DATASHEET

TR-3110

T&D

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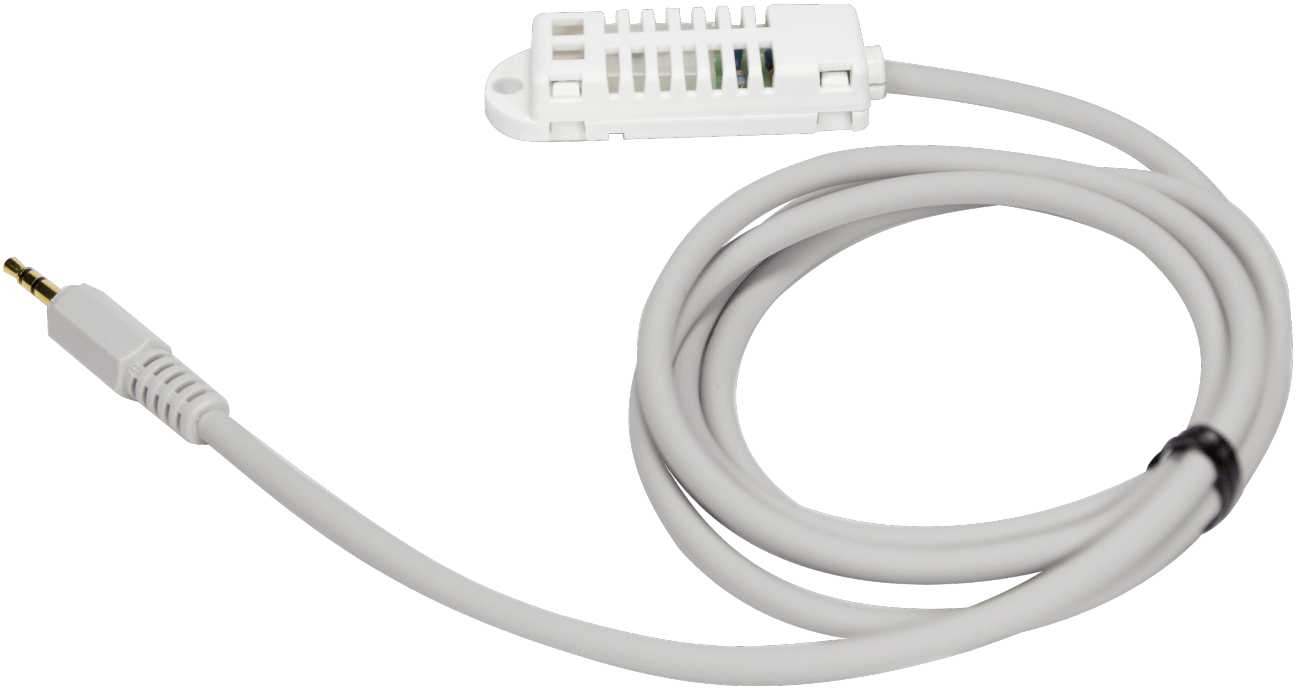

2024. 09

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

Temperature-Humidity Sensors

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THA-3151 ..... P. 2

SHA-3151 ..... P. 3

SHB-3101 ..... P. 3

TR-3310..... P. 4

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Sensor Extention Cables

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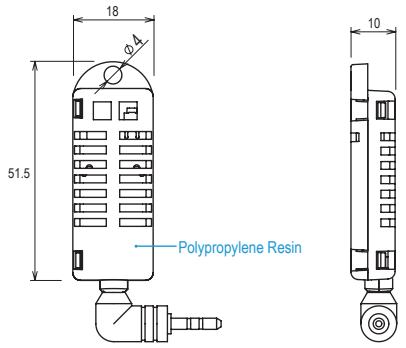
T&D Corporation

AKRIBIS · www.akribis.info · contacto@akribis.info

THA-3001

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

Temperature-Humidity Sensor



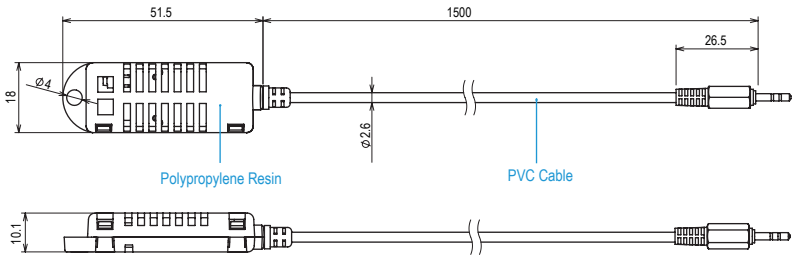
[Unit: mm]

