ATO

Temperature and Humidity Transmitter
ATO-TAHT-FG6010
User Manual

Product overview

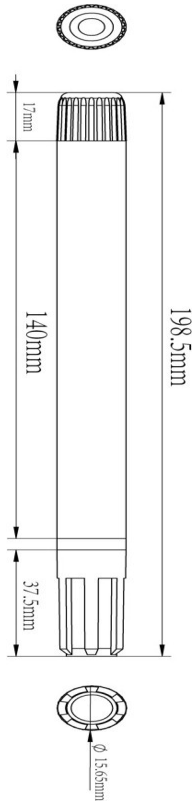
FG6010 pipeline voltage type temperature and humidity transmitter, the product adopts the capacitive digital sensor as the temperature and humidity measurement unit,With stable and reliable signal processing circuit, the temperature and humidity in the environment can be converted into the corresponding standard signals, with high quality, The quantity integrated digital temperature and humidity sensor guarantees the long-term stability, low delay and strong anti-chemical pollution ability of the transmitter,Repeatability of the transmitter.

Application scope

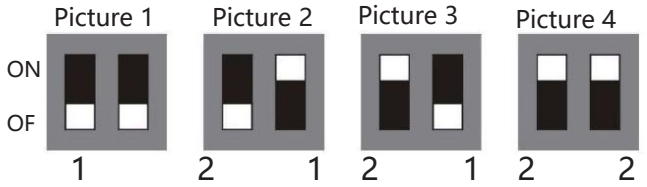
It can be widely used in textile, food, scientific research, environmental protection, warehouse, weather station (station), workshop, workshop, warehouse, book, Hall, office, microcomputer room, laboratory, greenhouse and other environmental temperature and humidity monitoring.

Product highlights

Long-term stability, wide temperature measurement range, high and low temperature measurement precision, small volume, light weight, high measurement accuracy, response speed,Faster.



Temperature measurement range Setting



P1： 0-50 degrees centigrade

P2： -20~80 degrees centigrade

P3： -40~60 degrees centigrade

P4： -40~120 degrees centigrade

Note: please switch off the transmitter power before you select the dial switch for the measuring range.

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Product parameters

Range (can be set up through the jumper wire) :
0 ~ 50 ℃ / - 20 ~ 80 ℃ / - 40 ~ 60 ℃ Accuracy:
(25℃)±0.3 ℃Resolution: 0.1 ℃
Long term stability: < 0.1 ℃ / year

Relative humidity Range: 0 ~ 99.9% RH Accuracy (package nonlinearity, hysteresis and repeatability) : ±3% RH
Factory calibration uncertainty:
±0.6%RH （0~40%RH） /±1.0%RH
（ 40~97% RH ）

Response time (90 %) static air 8 s, plastic barrier
Resolution: 0.1%RH
Long-term stability: <0.5 % RH/year

Working environment
Working environment temperature： -40~120℃
Working environment humidity: 0 ~ 99.9 percent no condensation Store the scope

Storage range
Temperature: 0 ~ 60 ℃
Humidity: < 90% RH

Input and output
Working voltage: 12~24VDC

Power time: 3s
Product power consumption:
10mA (typical value)
Humidity voltage output: 0~10VDC Temperature voltage output: 0~10VDC
Note: the above parameters, such as no special instructions, all under the condition of 25 ℃

Formula:
Temperature T set conversion: T = (℃) $\frac{\text{Actual measuring voltage (V)}}{\text{Upper limit value - lower limit value}}$ +Temperature limit

Example:

Temperature 0 ~ 50 ℃ conversion: setting T = (℃) = $\frac{\text{actual measurement voltage (V)}}{0.2\text{V/° C}}$

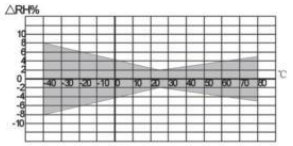
Temperature - 20 ~ 80 ℃ conversion: setting T (℃)= $\frac{\text{Actual measuring voltage (V)}-20}{0.1\text{V/° C}}$

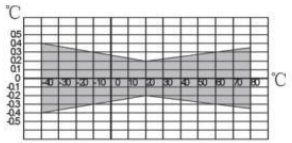
Temperature - 40 ~ 60 ℃ conversion: setting T = (℃) $\frac{\text{Actual measuring voltage (V)}-40}{0.1\text{V/° C}}$

Conversion of humidity setting: humidity T (% RH) $\frac{\text{actual measurement voltage (V)}}{0.1\text{V/\%RH}}$

Humidity setting conversion: humidity T (% RH) = $\frac{\text{Actual measuring voltage}}{0.1\text{V/\%RH}}$

Temperature and humidity error curv





The measurement values of the products may be affected by the following factors:
1. Temperature error The stable time in the test environment is too short. Near heat source, cold source, or direct sunlight.
2. Humidity error The stable time in the test environment is too short. It is forbidden to be in steam, fog, water curtain or condensation environment for a long time.
3, pollution In the case of dust or other pollution, products must be cleaned regularly.

Certificate of approval

Product Name: Product Model:
Factory No. : Inspector:
Date of manufacture:

Warranty card

User contact:	
Model:	
Purchase date:	
Warranty:	

* If the content crisis, then the warranty card is invalid, because the user is required to record the content when purchasing.The warranty items in the warranty card are breathtaking and the free items bound in the warranty card are maintained.

* During the warranty period, in case of any failure of the product, users are requested to issue a real warranty card to the dealer, purchase an invoice and propose maintenance requirements.