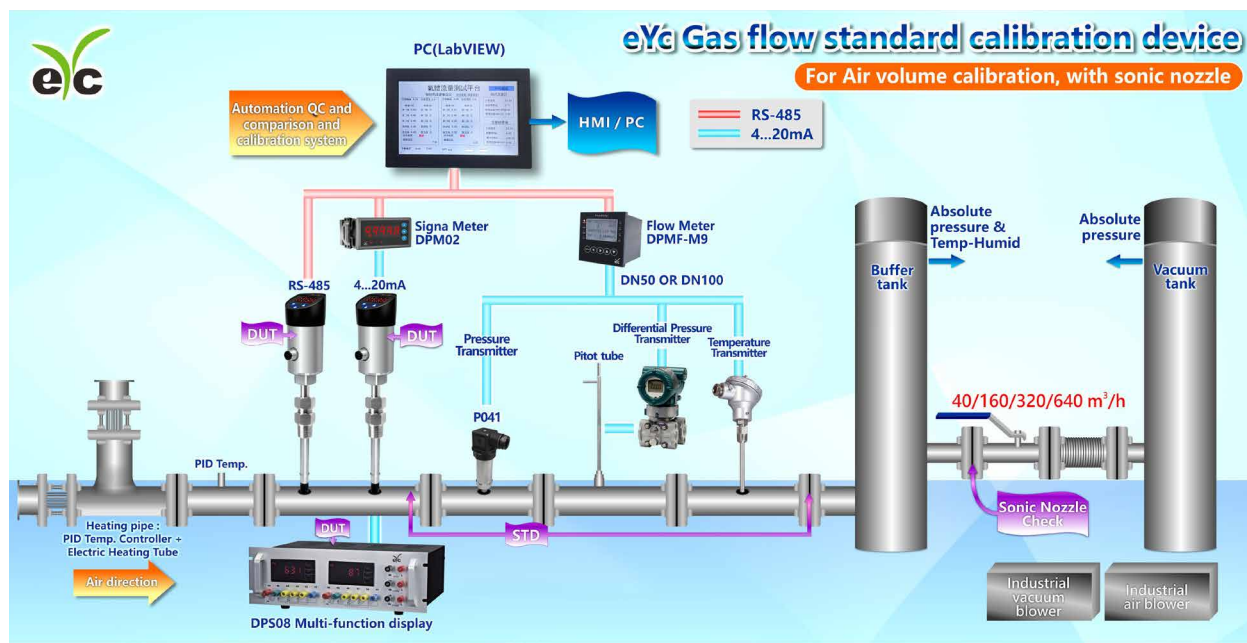
| Introduction |

FTM06D is based on thermodynamic principle, can measure air velocity and air volume, there are 2 temperature sensors inside the probe: one for temperature measurement, the other one as a measuring conveyor after heated.

Temperature difference between the two as a basis for measuring flow rate. When the medium flow rate increases, the temperature difference decreases.

The temperature difference converted to standard signal output after processed that is why flow rate can be measured by these two sensors. All-metal housing, suitable for a variety of pipe diameters.

Applications: Semiconductor, Electronics, Papermaking, Food, Pharmaceuticals, Biotechnology industry, Plant, CDA system, Refrigerated dryer adsorption, PSA nitrogen(N₂) generator

