# T&D Optional Products Catalog Temp-Humidity Sensors & Illuminance-UV Sensor



# **Temperature-Humidity Sensors**

THA-3001 P. 2
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SHA-3151 P. 3
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TR-3110 P. 5
Illuminance-UV Sensor
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TR-1C30 P. 7
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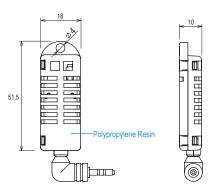
TR-5C10 ..... P. 7

Discontinued: TR72A / 72A-S, TR-72wb / 72wb-S / 72wf / 72wf-H / 72nw-H, TR-74Ui-H / 76Ui-H, RTR-574-H / 576-H, TR-702NW / 702NW-H / 702AW / 702AW-H, TR-77Ui

# THA-3001

Provided with TR72A2, TR-72nw, TR-76Ui and RTR-576

### **Temperature-Humidity Sensor**



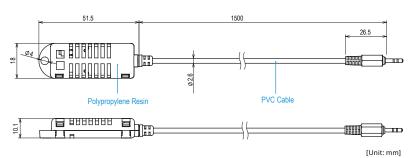
[Unit: mm]

Measurement	Temperature	0 to 55 °C
Range	Humidity	10 to 95 %RH
Accuracy	Temperature	±0.5 °C
	Humidity	±5 %RH at 25 °C, 50 %RH
Response Time (90 %)		Approx. 7 min.
Conditions for Use		Do not expose to condensation, dampness, corrosive gases or organic solvents.  Continued use may cause a decrease in the sensor's accuracy and sensitivity even under normal operational conditions.
Note		Can be extended by 9 meters with the Extension Cable TR-1C30 or TR-5C10

# THA-3151

Provided with TR-74Ui and RTR-574

# **Temperature-Humidity Sensor**



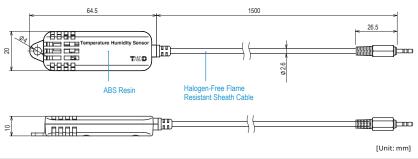
Measurement	Temperature	0 to 55 °C
Range	Humidity	10 to 95 %RH
Accuracy	Temperature	±0.5 °C
	Humidity	±5%RH at 25 °C, 50%RH
Response Time	(90 %)	Approx. 7 min.
Conditions for Use		Do not expose to condensation, dampness, corrosive gases or organic solvents.  Continued use may cause a decrease in the sensor's accuracy and sensitivity even under normal operational conditions.
Note		Can be extended by 9 meters with the Extension Cable TR-1C30 or TR-5C10

Discontinued: TR72A / 72A-S, TR-72wb / 72wb-S / 72wf / 72wf-H / 72nw-H, TR-74Ui-H / 76Ui-H, RTR-574-H / 576-H, TR-702NW / 702NW-H / 702AW / 702AW-H, TR-77Ui



Provided with TR72A2-S, TR-72nw-S, TR-74Ui-S, TR-76Ui-S, RTR-574-S and RTR-576-S

### **High Precision Temp-Humidity Sensor**



Temperature	-25 to 70 °C
Humidity	0 to 99 %RH
	Note: When continually used in environments with temperatures above 60 °C, accuracy of humidity measurements will decrease over time. Also, humidity cannot be measured at temperatures below -20 °C.
Temperature	±0.3 °C at 10 to 40 °C
	±0.5 °C all other temperatures
Humidity	±2.5 %RH at 15 to 35 °C, 30 to 80 %RH
(90 %)	Approx. 7 min.
ility	±1 %RH/yr, ±0.1 °C/yr
Ise	Do not expose to condensation, dampness, corrosive gases, organic solvents.
	Can be extended by 9 meters with the Extension Cable TR-1C30 or TR-5C10
	Temperature Humidity (90 %)

