



2024 Product Catalog Sensors for HVAC, OEM & Building Automation



Tasseron has taken its high quality and value added approach to the HVAC and BAS industries, where we manufacture standardized and custom solutions for temperature, humidity and air quality applications.

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ABOUT TASSERON

Founded in 1920, Tasseron focused on the import of electronic insulation materials in the Netherlands. The manufacturing of



radio receivers began five years later in 1925 and in 1948, Tasseron changed course and began specialization on temperature measurement equipment. Decades later, in 1980, Tasseron built its first temperature sensor.

In 2004, Tasseron opened its first office in North America. The new company had humble beginnings, but customers were won over by Tasseron's unmatched European quality and willingness to build custom designed sensors to match their needs.

The Tasseron Group, made up of 5 companies and 3 manufacturing locations, utilizes a century of experience, innovation, and quality to design new lines of products for the all of the heating, ventilation, and air conditioning (HVAC) markets.

Tasseron Sensors Inc. (USA) has grown rapidly and utilized its' experience, innovation and quality to design and launch a new line of products for the Building Automation and HVAC Controls markets. Many of these products are now being built in Tasseron's state of the art manufacturing facility located in Montoursville, PA.

Tasseron USA continues to work closely with their European counterparts, leveraging a relationship that gives Tasseron a competitive advantage in many areas including quality, design and pricing.



Tasseron Group is comprised of 5 different companies, see global locations pages 6-7



OUR MISSION

To develop and manufacture cost effective sensor solutions that meet the customers' needs and exceed their expectations.

To produce products that are not only the highest quality but also add value to the customer because of their unique design and ease of use.

To create a work environment where each employee is part of the solution and their opinion is valued.

GLOBAL LOCATIONS



Pennsylvania, United States Tasseron Sensors Inc.

Tasseron Sensors Inc. is a North American subsidiary for HVAC and OEM temperature sensors and related products for the North American HVAC and OEM markets.

Tasseron Sensors B.V. develops and manufactures top-quality, custom made temperature sensors and related products for the OEM heating and cooling market.

SENSORS 🚳

Tasseron Controls B.V. is a supplier of products specialized for the measurement and control of temperature.



Tasseron Electronics B.V. develops and manufactures custom made electronic controls, control valves, EC and pH meters, angle sensors and climate computers. With our own production and R&D department we are able to work together with our customers on new developments.

Tasseron-SEKC develops and manufactures high quality cable harnesses and cable assemblies for OEM manufacturers.

DUCT FLANGE

The Tasseron Duct Flange temperature sensors are made of a durable injection molded material and with AISI 316 Stainless Steel probes.

The Quick Connect wire terminals and simple design make this a very cost effective solution for commercial and industrial applications.

FFATURES

- AISI 316 Stainless Steel probe in 4" / 6" / 8" / 12" / 18" lengths
- Quick Connect terminals for fast installation
- Installed anti-vibration pad on flange

SPECIFICATIONS

OPERATING RANGE:

-40...105°C / -40...221°F

SENSING ELEMENT:

NTC or RTD (see R/T table pg. 32)

WIRING:

2 pole AWG 22-16 / 0.35-1.5mm² spring-loaded

MOUNTING:

Two integrated # 8 mounting holes

PROBE:

8

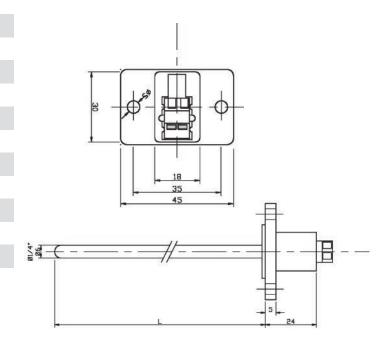
AISI 316 Stainless Steel, 6mm diameter

ENCLOSURE:

NEMA 1, IP10, PA 6/6 30% GF, UL94 HB

Part Number: THTDF-xxx

ROHS



(570) 601-1971 sales@tasseronusa.com

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DUCT MINI

The Tasseron Duct Mini temperature sensors are in a high quality NEMA 3 injection molded housing, equipped with a quick snap cover, quick connect wire terminals, weathertight grommet, and AISI 316 Stainless Steel probes.

