Quality&**Precise**

MAXWELLON HT4018

-40°C ~ +180°C

High Temp Humidity and Temperature Transmitter

2024

Maxwellon

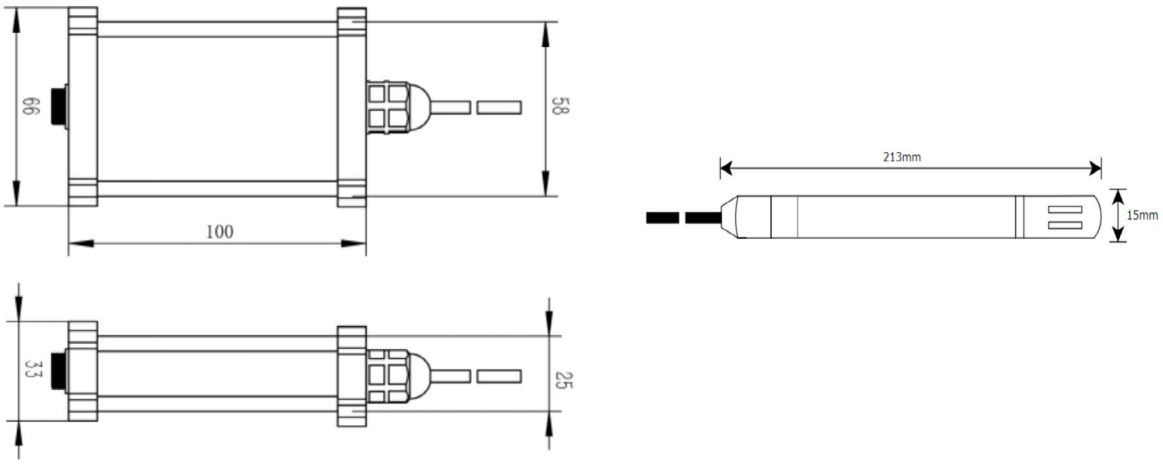
The HT4018 High-Temperature Transmitter utilizes an independent thin-film capacitive humidity sensor as its humidity-sensitive component and a platinum resistor as its temperature-sensitive component. The thin-film capacitive humidity sensor offers strong stability and high temperature resistance, enabling it to operate reliably in high-temperature environments for extended periods. Similarly, the platinum resistor features a wide temperature measurement range, high accuracy, and excellent operational stability. The HT4018 High-Temperature Transmitter is capable of operating within a range of up to +180℃.

Key Feature

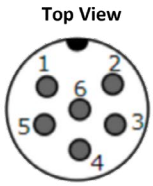
- Cutting-edge polymer film sensor technology
- Ultra-fast response time and outstanding long-term stability
- Anti-condensation to prevent condensation, resistance to particulate pollution, oil vapor, and most chemicals
- Multi-point temperature compensation calibration before leaving the factory
- Excellent anti-interference capability
- IP65 protection rating, providing reliable protection even in harsh environments
- Polymer materials possess acid resistance, alkali resistance, water resistance, and have low requirements for operating environments

Dimension

Unit: mm(±0.5)



Connection



1 > DC: 15-28V Red
2 > GND Black
3 > 485-
4 > Temlout White
5 > Humlout Yellow
6 > 485+

PIN	1	2	4	5
Signal	15 - 28V	GND	TemVout	HumVout
Explanation	Power +	Power -	Temperature Voltage Output	Humidity Voltage Output

Specifications

Measurement	
Relative Humidity Measurement Range	0 ~ 99.9%RH
Application Temperature Range	-40°C ~ 180°C
Measurement Accuracy	
Humidity	±3%RH(25°C)
Temperature	±0.5°C(25°C)
Response Time	
Humidity	8s
Temperature	1s
Output	
Humidity Voltage Output	0 ~ 10V (0 ~ 99.9%RH)
Temperature Voltage Output	Customizable 0 ~ 10V output (-40 to 180°C)
Output Load Capability	>50KΩ
Power Supply	
Normal Measurement	15 ~ 28V/30mA
Environment	
Operation Temperature	Stainless steel humidity sensing probe: -40°C ~ 180°C
	Aluminum alloy square housing: -40°C ~ 80°C
Storage Temperature	-30°C ~ 80°C
Relative Humidity	0 ~ 99%RH
Sample Gas Flow Rate	> 1 L/min
Pressure	0 ~ 50bar
Others	
Housing	Stainless steel
Protection Level	IP65
Stainless Steel Mesh Filter	Filter level 40 ~ 50um
Electromagnetic Compatibility	IEC 61326-1

