

ECONOMIC MODEL TEMPERATURE & HUMIDITY TRANSMITTER



Wall mount type

Duct type

Remote probe type

Outdoor type

■ Features

- Configure adaptor available for setting.
- Single channel with selectable physical quantity.
- With sensing element module for easy replacement and repair.
- RS485 Modbus data with integer and floating type. Support metric and imperial unit.
- 3 models for industrial applications
- 0 ~ 100%RH measurement, temperature range up to +120°C (248 °F)
- Excellent quality and stable measurement
- IP-65 housing

■ Applications

- Semiconductor and microelectronics industry
- Pharmaceutical industry, paper industry
- Environmental chambers, drying equipment, spraying equipment
- Agriculture, farms
- Greenhouse, storage room, cooling chamber
- Building Automation
- Environment and ventilation control

■ Order Information

MEHT	—	120	—	3	—	1	—	A	—	M	—	D2
A		B		C		D		E		F		G

A. Model:

MEHTAA
MEHTA
MEHT

C. Output:

2 - 4 ~ 20mA
3 - 0 ~ 10V
5 - 0 ~ 5V
6 - 0 ~ 1V
4 - RS485

D. Temperature Scale:

1 - 0 ~ 50°C
2 - 0 ~ 100°C
S - By order
X - No

F. Psychometric calculations:

(Option)
M - Yes
X - No

B. Installation:

110 - Wall mount
120 - Duct
130 - Remote probe
140 - Outdoor

E. Connection:

A - Cable gland
B - M12-4 pin (with 2m cable)

G. LED Display :(Option)

D1 - Forward
D2 - Reverse

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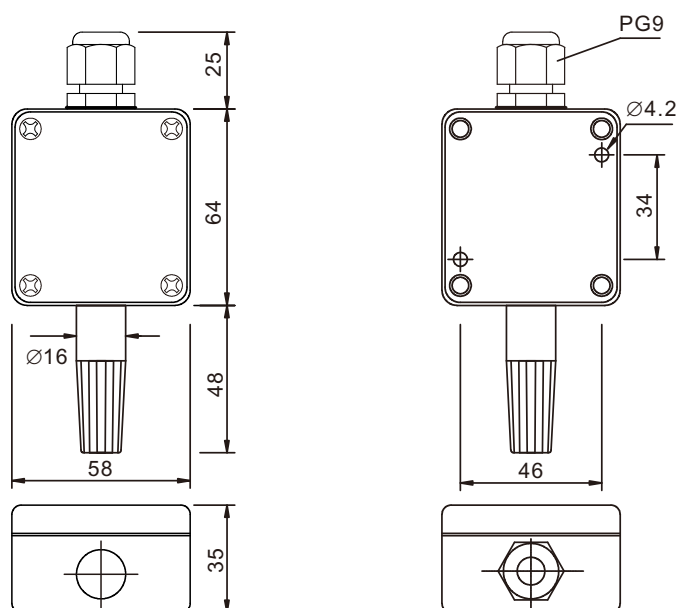
■ Specifications 規格