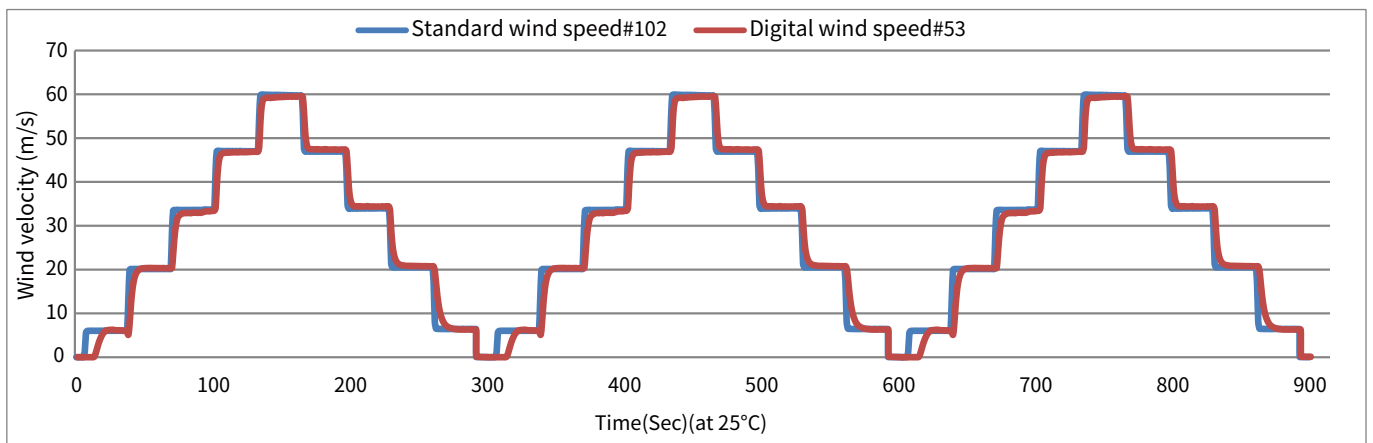


| Specification |

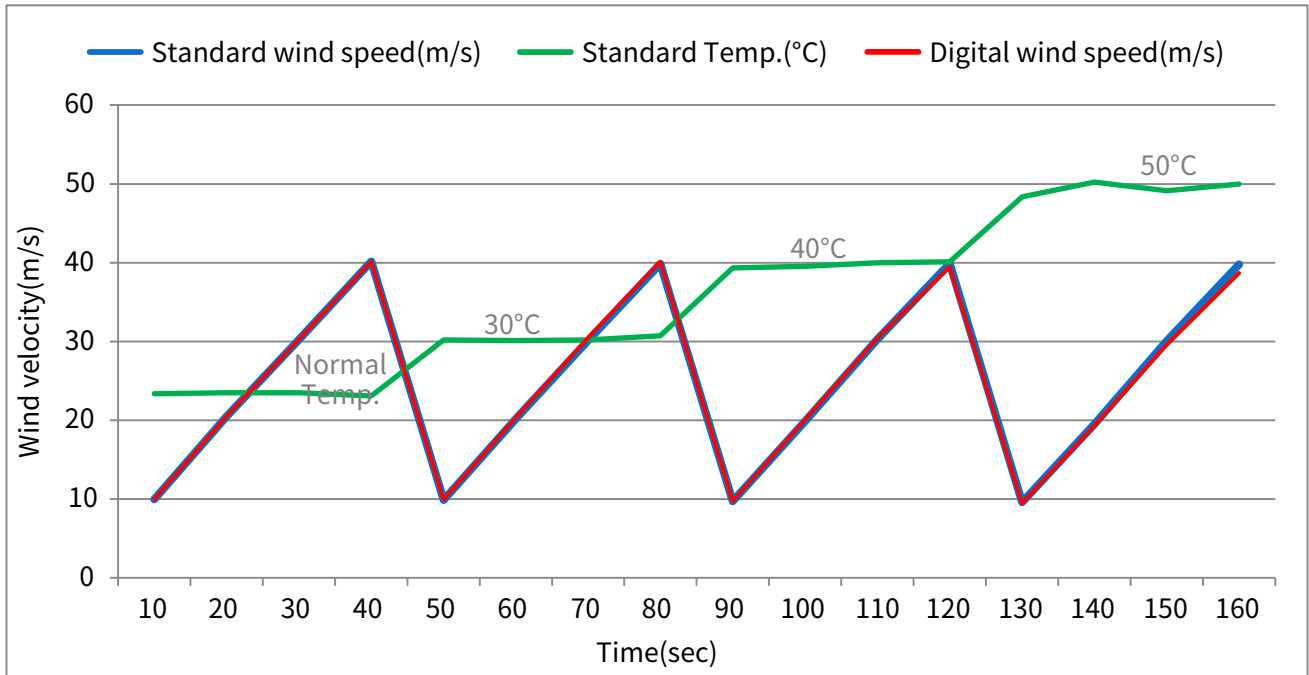
Item	Function & Parameter	
Input	Type	Resistance temperature detector(RTD)
	Range	Air:0 ... 120 m/s
	Minimum initial value	0.2 m/s
	Installation angle effect	<5% of the measured value(When the installation angle<±3 degrees)
Output	Signal	One group output, Analog(4 ... 20 mA / 0 ... 10 V)+RS-485 or Impulse+RS-485
	Signal connection	3-wire
	Product accuracy	Air(at 25°C): ±3%F.S.(Option 1.5%) (Because the probe is affected by the operating Temp., there will be some error)
	Warm-up time	About 120 sec
	Response time	t90>3 sec
	Load resistance	Voltage output: ≥10 KΩ;Current output: ≤250 Ω
	Display & Operation (See page 5 key operation)	Display value
Environmental	Measurement screen	Measure cycle display every 3 sec(Light identification), Out1(Default is Flow m/s), Out2(Default is Temp. °C)
	Unit selection	Out1 / Out2 Unit setting: [m/s], [ft/s], [Nm ³ /h], [L/min], [°C], [°F]
	Function selection	Unit;Output options:0 ... 10 V, 4 ... 20 mA;Pipe setting range:20 ... 9999 mm(Note1)
	Medium	Non-corrosive gas
Electrical	Operating Temp. & Humid.	0 ... 50°C;20 ... 90%RH(Non-condensing)
	Storage Temp.	-20 ... 85°C
	Power supply	DC 24 V±10%
Installation	Current consumption	24 V:110 mA
	Electrical connection	M12 Metal quick connector
Protection	Flange or thread	Metal flange mount or R1/2" metal quick connector
	IP rating	IP65(IP67 option)
Material / Weight	Electrical protection	■ Polarity protection ■ Over-voltage ■ Short-circuit
	Material	Body&Probe:SUS304,Probe head :PC+Glass fiber
	Weight	480 g

