

THS806 Remote Mount  
TEFLON Cable  
-40 to +200°C



## Features

- Industrial Sensor with High Accuracy & Long-term Stability
- Acid & Alkali Resistant
- High or Low Dew Point
- Built-in Temperature Compensation & Linearization
- Multiple Parameter Measurements - Temperature, Humidity, Dew Point, Frost Point, Wet-bulb Temperature, Vapor Pressure, Mixture Ratio, Absolute Humidity, Specific Enthalpy
- Standard : 2 Analog Outputs or MODBUS RS485
- Option : 1 Analog Output + MODBUS RS485
- Probe Material : PC or S.S.
- Cable : PVC or TEFLON
- Power Supply : 8 ~ 35 VDC and 12 ~ 35 VAC
- Free Programming Software - Physical Quantities, Output, Data Logger, Charts, Calibration

## Application

- Monitoring for High-end HVAC Process, Air Conditioning, Environmental Ventilation Control
- Building, Factory, Hospital, Clean Room, Lab., Storeroom
- Cooling Tank, Crisper, Environmental Chambers, Weather Station
- Indoor Pool, Greenhouse, Livestock Nursery
- Pharmaceutical, Textile, Agriculture, Food, Manufacturing Industry, Monitoring for Process, Drying Facility, Chemical Industry

## Specifications

General	
Sensing Elements	Capacitive Humidity Sensor & Pt100 Class A Temperature Sensor
Operating Range	Temperature : -40 to 200°C
	Humidity : 0 to 100% RH
	Dew Point : -40 to +60°C
Accuracy @ 25°C	Temperature : ± 0.15°C
	Humidity : ± 2 %RH
Temperature Influence	0.05 %RH / °C (of body)
Load Resistance	Current Output : Max. 500 Ω Voltage Output : Min. 10 KΩ

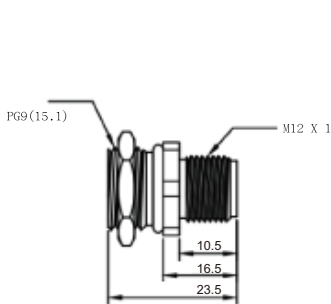
Output Calibration	Software (Zero & Span)
Response Time t90	<20 Sec (Membrane Filter / S.S. Metal grid filter with mesh) <30 sec (Sintered filter)
Output	RS485 and 2 Analog Output : 0 - 20mA / 4 - 20mA / 0 - 1V / 0 - 5V / 0 - 10V
Signal Connection	3-wire
Display Type	LCD Module with back light
Display Range	Upon request, one decimal place
Height of character	5.56 mm
<b>Electrical, Mechanical &amp; Environmental</b>	
Power Supply	DC Voltage : 8 ~ 35 VDC AC Voltage : 12 ~ 30 VAC
Current Consumption	DC Voltage : 24V - 60mA / 12V - 120mA AC Voltage : 24V - 140mA / 12V - 230mA
Electrical Connection	M12 metal connector with 2m cable or terminal (cable gland)
Medium	Air
Operating Temperature	0 to +60°C
Operating Humidity	0 to 95%RH (Non-Condensing)
Proof Temperature	PC Probe : Max. 120°C;      S.S. Probe : Max. 200°C
Cable	PVC Cable : Max. 80°C;      Teflon Cable : Max. 200°C
Storage Temperature	-25 to +60°C
Filter	PC membrane filter (PC Probe); Metal grid filter with mesh (S.S. Probe)
<b>Certification</b>	
Certification	CE
<b>Protection</b>	
IP Rating	Housing : IP65;      Probe : IP20
Electric Protection	● Polarity Protection      ● Over-Voltage      ● Short-Circuit
<b>Installation</b>	
Installation	PC Probe : Plastic flange (standard)
<b>Material</b>	
Housing	PC fire-proof class (PC-110)
Probe	PC fire-proof class (PC-110) / S.S. (SS304)

## Physical Quantity Measuring Range List

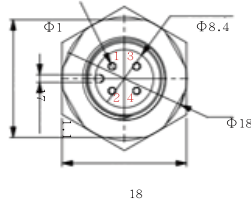
Physical Quantity	THS806 Remote Mount S.S. Probe + TEFLON Cable
Temperature (T)	-40 ~ +200°C
Humidity (H)	0 ~ 100%RH
Dew Point (D)	-40 ~ +60°C
Frost Point (F)	-40 ~ 0°C
Wet-bulb Temp. (W)	0 ~ 100°C
Vapor Pressure (E)	0 ~ 1100mbar
Mixture Ratio (R)	0 ~ 999g/kg
Absolute Humidity (V)	0 ~ 700g/m <sup>3</sup>
Specific Enthalpy (S)	0 ~ 2800kj/kg

## Electric Connector

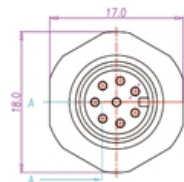
unit : mm



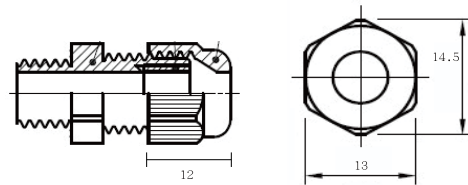
【M type (M12-4PIN metal connector)  
RS-485 or analogue



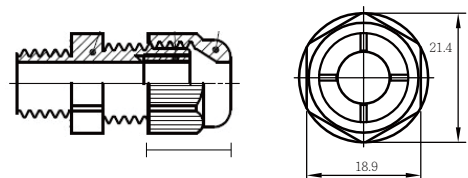
【M type (M12-8PIN metal connector)  
RS-485+analogue