Model Name		MEHTAA	MEHTA	MEHT
Humidity 濕度	Measurement range 量測範圍	0 ~ 100 %RH	0 ~ 100 %RH	0 ~ 100 %RH
	Accuracy(including non-linearity, hysteresis, and repeatability) 精度 (包含非線性誤差, 遲滯誤差, 和非重複性誤差)	±1.5%RH@25°C (20~80%RH) ±2%RH@25°C (0~20%RH)/ (80~100%RH)	±2%RH@25°C (20~80%RH) ±3%RH@25°C (0~20%RH)/ (80~100%RH)	±3%RH@25°C (20~80%RH)
	Temperature coefficient 溫度係數	typ. ±0.05%RH/°C (from 0°C to 80°C)		
	Humidity Hysteresis 遲滯誤差	±1%RH		
	Recovery time after 150 hours of condensation 回復時間,在150小時結露之後	10 second		
	Long term drift 長時間飄移	0.25%RH/year		
	Response Time from 33 to 75%RH 反應時間從33 到 75%RH	10 second (at 1m/s air flow)		
Temperature 溫度	Measurement range 量測範圍	-40 ~ 120 °C		
	Accuracy (including non-linearity, hysteresis, and repeatability) 精度	±0.7°C (-40 ~ 5°C) / ±0.3°C (5 ~ 60°C) / ±0.9°C (60 ~ 120°C)		
	Long term drift 長時間飄移	0.02°C/year		
Analog output 類比輸出	Current output 電流輸出	3-wire, 4 ~ 20mA		
	Voltage output 電壓輸出	0 ~ 1 V / 0 ~ 5 V / 0 ~ 10 V		
	Accuracy @25°C 精度	±0.1% full scale		
	Temperature dependence 溫度係數	±0.005%/°C full scale		
	External loads 輸出負載	current outputs RL < 500 ohm/ voltage output 0 ~ 1 V output RL > 2K ohm 0 ~ 5 V and 0 ~ 10 V outputs RL > 10K ohm		
Digital output 數位輸出	RS485	meet the standards TIA/EIA-485-A		
	Protocol	MODBUS RTU		
Psychrometric calculations(Optional) 濕度單位選擇(選配)		(Td) dew point temperature, (R) mixing ratio, (Tf) frost point temperature (A) absolute humidity, (Tw) wet bulb temperature, (E) water vapor pressure, (S) enthalpy,		
LED Display (option)	Number of bits 位數	3-digit, 0.4 "7-segment LED		
	Display method 顯示方式	OUT1 stable, OUT2 flash 3 time, alternate		
LED 顯示器	View direction 顯示方向	Forward or Reverse		
Power supply 電源供應	DC Voltage 直流電壓	15 ~ 35VDC		
	AC Voltage 交流電壓	12~ 29 VAC		
Mechanics 機構	Housing material 外殼材質	PC, POLYCARBONATE		
	Housing classification 保護等級	IP 65		
	Probe pressure 測棒耐壓	10bar		
	Cable of remote probe version	2m, shield PVC 80° C		
Probe material 測棒材質	Wall mount version 壁掛型	ABS		
	Duct version 風管型	aluminum		
	Remote probe version 分離型	brass nickel-plated		
temperature range 工作溫度		Without display -40 ~ 80°C (-40 ~ 176°F)/ With display -25 ~ 80°C (-13 ~ 176°F)		
Probe temperature range 棒測工作溫度		Duct and remote probe version -40 ~ 120 °C (-40 ~ 248 °F)		
Electromagnetic compatibility 電磁干擾防護		Complies with EMC standard EN61326-1, Industrial Environment		