Compatible Products

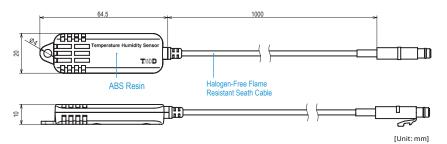
#### RTR507B / 507BL

Discontinued: RTR-507 / 507L / 507S / 507SL



Provided with RTR507B and RTR507BL

### **High Precision Temp-Humidity Sensor**



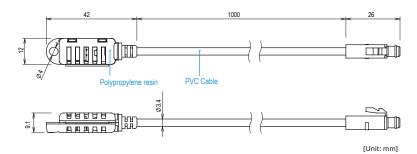
Measurement	Temperature	-25 to 70 °C	
Range	Humidity	0 to 99 %RH	
		Note: When continually used in environments with temperatures above 60 °C, accuracy of humidity measurements will decrease over time. Also, humidity cannot be measured at temperatures below -20 °C.	
Accuracy	Temperature	±0.3 °C at 10 to 40 °C ±0.5 °C all other temperatures	
	Humidity	±2.5 %RH at 15 to 35 °C, 30 to 80 %RH	
Response Time (90 %)		Approx. 7 min.	
Long Term Stability		±1 %RH/yr, ±0.1 °C/yr	
Conditions for Use		Do not expose to condensation, dampness, corrosive gases, organic solvents.	
Note		Can be extended by 3 meters with the Extension Cable TR-3C30	

Discontinued: RTR-503 / 503L, RTR-53A

# TR-3310

Provided with RTR503B and RTR503BL

## **Temperature-Humidity Sensor**



Measurement	Temperature	0 to 55 °C
Range	Humidity	10 to 95 %RH
Accuracy	Temperature	Avg.±0.3 °C
	Humidity	±5 %RH at 25 °C, 50 %RH
Response Time (90 %)		Approx. 7 min.
Conditions for Use		Do not expose to condensation, dampness, corrosive gases or organic solvents.  Continued use may cause a decrease in the sensor's accuracy and sensitivity even under normal operational conditions.
Note		This sensor does not support the use of an extension cable.



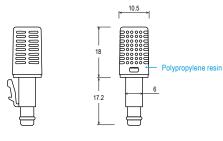
# TR43A, RTR503B / 503BL

Discontinued: RTR-503 / 503L, RTR-53A

# THB3001

Provided with TR43A

# **Temperature-Humidity Sensor**



[Unit:	mml
[Unit:	mmj

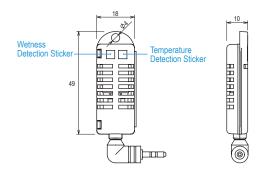
Measurement	Temperature	0 to 55 °C
Range	Humidity	10 to 95 %RH
Accuracy	Temperature	±0.5 °C
	Humidity	±5 %RH at 25 °C, 50 %RH
Response Time (90 %)		TR43A: Approx. 11 min. RTR503B: Approx. 13 min. RTR503BL: Approx. 16 min.
Conditions for Use		Do not expose to condensation, dampness, corrosive gases or organic solvents.  Continued use may cause a decrease in the sensor's accuracy and sensitivity even under normal operational conditions.
Note		This sensor does not support the use of an extension cable.

Discontinued: TR-72U, TR-72Ui, TR-72W, TR-72S



Provided with TR-73U

# Temperature-Humidity Sensor

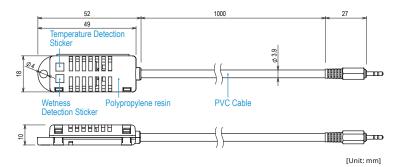


		m1

Measurement	Temperature	0 to 50 °C
Range	Humidity	10 to 95 %RH
Accuracy	Temperature	Avg. ±0.3 °C
	Humidity	±5 %RH at 25 °C, 50 %RH
Response Time (90 %)		Approx. 7 min.
Conditions for Use		Do not expose to condensation, dampness, corrosive gases or organic solvents.  Continued use may cause a decrease in the sensor's accuracy and sensitivity even under normal operational conditions.
Note		Can be extended by 1 meter with the Extension Cable TR-5C10