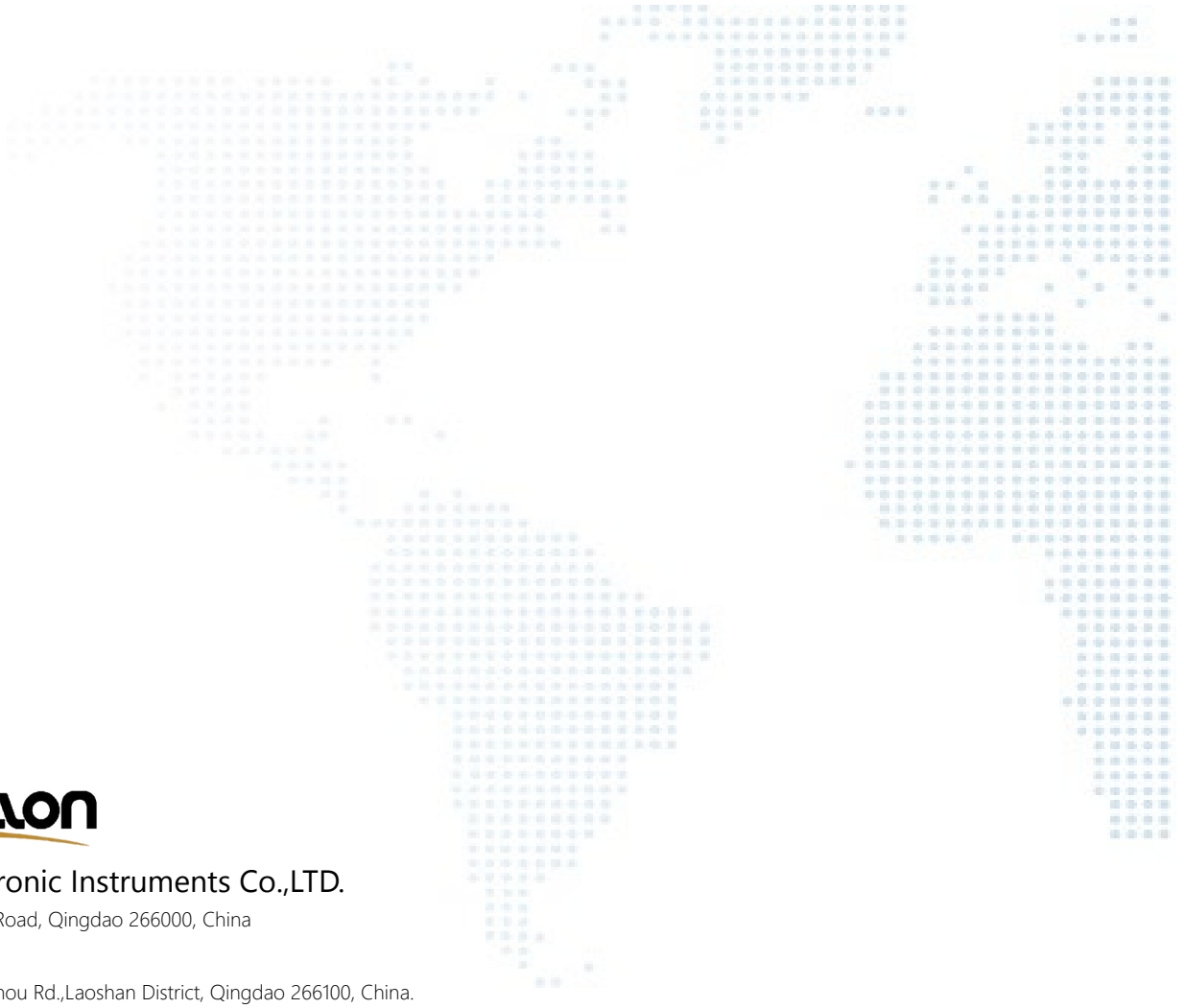
Conditions

Working Conditions

Ensure stable performance of the sensor within the recommended temperature range of -40°C to +180°C. Operating beyond the recommended range may result in temporary measurement drift.

Storage

The humidity sensor is a sensitive electronic component and requires careful handling. Prolonged exposure to high concentrations of chemical vapors may cause measurement drift in the sensor. Therefore, it is recommended to store the sensor in its original packaging and adhere to the following storage conditions: temperature range of -30°C to 80°C. During production and transportation, ensure that the sensor is kept away from high concentrations of chemical solvents. Avoid the use of volatile adhesives, sticky tapes, labels, or packaging materials with volatile compounds such as foam bags or foam plastics.



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