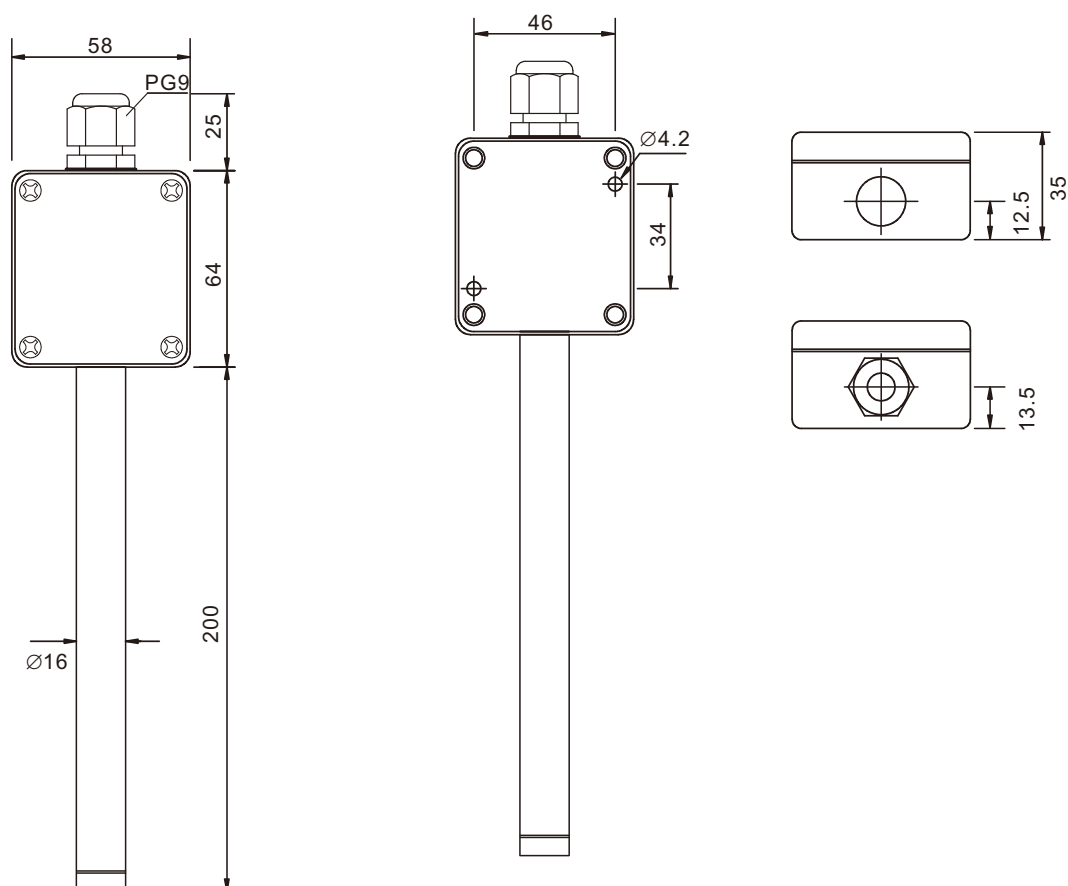
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DIMENSIONS (mm)

