# 808H5V6 Humidity transmitter

808H5V6 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 instrument , industrial process control , RH measurement instrumentation etc.

#### Specification

| Model                      | 808H5V6   |  |  |  |  |
|----------------------------|---|--|--|--|--|
| Measuring range            | 0~100%RH  |  |  |  |  |
| Signal output              | <b>0~3.0V @25</b> ℃   |  |  |  |  |
| Accuracy                   | $\leq \pm 4$ %RH (at 25°C, 30~80%RH, when the power supply is 3.3VDC) |  |  |  |  |
| Electrical current<br>(Ic) | Typical current: <mark>180uA</mark> ; max current <200uA              |  |  |  |  |
| Power supply               | 3.3 V DC ±3%  |  |  |  |  |
| Operating                  |   |  |  |  |  |
| environment                | - <b>40∼+85</b> ℃   |  |  |  |  |
| Storing                    | -55~+125℃   |  |  |  |  |
| environment                |   |  |  |  |  |
| 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 3.30V DC, at 25  $^\circ\!\!\!{\rm C}$  environment

|         | 30%RH | 40%RH | 50%RH | 60%RH | 70%RH | 80%RH |
|---------|-------|-------|-------|-------|-------|-------|
| 808H5V6 | 0.93V | 1.24V | 1.55V | 1.85V | 2.15V | 2.43V |

#### accuracy according to range



Dimension( mm )



Application





Typical data curve( 808H5V6 )

Relative humidity %RH

0~3.0V linear output response to the 0~100 %RH humidity drawing

# **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

808H5V6 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 user will use temperature compensation for high accuracy, please refer follow formula:

Voltage output temperature compensation formula

=(6E-06\*Rh - 0.0013)\*T+(-0.0001\*Rh + 0.03)+Vout

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

So, the Voltage output after temperature compensation will be =(-0.005\*Vin<sup>2</sup> + 0.0381\*Vin - 0.04128)\*Rh+(-0.7971\*Vin<sup>2</sup> + 5.0649\*Vin- 8.033751)