FEATURES

- AISI 316 Stainless Steel probe in 4" / 6" / 8" / 12" / 18" lengths
- Quick Connect terminals for fast installation
- Anti-vibration pad on mounting flange
- Small, lightweight design

SPECIFICATIONS

OPERATING RANGE:

-40...105°C / -40...221°F

SENSING ELEMENT:

NTC, RTD (see R/T Table pg. 32)

WIRING:

2 pole AWG 22-16 / 0.35-1.5mm² spring-loaded

MOUNTING:

Two integrated # 8 mounting holes

PROBE:

AISI 316 Stainless Steel, 6mm diameter

ENCLOSURE:

NEMA 3, IP54, PA 6/6 30% GF, Cover PC UL94 HB

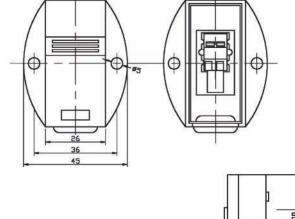
Quick Snap Cover

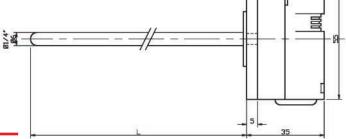
ACCESSORY:

CONDUIT ADAPTER

1/2" NPT threaded click into the bottom and can be purchased separately in packs of 10 or added by Part Number specification. (Change "P" to "C")

Part Number: THTDP-xxx





DIMENSIONS (in mm)

CE ROHS COMPLANT

DUCT SAFE BOX

The Tasseron Duct Safe Box temperature sensors are in a high quality weatherproof, polycarbonate NEMA 4X / IP 65 enclosure with an internal hinged cover.

All units have a watertight, built in 1/2" NPT threaded conduit connection with 1/2" NPT conduit adapter ports on both sides.

FFATURFS

- AISI 316 Stainless Steel probe in 4" / 6" / 8" / 12" / 18" lengths
- Quick Connect terminals for fast installation
- Additional 1/2" NPT conduit adapter pop-outs on both sides
- Hinged, removable cover with watertight O-ring

SPECIFICATIONS

OPERATING RANGE:

-40...105°C / -40...221°F

SENSING ELEMENT:

NTC, RTD (see R/T Table pg. 32) or 4-20mA transmitter (see ranges on pg. 31)

WIRING:

2 pole AWG 22-16 / 0.35—1.5mm² spring-loaded

MOUNTING:

Quick mount bracket

PROBE:

10

AISI 316L Stainless Steel, 6mm diameter

ENCLOSURE:

NEMA 4X, IP 65 UV-resistant PC, UL94, V-2

1/2" NPT port on bottom

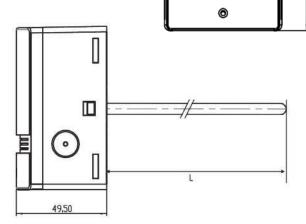
Internally hinged cover



ROHS

65.94

89,45



DUCT G-BOX

The Tasseron Duct Box temperature sensors are in a high quality Galvanized Steel enclosure, and equipped with a dual-slotted Quick Attach neoprene cover and 1/2" knock-out on the bottom.

FEATURES

- AISI 316 Stainless Steel probe in 4" / 6" / 8" / 12" / 18" lengths
- Quick Connect terminals for fast installation
- Dual insulated, closed cell neoprene on backing
- Insulated, dual-slotted Quick Attach cover

SPECIFICATIONS

OPERATING RANGE:

-40...125°C / -40...257°F

SENSING ELEMENT:

NTC, RTD (see R/T Table pg. 32) or 4-20mA transmitter

WIRING:

2 pole AWG 22-16 / 0.35-1.5mm² spring-loaded

MOUNTING:

Two integrated # 8 mounting holes

PROBE:

AISI 316L Stainless Steel, 6mm diameter

ENCLOSURE:

NEMA 2, IP40, 1.2mm Galvanized Steel with

1/2" port on bottom

ACCESSORY: WEATHERPROOF

GROMMET Part Number: THXGROM0

Makes the Duct and Immersion G-Box NEMA 3 rated enclosure. Can be purchased separately in packs of 10.

Part Number: THTDG-xxx

DIMENSIONS (in mm)

ROHS

<image><image>





VAV FLANGE OR MINI

Tasseron Duct VAV Flange or Mini temperature sensors are made of a durable injection molded material and with AISI 316 Stainless Steel probes.

The VAV models includes stripped and cut plenum rated wires packaged for easy termination.