【N type (M12 cable gland)】RS-485 or analogue

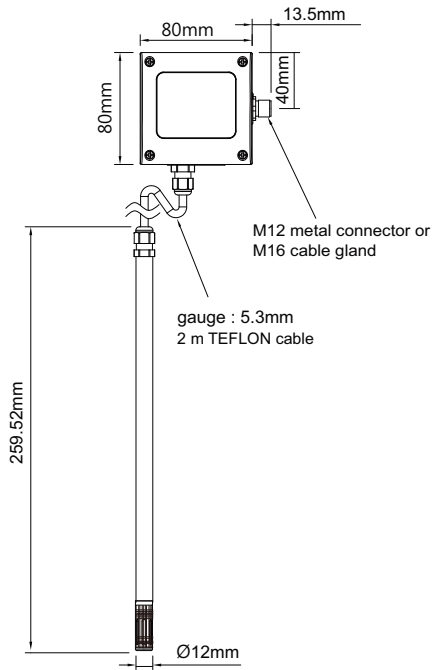


【N type (M16 cable gland)】RS-485+analogue

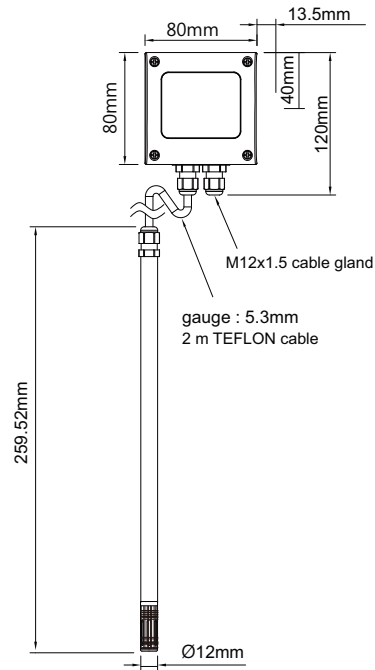


## Dimensions

(S.S. probe + 2 m TEFLON cable)

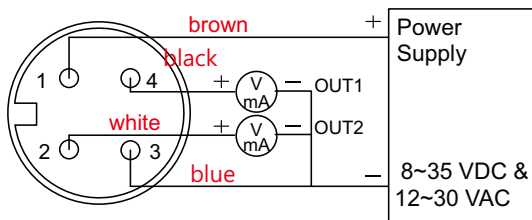


M type (4P) : RS-485 or analogue  
M type (8P) or N type : RS-485+ analogue



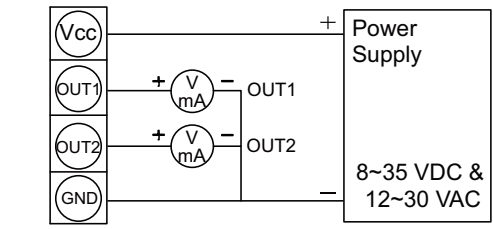
N type : RS-485 or analogue

## Connection Diagram



M12 connector

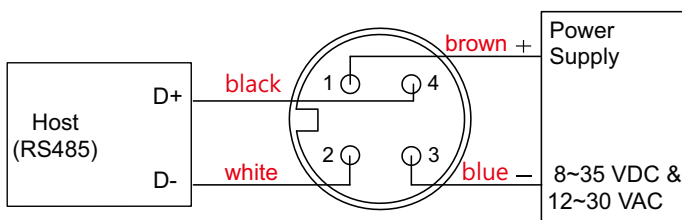
M type (4P)



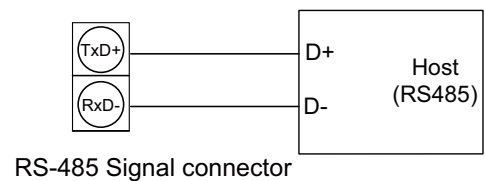
4P terminal

N type

## Comport Connections



M type (4P)

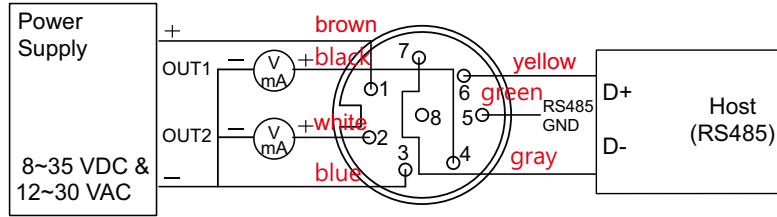


RS-485 Signal connector

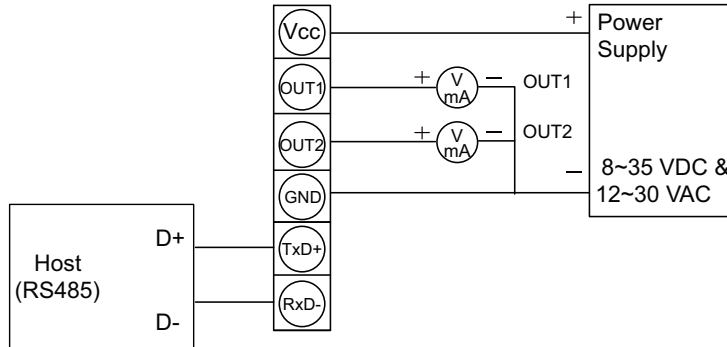
N type

Note : When output of ordering code is RS-485 (without analogue), RS-485 diagram of default setting is M type.

# Analog + RS485 Connections



M type (8P)



N type (M16)