

808H5V5 humidity transmitter

808H5V5 module humidity transmitter is designed based capacitive humidity sensor. This product utilize craftwork of SIP, so own a extremely small body. That make it to easy use as component in kinds of humidity measuring and controlling products.

Can supply defined data each products desired by customer.

Feature

Low cost, capacitor polymer sensor

Voltage output linear response relative humidity

High accuracy, long term stability.

interchangeable

colophony enveloped, can work even in bad environment



Application

Meteorological instrumentation , industrial process control , RH measurement instrumentation etc.

Specification

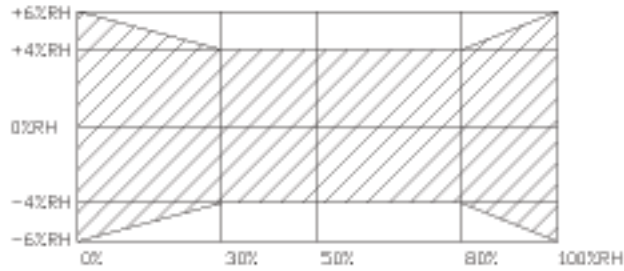
Model	808H5V5
Measuring range	0~100%RH
Signal output	0.8~3.9V @25℃
Accuracy	$\leq \pm 4\%RH$ (at 25℃ , 30~80%RH, when the power supply is 5VDC)
Electrical current (Ic)	Typical current: 0.38 mA ; max current <0.5mA
Power supply	5V DC $\pm 5\%$
Operating environment	-40~+85℃
Storing environment	-55~+125℃
Responding time	<15s
stability	<1%RH per year
interface	3 pin 2.54mm between, SIP
dimension	12.2×8×4 mm

Typical humidity data responding to output

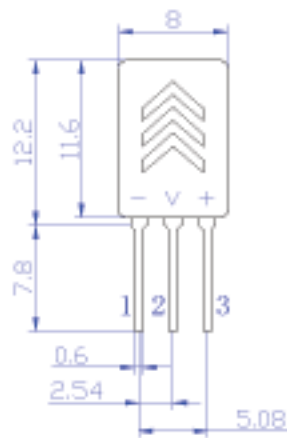
Based as the power supplied by 5.0V DC, at 25°C environment

	30%RH	40%RH	50%RH	60%RH	70%RH	80%RH
808H5V5	1.73V	2.08V	2.41V	2.72V	3.01V	3.30V

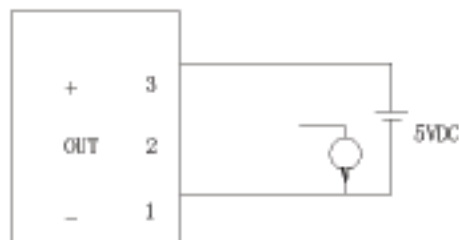
accuracy according to range



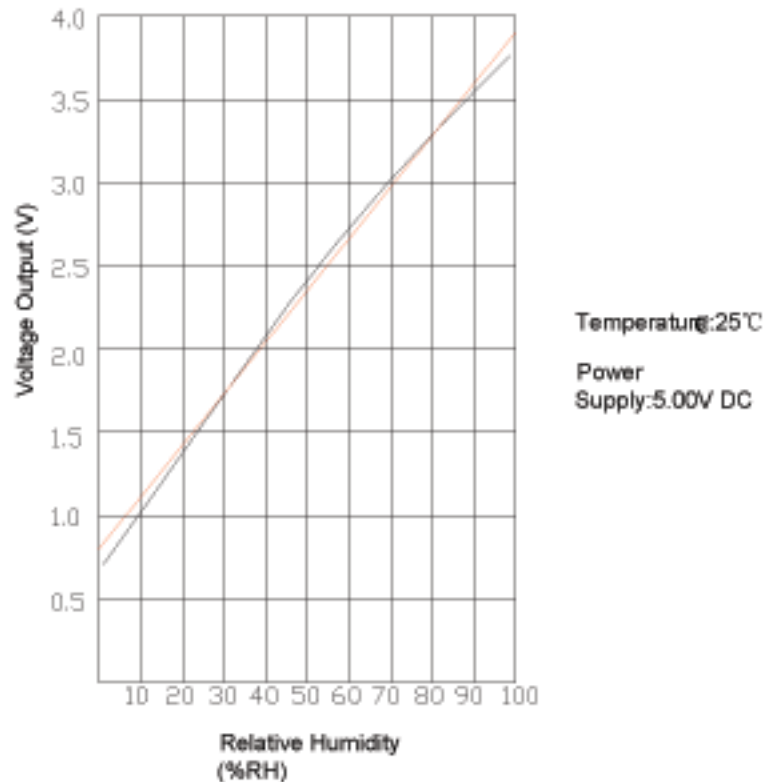
Dimension (mm)



Application



Typical data curve(808H5V5)



0.8~3.9V linear responding to 0~100%RH

Quality Warranty

The quality guarantee time is 12 months. Within 12 months after purchasing, the spoiling will be maintained by Sencera Co., Ltd for some fee. except man-made spoiling.

Note

808H5V5 humidity transmitter is kind of precision instrument, correct manipulation and careful maintenance is necessary for normal running.

So be sure to note:

1. Be sure to keep away from the hot or cold things.
2. Be sure to keep correct mounting direction.
3. The transmitter should be redefined after 1year.
4. If want to use temperature compensation for high accuracy, please use follow formula.

Voltage output temperature compensation formula

$$= (5E-05 * Rh - 0.0036) * T + (-0.0013 * Rh + 0.0925) * V_{out}$$

(The temperature compensation at 25°C, 50%RH is zero)

So, the Voltage output will be

$$V_{out} \text{ (after compensation)} = (0.0157 * V_{in} - 0.0475) * Rh + (-0.6536 * V_{in} + 4.068)$$