## RhT11

## FEATURES

This Probe is meant for industry-proven quality and reliability in measurement of humidity and temperature sensors and constant accuracy over a large measurement range.
The probe uses Capacitive humidity sensor with a bandgap temperature sensor, calibration data memory, D/A converter. The sensor covers a humidity measurement range of 0 to 100 $\% \mathrm{RH}$ and a temperature measurement range of $-40^{\circ} \mathrm{C}$ to $125^{\circ} \mathrm{C}$ with a typical accuracy of $\pm 2$ $\% R H$ and $\pm 0.2^{\circ} \mathrm{C}$.

## APPLICATION

Can be used in Industrial Automation in Chemical Plants, Pharma, Engineering industries and commercial applications. The sensor shall be compatible to Indicator Controllers, SCADA, Industry 4.0 standards and IoT compatible.


## TECHNICAL SPECIFICATION

| Model | Environmental Sensor |
| :--- | :--- |
| Humidity | $0 \% \sim 100 \% \mathrm{RH}$ |
| Temperature | $-40^{\circ} \mathrm{C} \sim 125^{\circ} \mathrm{C}$ |
| Accuracy | $\pm 2 \% \mathrm{RH}, \pm 0.2 \%^{\circ} \mathrm{C}$ |
| Response Time | $\tau 63 \% 8 \mathrm{Sec}$ |
| Cable | PTFE $/ 1$ Metre |
| Operating Voltage | $12 \sim 30 \mathrm{VDC}$ |
| Output | Humidity: $4 \sim 20 \mathrm{~mA}$ |
| Housing | Temperature: $4 \sim 20 \mathrm{~mA}$ |
| Filter | Aluminium Grade 6 xxx series |


| Parameter | Condition | Value | Unit |
| :--- | :--- | :--- | :--- |
| Accuracy tolerance | Typ. | $\pm 2.0$ | \%RH |
|  | Max. | Below Graph | \%RH |
| Repeatability | - | 0.1 | \%RH |
| Resolution | - | 0.01 | \%RH |
| Hysteresis | - | $\pm 1$ | \%RH |
| Specified range | extended | 0 to 100 | \%RH |
| Response time | $\tau 63 \%$ | 8 | S |
| Long-term drift | Typ. | $<0.25$ | \%RH/y |

## $\stackrel{(4)}{\leftrightarrow}$ DIMENSION DETAILS



OTHER PRODUCTS


Display Logger
Relay Output - Threshold RH \& Temperature


Mote
Log / Wifi - RH \& Temperature


| Parameter | Condition | Value | Unit |
| :--- | :--- | :--- | :---: |
| Accuracy tolerance | Typ. | $\pm 0.2$ | ${ }^{\circ} \mathrm{C}$ |
|  | Max. | Below Graph | ${ }^{\circ} \mathrm{C}$ |
| Repeatability | - | 0.1 | ${ }^{\circ} \mathrm{C}$ |
| Resolution | - | 0.01 | ${ }^{\circ} \mathrm{C}$ |
| Specified range | - | -40 to +125 | ${ }^{\circ} \mathrm{C}$ |
| Response time | $\tau 63 \%$ | $<5$ to 30 | S |
| Long-term drift | Typ. | $<0.02$ | ${ }^{\circ} \mathrm{C} / \mathrm{y}$ |




Compatible