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

| 3-Cycle Linear Curve |

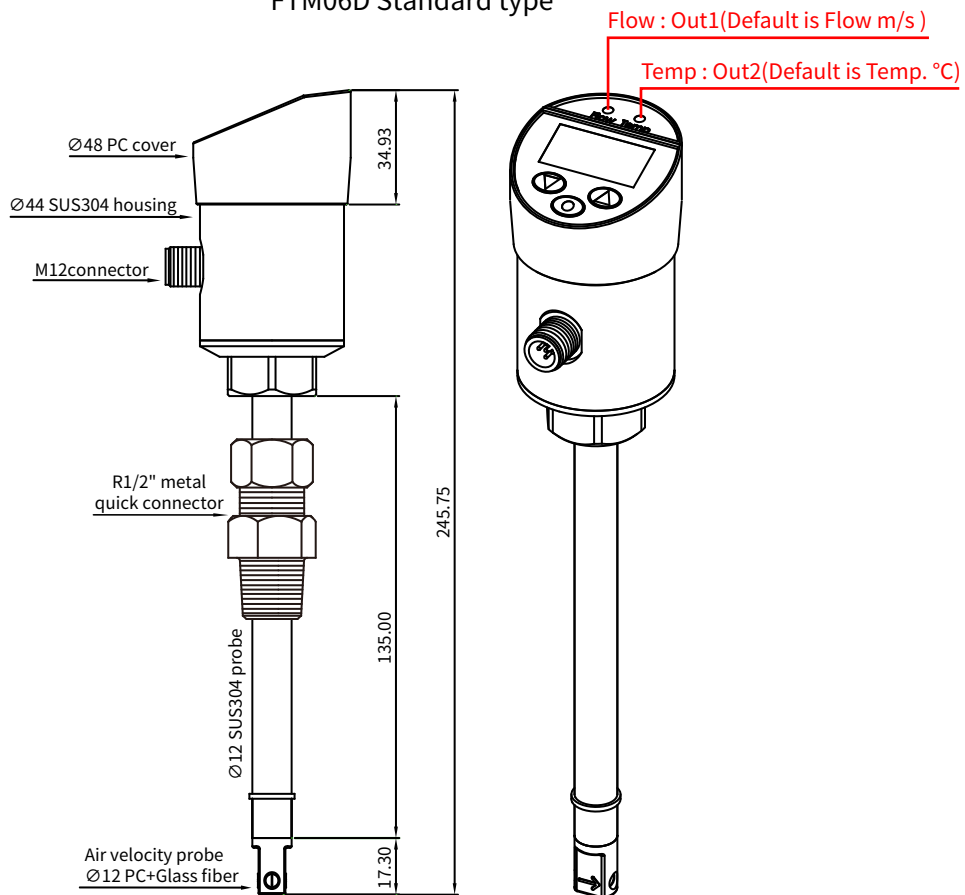


| Temp. Compensation Verification |

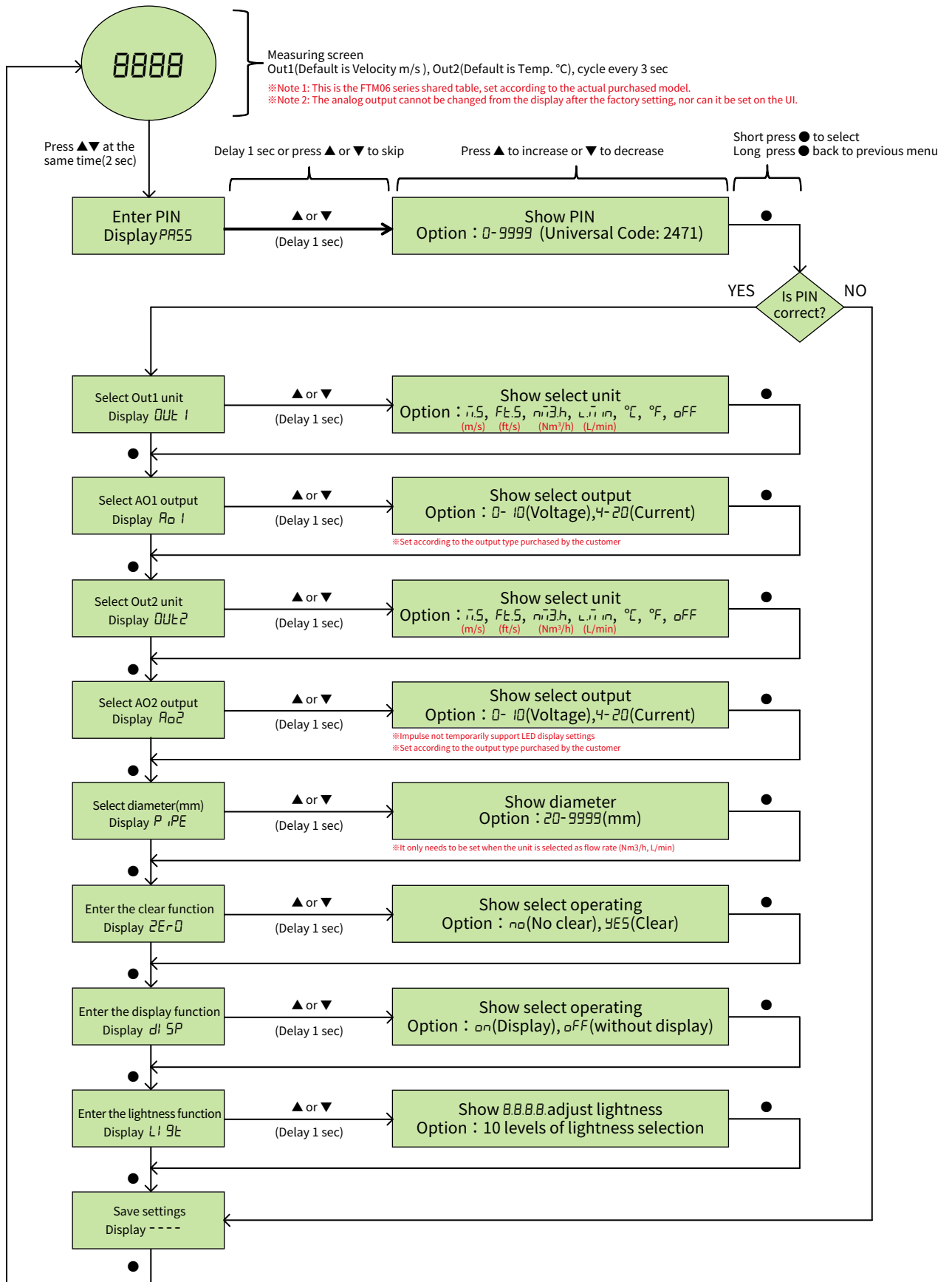


| Dimension | Unit : mm

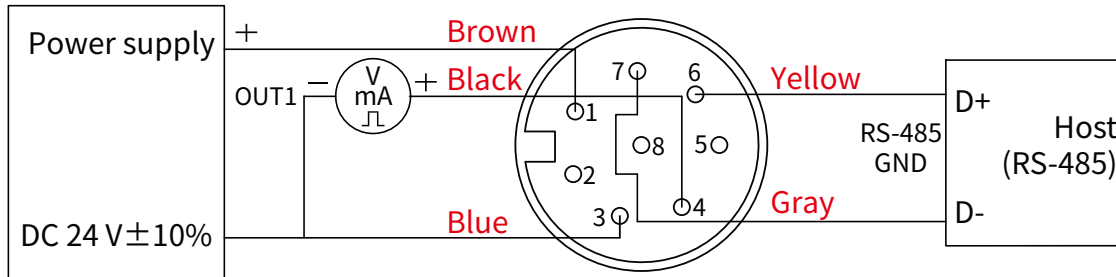
FTM06D Standard type



| Operation Form |



| Connection Diagram |



Analog+RS-485 / Impulse+RS-485

| Ordering Guide |

FTM06D	Medium	Range	Type	Power supply	Installation	Option
	A	10	2	1	3	N
	Air	10 : 10 m/s 20 : 20 m/s 40 : 40 m/s 60 : 60 m/s 90 : 90 m/s 12 : 120 m/s	2 : 4 ... 20 mA+RS-485 3 : 0... 10 V+RS-485 4 : Impulse+RS-485	DC 24 V ± 10%	1 : Metal flange mount 3 : Ø12 Plus R1/2 quick connector	N : Without display D : Display

Note 1. Probe at most 1000 mm, please contact us for delivery and price.

| Additional Option(ILAC/TAF) Test Report |

TAF Calibration Lab

Optional laboratory calibration report, please consult sales.

More Information > [Yuden-tech Official](#) > [Calibration Service](#)

Project	Measurand level or range
Air velocity transmitter	0.2 m/s ... 60 m/s

| Factory calibration(ISO 9001) |

Project	Measurand level or range
Air velocity transmitter	120 m/s(Max)