FEATURES

- Option for Mini or Flange base sensor
- AISI 316 Stainless Steel probe in 4" / 6", other on request
- Quick Connect terminals with plenum wire included
- Installed anti-vibration pad on flange

SPECIFICATIONS

OPERATING RANGE:

-40...105°C / -40...221°F

SENSING ELEMENT:

NTC or RTD (see R/T table pg. 32)

WIRE:

Plenum rated 22 AWG, standard 2ft, 6ft, 9ft, 12ft

WIRING:

2 pole AWG 22-16 / 0.35-1.5mm² spring-loaded

MOUNTING:

Two integrated # 8 mounting holes

PROBE:

12

AISI 316 Stainless Steel, 6mm diameter

ENCLOSURE:

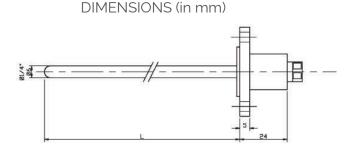
NEMA 1, IP10, PA 6/6 30% GF, UL94 HB

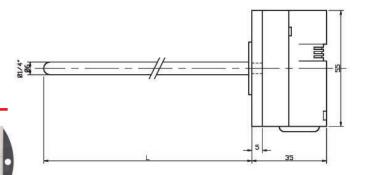
NEMA 3, IP54, PA 6/6 30% GF, Cover PC UL94 HB

ACCESSORY:

CONDUIT ADAPTER

1/2" NPT threaded click into the bottom and can be purchased separately in packs of 10 or added by Part Number specification. (Change "P" to "C") Flange Part Number: THTVF-xxx Mini Part Number: THTVP-xxx





into the bottom and ly in packs of 10 or added ion. (Change "P" to "C")

DUCT EURO

The Tasseron Duct Euro temperature sensor provides a high-quality solution for both commercial and industrial applications. The Euro housing offers weatherproof NEMA 4X/IP 66 ratings and is also available in passive options or multiple temperature transmitter ranges with 4-20mA analog output.

FFATURES

- Robust, hinged removable cover with watertight O-ring
- AISI 316 Stainless Steel probe in 4" / 6" / 8" / 12" / 18" lengths
- Quick Connect terminals for fast installation
- 1/2" NPT threaded conduit adapter and cable gland included

SPECIFICATIONS

OPERATING RANGE:

-40...105°C / -40...221°F

SENSING ELEMENT:

NTC, RTD (see R/T Table pg. 32) or 4-20mA transmitter (see ranges on pg.31)

WIRING:

2 pole AWG 22-16 / 0.35-1.5mm² spring-loaded

MOUNTING:

Direct or available adjustable mounting system

PROBE:

AISI 316L Stainless Steel, 6mm diameter

ENCLOSURE:

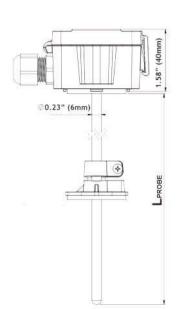
NEMA 4X, IP 66 UV-resistant PC/ABS, UL94 V-0

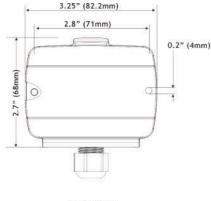
1/2" NPT conduit adapter and cable gland (m16) included

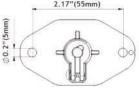
Hinged, removable cover

Part Number THTDE-xxx

DIMENSIONS (in mm)







INCLUDED:

1/2" CONDUIT ADAPTER & CABLE GLAND

In addtion to the cable gland, the Euro Series is equipped with a conduit fitting m16 to 1/2" NPT





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ROH

IMMERSION FLANGE

The Tasseron Immersion Flange temperature sensors are made of a durable injection molded material with quick connect wire terminals.

The Immersion Series comes standard equipped with 1/2" NPT brass or stainless steel immersion wells or brass compression fitting (1/2" or 1/4" NPT) and a thermal paste syringe.