110 Wall mount version

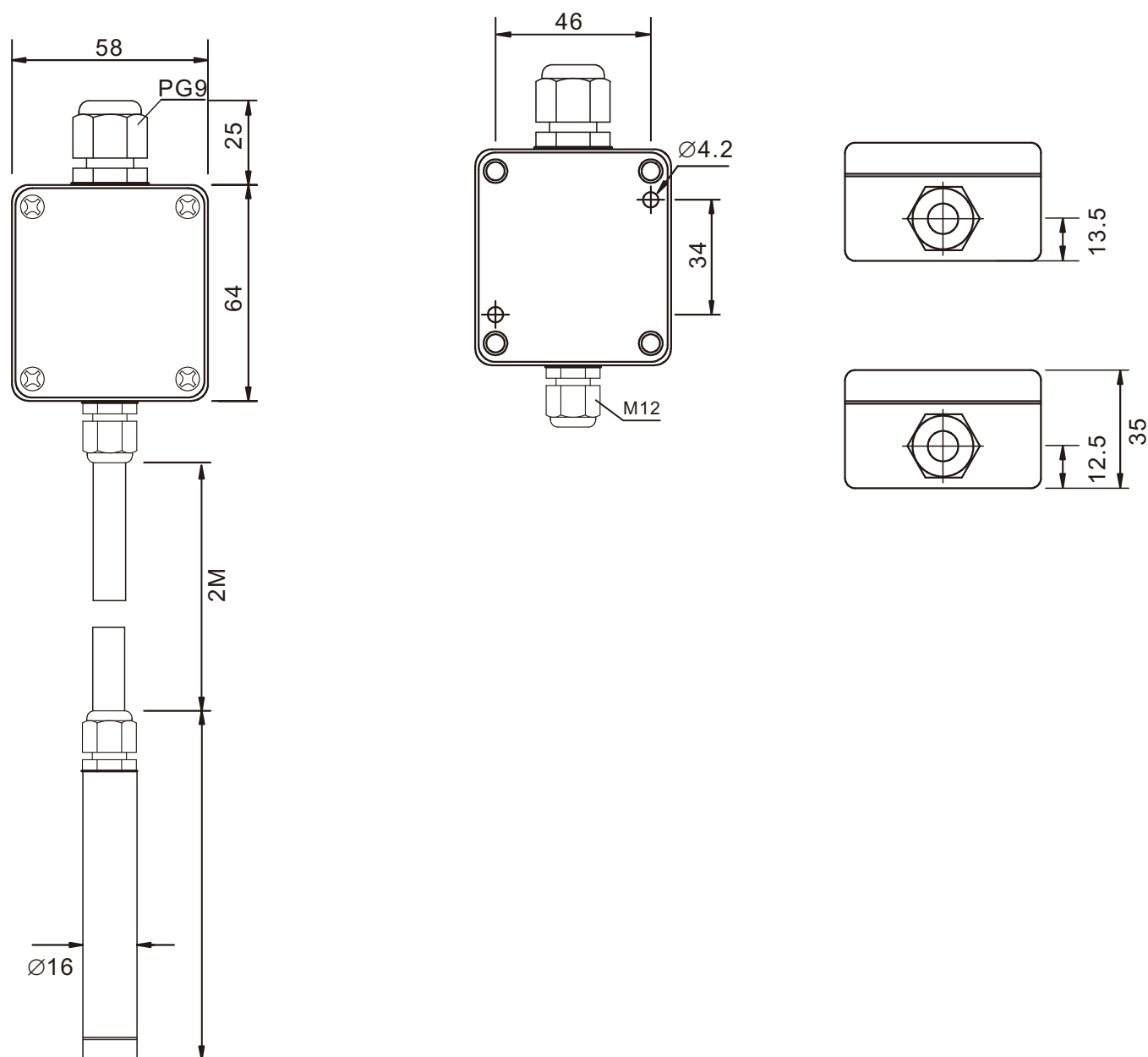


120 Duct version



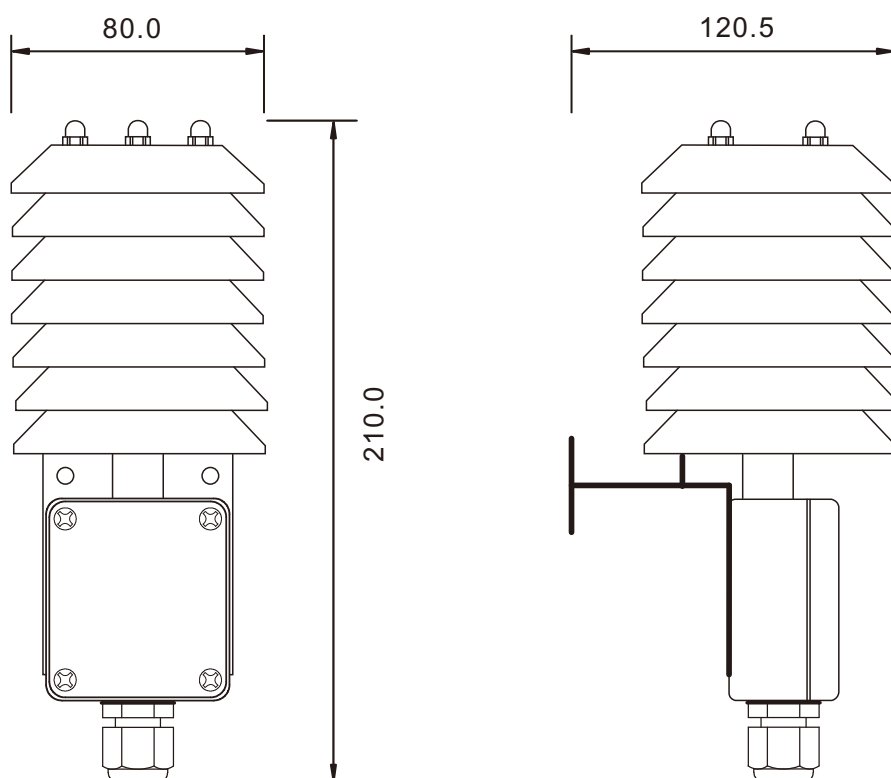
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130 Remote probe version