# **Temperature-Humidity Sensor**



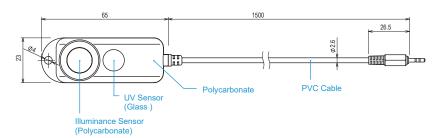
Measurement	Temperature	0 to 50 °C
Range	Humidity	10 to 95 %RH
Accuracy	Temperature	Avg.±0.3 °C
	Humidity	±5 %RH at 25 °C, 50 %RH
Response Time (90 %)		Approx. 7 min.
Conditions for Use		Do not expose to condensation, dampness, corrosive gases or organic solvents.  Continued use may cause a decrease in the sensor's accuracy and sensitivity even under normal operational conditions.
Note		This sensor does not support the use of an extension cable.

Discontinued: TR-74Ui-H, RTR-574-H



Provided with TR-74Ui, TR-74Ui-S, RTR-574 and RTR-574-S

#### **Illuminance-UV Sensor**





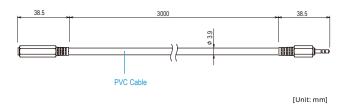
Measurement	Illuminance	0 to 130,000 lx
Range	UV Intensity	0 to 30 mW/cm <sup>2</sup>
Measurement	Illuminance	Minimum 0.01 lx
Resolution	UV Intensity	Minimum 0.001 mW/cm <sup>2</sup>
Accuracy	Illuminance	10 lx to 100 klx ±5 % at 25 °C, 50 %RH
	UV Intensity*	0.1 to 30 mW/cm <sup>2</sup> ±5 % at 25 °C, 50 %RH
Conditions for Use		Do not expose to condensation, dampness, corrosive gases or organic solvents.
Note		Can be extended by 9 meters with the Extension Cable TR-1C30 or TR-5C10

<sup>\*</sup> Compared to the value measured by the T&D standard sensor for calibration under our calibration light source.

# TR-1C30



## **Sensor Extension Cable**

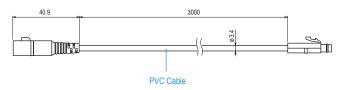


Temperature Durability	-25 to 60 °C
Waterproof Capacity	None
Compatible Sensors	Temperature Sensor: TR-1106, TR-1220, TR-1320, TR-0106, TR-0206, TR-0306, TR-0406, TR-0506, TR-0706 Temp-Humidity Sensor: THA-3001, THA-3151, SHA-3151 (Discontinued: HHA-3151) Illuminance-UV Sensor: ISA-3151
Conditions for Use	Temperature sensors can use up to 3 meters of extension cables. Temp-Humidity sensors and Illuminance-UV sensors can use up to 9 meters of extension cables.

# TR-3C30



### **Sensor Extension Cable**



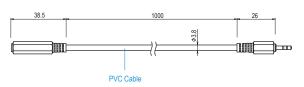
[Unit: mm]

Temperature Durability	-25 to 60 °C
Waterproof Capacity	Splash proof (rated for use in daily life)
Compatible Sensors	Temp-Humidity Sensor: SHB-3101 (Discontinued: HHB-3101) Input Module: TCM-3010, PTM-3010, VIM-3010, AIM-3010, PIC-3150, PMP- 3200
Conditions for Use	Only one cable per sensor or module.

# TR-5C10



# **Sensor Extension Cable**



[Unit: mm]

Temperature Durability	-25 to 60 °C
Waterproof Capacity	None
Compatible Sensors	Temperature Sensor: TR-1106, TR-1220, TR-1320, TR-0106, TR-0206, TR-0306, TR-0406, TR-0506, TR-0706, Temp-Humidity Sensor: THA-3001, THA-3151, SHA-3151, TR-3100* (Discontinued: HHA-3151) Illuminance-UV Sensor: ISA-3151
Conditions for Use	Temperature sensors can use up to 3 meters of extension cables. Temp-Humidity sensors and Illuminance-UV sensors can use up to 9 meters of extension cables. * Only 1 extension cable for TR-3100