FEATURES

- 2" / 4" / 6" lengths of Machined Brass or Fabricated Stainless Steel wells included (1/2" or 1/4" NPT adapters available)
- Includes conveniently packaged syringe of thermal paste
- Quick Connect terminals for fast installation

SPECIFICATIONS

OPERATING RANGE:

-40...105°C / -40...221°F

SENSING ELEMENT:

NTC or RTD (see R/T table pg. 32)

WIRING:

2 pole AWG 22-16 / 0.35-1.5mm² spring-loaded

MOUNTING:

Two integrated # 8 mounting holes

PROBE:

AISI 316 Stainless Steel, 6mm diameter

ENCLOSURE:

NEMA 1, IP10, PA 6/6 30% GF, UL94 HB

THERMOWELL:

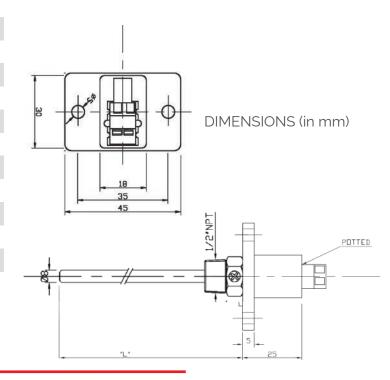
1/2" NPT Brass (Machined) or 316L SS (Fabricated) included

- 2", 4" or 6" length with compression installation
- 1/2" or 1/4" adapter available instead of thermowell





Part Number: THTIF-xxx



INCLUDED: Thermal Paste Syringe

Every Tasseron Immersion Sensor is packed with a Thermal Paste Syringe to ensure fast



Also Sold Separate in packs of 10- PART NUMBER: **THXPASTE**

IMMERSION EURO

The Tasseron Immersion Euro offers weatherproof NEMA 4X/IP 66 ratings and is also available in passive options or multiple temperature transmitter ranges with 4-20mA analog output.

The Immersion Series comes standard equipped with 1/2" NPT and immersion well or threaded compression adapters and a thermal paste syringe.

FEATURES

- 2" / 4" / 6" lengths of Machined Brass or Fabricated Stainless Steel wells included (1/2" or 1/4" NPT adapters available)
- Robust, hinged removable cover with watertight O-ring
- 1/2" NPT threaded conduit adapter and cable gland included
- Quick Connect terminals for fast installation

SPECIFICATIONS

OPERATING RANGE:

-40...105°C / -40...221°F

SENSING ELEMENT:

NTC, RTD (see R/T Table pg. 32) or 4-20mA transmitter (see ranges on pg.31)

WIRING:

2 pole AWG 22-16 / 0.35-1.5mm² spring-loaded

MOUNTING:

Thermowell or direct in medium

PROBE:

AISI 316L Stainless Steel, 6mm diameter

ENCLOSURE:

NEMA 4X, IP 66 UV-resistant PC/ABS, UL94 V-0

1/2" NPT conduit adapter and cable gland (m16) included

Hinged, removable snap cover

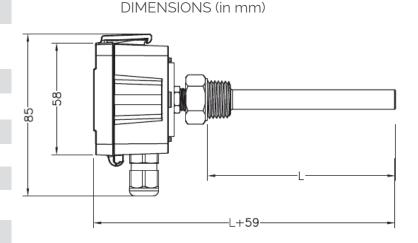
THERMOWELL:

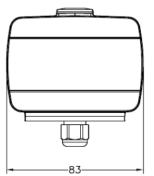
1/2" NPT Brass (Machined) or 316L SS (Fabricated) included

2", 4" or 6" length with compression installation

1/2" or 1/4" adapter available instead of thermowell

Part Number: THTIE-xxx









IMMERSION SAFE BOX

The Tasseron Duct Safe Box temperature sensors are in a high quality weatherproof, polycarbonate NEMA 4X / IP 65 enclosure with an internal hinged cover. All units have a watertight, built in 1/2" NPT threaded conduit connection with conduit adapter ports on both sides, sealed with rubber grommets.

The Immersion Series comes standard equipped with 1/2" NPT brass or stainless steel immersion wells or brass compression fitting (1/2" or 1/4" NPT) and a thermal paste syringe.

FEATURES

- 2" / 4" / 6" lengths of Machined Brass or Fabricated Stainless Steel wells included (1/2" or 1/4" NPT adapters available)
- Includes conveniently packaged syringe of thermal paste
- Quick Connect terminals for fast installation
- Weatherproof 1/2" NPT port on the bottom

SPECIFICATIONS

OPERATING RANGE:

-40...105°C / -40...221°F

SENSING ELEMENT:

NTC, RTD (see R/T Table pg. 32)

WIRING:

2 pole AWG 22-16 / 0.35-1.5mm² spring-loaded

MOUNTING:

Quick mount bracket

PROBE:

AISI 316L Stainless Steel, 6mm diameter

ENCLOSURE:

NEMA 4X, IP 65 UV-resistant PC, UL94, V-2

1/2" NPT port on bottom

Internally hinged cover

THERMOWELL:

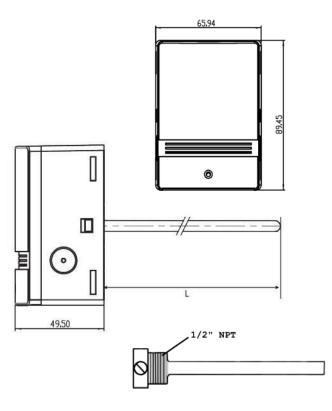
16

1/2" NPT Brass (Machined) or 316L SS (Fabricated) included

2", 4" or 6" length with compression installation

1/2" or 1/4" adapter available instead of thermowell

Part Number: THTIS-xxx







IMMERSION G-BOX

The Tasseron Immersion G-Box temperature sensors are in a high quality Galvanized Steel enclosure, and equipped with a dual-slotted Quick Attach neoprene cover, and 1/2" knock-out on the bottom.

The Immersion Series comes standard equipped with 1/2" NPT brass or stainless steel immersion wells or brass compression fitting (1/2" or 1/4" NPT) and a thermal paste syringe.

FEATURES

- 2" / 4" / 6" lengths of Machined Brass or Fabricated Stainless Steel wells included (1/2" or 1/4" NPT adapters available)
- Quick Connect terminals for fast installation
- Insulated, dual-slotted Quick Attach cover

SPECIFICATIONS

OPERATING RANGE:

-40...125°C / -40...257°F

SENSING ELEMENT:

NTC, RTD (see R/T Table pg. 32)

WIRING:

2 pole AWG 22-16 / 0.35—1.5mm² spring-loaded

MOUNTING:

Two integrated # 8 mounting holes

PROBE:

AISI 316L Stainless Steel, 6mm diameter

ENCLOSURE:

NEMA 2, IP40, 1.2mm Galvanized Steel,

1/2" knockout on bottom for wiring

THERMOWELL:

1/2" NPT Brass (Machined) or 316L SS (Fabricated) included

2", 4" or 6" length with compression installation

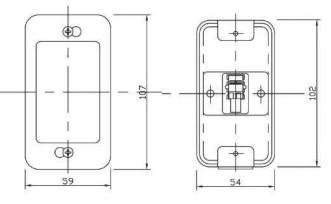
1/2" or 1/4" adapter available instead of thermowell

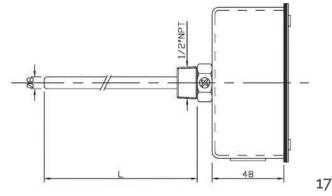
ACCESSORY: WEATHERPROOF GROMMET Part Number: THXGROM0

Makes the Duct and Immersion G-Box NEMA 3 rated enclosure. Can be purchased separately.

Part Number: THTIG-xxx













The Tasseron Immersion Mini temperature sensors are made of a durable NEMA 3 injection molded housing equipped with a quick snap cover, quick connect wire terminals and weathertight grommet,

The Immersion Series comes standard equipped with 1/2" NPT brass/copper or stainless steel immersion wells and a thermal paste syringe.

FEATURES

- 2" / 4" / 6" lengths of Machined Brass or Fabricated Stainless Steel wells included (1/2" or 1/4" NPT adapters available)
- Includes packaged syringe of thermal paste
- Quick Connect terminals for fast installation

SPECIFICATIONS

OPERATING RANGE:

-40...105°C / -40...221°F

SENSING ELEMENT:

NTC, RTD (see R/T Table pg. 32) or 4-20mA transmitter

WIRING:

2 pole AWG 22-16 / 0.35-1.5mm² spring-loaded

MOUNTING:

Two integrated # 8 mounting holes

PROBE:

AISI 316 Stainless Steel, 6mm diameter

ENCLOSURE:

NEMA 3 / IP54, PA 6/6 30% GF, Cover PC UL94 HB

THERMOWELL:

1/2" NPT Brass (Machined) or 316L SS (Fabricated) included

- 2", 4" or 6" length with compression installation
- 1/2" or 1/4" adapter available instead of thermowell

ACCESSORY: CONDUIT ADAPTER

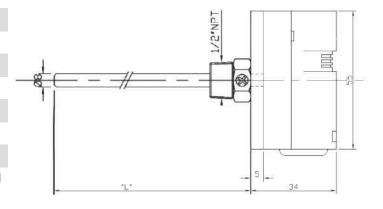
1/2" NPT threaded click into the bottom and can be purchased separately in packs of 10 or added by Part Number specification. (Change "P" to "C")







Part Number: THTIP-xxx



CABLE SERIES

The Tasseron Cable sensors come with PVC HT (gray) or High Temperature Silicone (blue or black) leads.