Measurement Range	Temperature	0 to 55 °C
	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



[Unit: mm]

Measurement Range	Temperature	0 to 55 °C
	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

Compatible Products

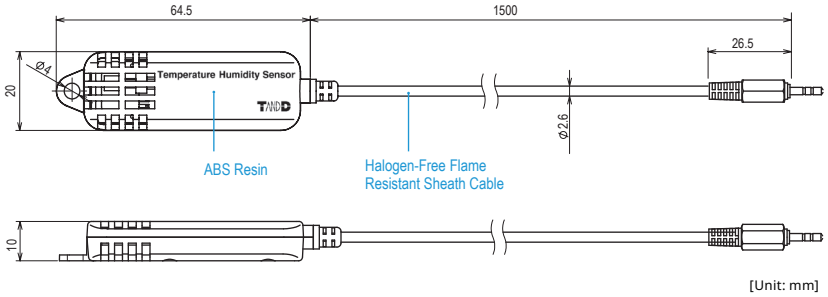
TR72A2 / 72A2-S, TR-72nw / 72nw-S, TR-74Ui / 74Ui-S / 76Ui / 76Ui-S, RTR-574 / 574-S / 576 / 576-S

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

SHA-3151

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



Measurement Range	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.
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 9 meters with the Extension Cable TR-1C30 or TR-5C10

Compatible Products

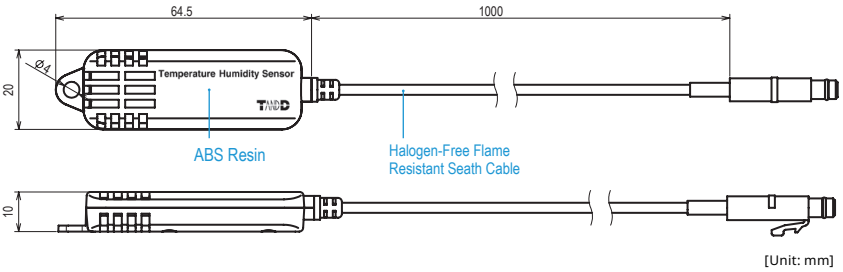
RTR507B / 507BL

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

SHB-3101

Provided with RTR507B and RTR507BL

High Precision Temp-Humidity Sensor



Measurement Range	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.
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

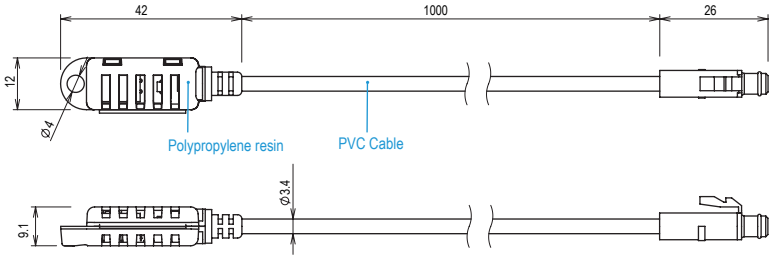
Compatible Products **RTR503B / 503BL, TR43A**

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

TR-3310

Provided with RTR503B and RTR503BL

Temperature-Humidity Sensor



[Unit: mm]

Measurement Range	Temperature	0 to 55 °C
	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.

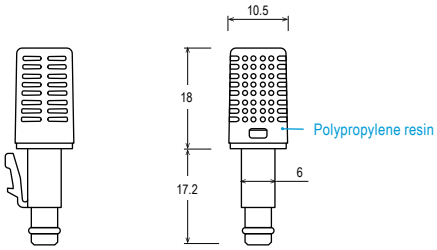
Compatible Products **TR43A, RTR503B / 503BL**

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

THB3001

Provided with TR43A

Temperature-Humidity Sensor



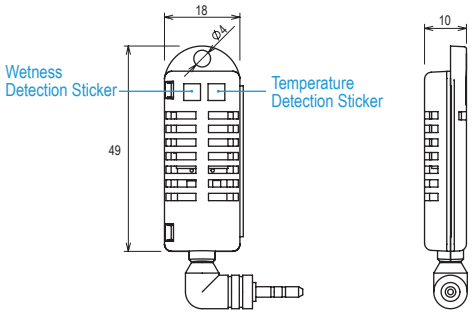
[Unit: mm]

Measurement Range	Temperature	0 to 55 °C
	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.