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140 Outdoor version

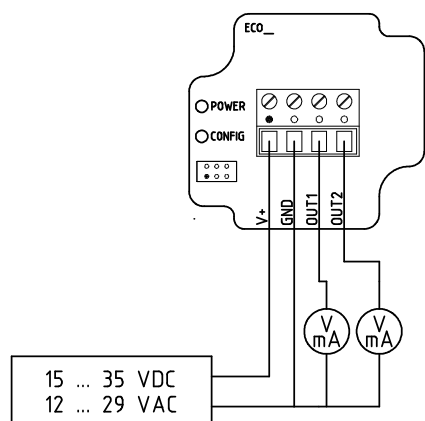


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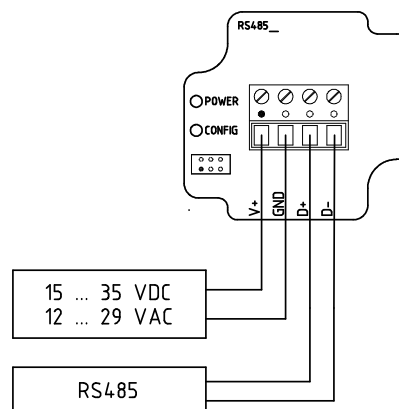
CONNECTION DIAGRAM

Cable gland with terminal block

Analog output

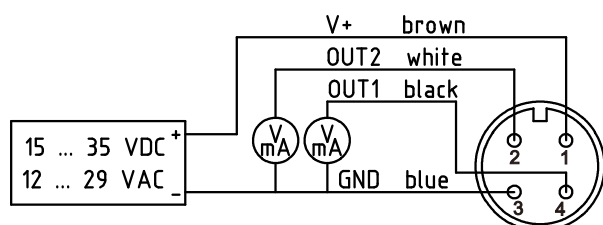


RS485 output

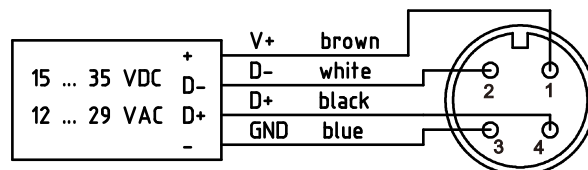


M12 – 4 pin

Analog output

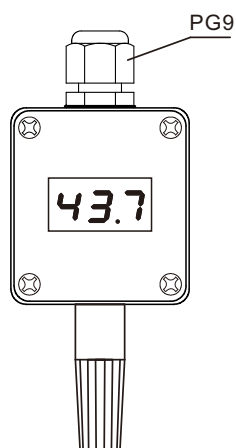


RS485 output

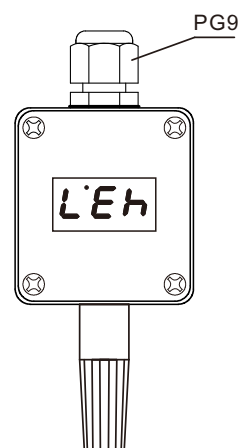


LED DISPLAY

Forward view : D1



Forward view : D2



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PHYSICAL QUANTITY OUTPUT RANGE

	<u>Metric</u>	<u>Imperial</u>
- Temperature <u>T</u>	-40 ... 120 °C	-40... 248 °F
- Relative Humidity <u>RH</u>	0 ... 100 %	0 ... 100 %
- Dew point <u>Td</u>	-20 ... 100 °C	-4 ... 212 °F
- Frost / dew point <u>Tf</u>	-20 ... 100 °C	-4 ... 212 °F
- Wet bulb temperature <u>Tw</u>	-40 ... 100 °C	-40 ... 212 °F
- water vapor pressure <u>E</u>	0 ... 1013 mbar	0 ... 14.7 psi
- Mixing ratio <u>R</u>	0 ... 30000 g/kg	0 ... 210000 gr/lb
- Absolute humidity <u>A</u>	0 ... 550 g/m ³	0 ... 240 gr/ft ³
- Enthalpy <u>S</u>	-40 ... 40000 kJ/kg	-10 ... 20000 BTU/lb

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