

GE-373-Ex ATEX Temperature Humidity Sensor

GE-373-Ex Explosion Proof Temperature Humidity Sensor adopts a stabilized Ex-proof shell to isolate the flammable point from external gas and dust, achieve the Ex grade to Ex db IIC T6 Gb ($-20^{\circ}\text{C} \leq T_a + 80^{\circ}\text{C}$), Ex tb IIIC T85 $^{\circ}\text{C}$ Db ($-20^{\circ}\text{C} \leq T_a + 80^{\circ}\text{C}$). It has domestic and international ATEX explosion-proof certificates. There are a variety of range options, and the signal output can be 4-20mA or RS-485.



Type:

GE-373-EX wall mount type for room or outside area

GE-373-EX insert type for duct or pipe air flow

The objection of the declaration is in conformity with the relevant EU harmonization legislation: ATEX directive 2014/34/EU, Machinery directive 2006/42/EC. The ATEX grade is Ex db IIC T6 Gb ($-20^{\circ}\text{C} \leq T_a + 80^{\circ}\text{C}$), Ex tb IIIC T85 $^{\circ}\text{C}$ Db ($-20^{\circ}\text{C} \leq T_a + 80^{\circ}\text{C}$) IP65; or **Ex II 3GD Ex dc IIC T6 Gc** ($-20^{\circ}\text{C} \leq T_a \leq +80^{\circ}\text{C}$) and **Ex tc IIIC T85 $^{\circ}\text{C}$ Dc** ($-20^{\circ}\text{C} \leq T_a \leq +80^{\circ}\text{C}$) IP65 for **gas** and **dust** explosion prevention.

Specification:

Relative Humidity:

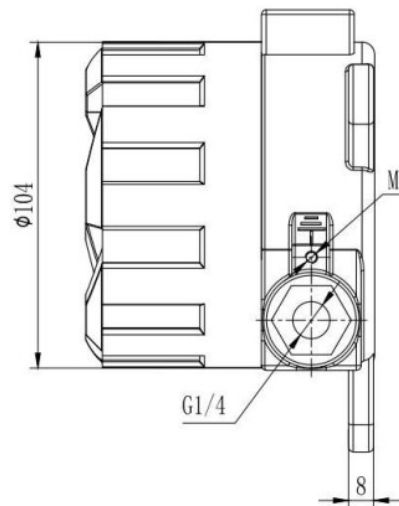
- * Sensor: Capacitance polymer
- * Range: 0~100%RH
- * Output: 4~20mA / 0~10VDC / RS485
- * Accuracy: 2%, 3% and 4.5%RH(25 $^{\circ}$ C, 20~80%RH)
- * Hysteresis: < $\pm 1\%$ RH
- * Response time: < 10s (25 C, in slowly flow air)
- * Drift: < $\pm 0.5\%$ RH/year

Temperature:

Sensor: Solid state band gap, RTD or thermistors
 Range: 0~50 $^{\circ}$ C 0~100 $^{\circ}$ C or -40~120 $^{\circ}$ C or other
 Output: 4~20mA/0~10V/RS485, RTD or thermistors
 Accuracy: < $\pm 0.2^{\circ}\text{C}$ @ 25 C

Electronic:

Power: Voltage 24V DC

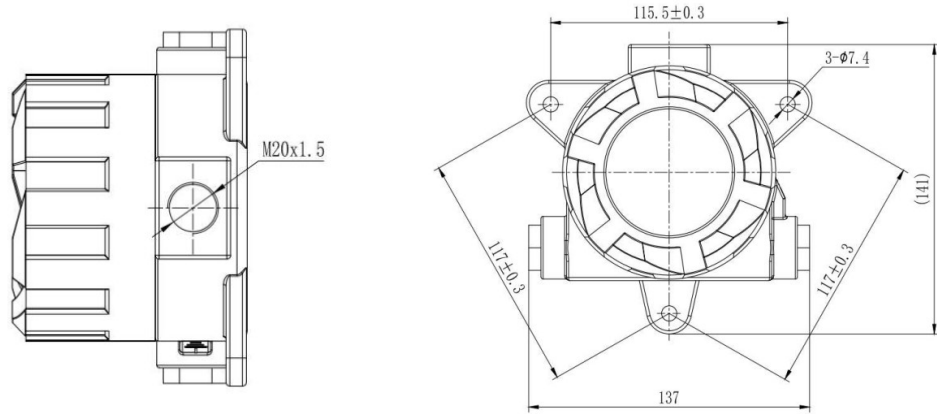


Output Load: <500Ω (current), >2KΩ (voltage)

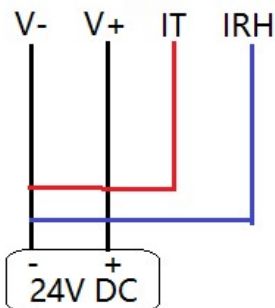
Display: Large LCD screen digital display, optional

Display Accuracy: 0.1° C, 0.1%RH

Display Resolution: 0.1° C, 0.1%RH



Wire Connection:



v+: DC 24V power supply +

v-: DC 24V power supply -

IT: Temperature signal

IRH: Humidity signal

RS485 or 0-10V will be similar

How to order:

1. Type number: GE-373-Ex

wall mount type or Insert type for duct air flow

2. Output signal: 4-20mA is standard, 0-10V or RS485 need declaration

3. Measure range: 0-100% humidity is standard, the standard temperature range is -20°C~60°C, other range should be declared.

4. Ex-grade: standard is Ex II 3GD Ex dc IIC T6 Gc (-20°C ≤ Ta ≤ +80°C) and Ex tc IIIC T85°C Dc (-20°C ≤ Ta ≤ +80°C);

Ex db IIC T6 Gb Ex tb IIIC T85°C Db is available too; if need SIL3 products, please declare it when quote or order.