TR-3100

Provided with TR-73U

Temperature-Humidity Sensor

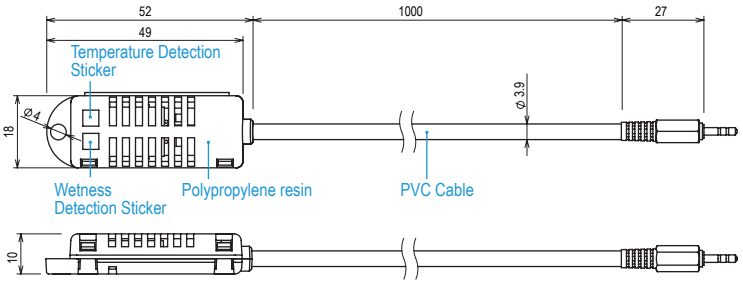


[Unit: mm]

Measurement Range	Temperature	0 to 50 °C
	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

TR-3110

Temperature-Humidity Sensor



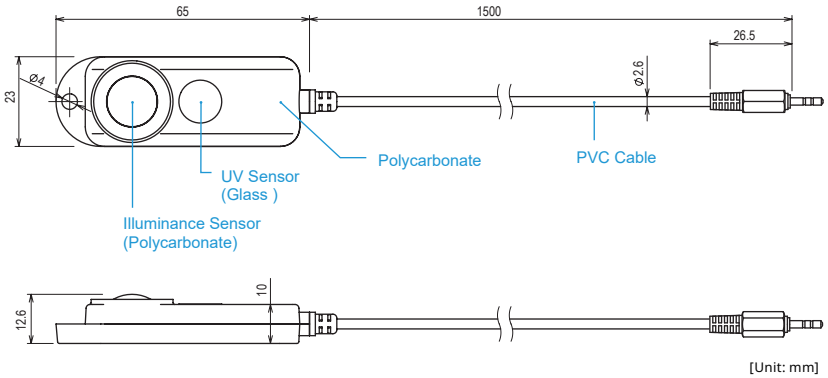
[Unit: mm]

Measurement Range	Temperature	0 to 50 °C
	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.

ISA-3151

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

Illuminance-UV Sensor

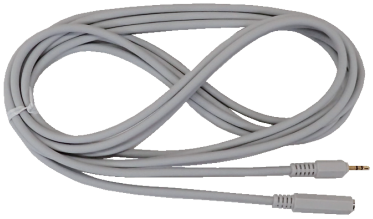


[Unit: mm]

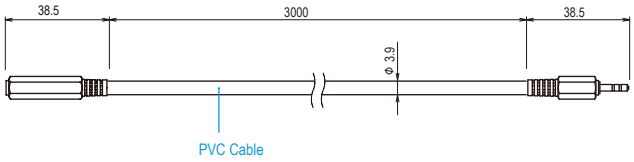
Measurement Range	Illuminance	0 to 130,000 lx
	UV Intensity	0 to 30 mW/cm^2
Measurement Resolution	Illuminance	Minimum 0.01 lx
	UV Intensity	Minimum 0.001 mW/cm^2
Accuracy	Illuminance	10 lx to 100 klx ±5 % at 25 °C, 50 %RH
	UV Intensity*	0.1 to 30 mW/cm^2 ±5 % at 25 °C, 50 %RH
Conditions for Use		Do 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

* Compared to the value measured by the T&D standard sensor for calibration under our calibration light source.

TR-1C30



Sensor Extension Cable

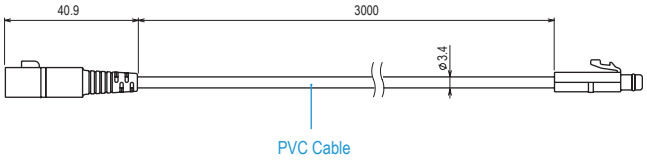


[Unit: mm]

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 (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

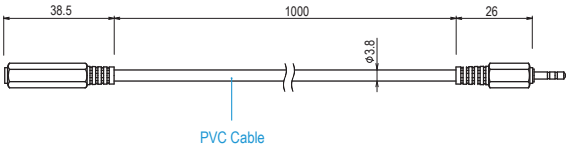


[Unit: mm]

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