The Cable Series is available in numerous lengths and temperature elements for a variety of different applications.

FEATURES

- Standard 5ft & 10ft lengths with custom lengths available
- IP66 Star-Crimp for watertight applications
- PVC HT and Silicone Cable versions available

SPECIFICATIONS

OPERATING RANGE:

PVC: -20...105°C / -4...221°F SILICONE (NTC): -40...125°C / -40...257°F SILICONE (RTD): -40...180°C / -40...356°F

SENSING ELEMENT:

NTC, RTD (see R/T table pg. 32)

WIRING:

2 pole with stripped wire leads

ENCLOSURE:

NEMA 4X / IP66

PROBE:

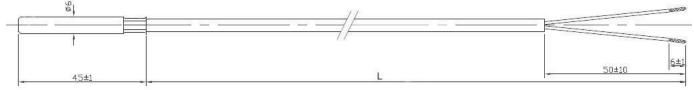
6mm x 45mm AISI 304 stainless steel Filled with waterproof compound Part Number PVC HT:

THTCP-xxx

Part Number Silicone:

THTCS-xxx

DIMENSIONS (in mm)



CABLE DUCT

The Tasseron Cable Duct temperature sensors are equippled with a longer duct mount probe star crimped to the cable leads with a mounting flange.

The flange is made of a durable injection molded material and with AISI 316 Stainless Steel probes.

FEATURES

TEMPERATURE

- Standard 5ft & 10ft lengths with custom lengths available
- IP66 Star-Crimp for watertight applications
- PVC HT and Silicone Cable versions available
- AISI 316 Stainless Steel probe in 4" / 6", other on request

SPECIFICATIONS

OPERATING RANGE:

PVC: -20...105°C / -4...221°F **SILICONE (NTC):** -40...125°C / -40...257°F

SILICONE (RTD): -40...180°C / -40...356°F

SENSING ELEMENT:

NTC, RTD (see R/T table pg. 32)

WIRING:

2 pole with stripped wire leads

ENCLOSURE:

NEMA 4X / IP66

PROBE:

6mm x 4 or 6in. AISI 316 stainless steel Filled with waterproof compound

BULK PACK AND SAVE:

The Cable Duct is a great solution for high volume OEM applications. Most products are available in bulk-pack per 100pc which offer storage efficiency, packing cost and freight savings.



Part Number: THTDK-xxx

BUTTON TEMP

The Tasseron Button temperature sensors are a very low-profile option for any indoor setting where visiblity is ciritical.

The Tasseron Button temperature is available to complement other applications in the Button Series.

FEATURES

- Very small footprint enclosure with high airflow
- Easy and secure installation in wall or ceiling
- Paintable cover and available in white or black plastic
- Series includes CO2 and RH combination options



*Patent Pending



SPECIFICATIONS

OPERATING RANGE:

0...50°C / 32...122°F

SENSING ELEMENT:

NTC, RTD (see R/T Table pg. 32)

WIRING:

2 pole AWG 22-16 / 0.35-1.5mm² screw-terminal

MOUNTING:

1-1/2 inch hole wall or ceiling 3/8-3/4 inch thickness

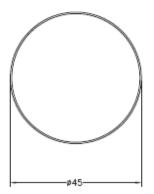
ENCLOSURE:

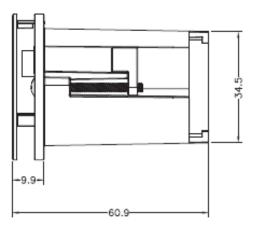
Injection-molded PC/ABS, UL94 V-0

COVER:

Snap in, injection-molded PC/ABS

Part Number: THTB-xxxx





ROOM AERO

The Tasseron Room Aero temperature sensors are in a streamlined, low profile, ABS enclosure. All units have high airflow for fast response, a built-in level, and feature Quick Connect wire terminals. Optional insulation is available.

FEATURES

- Attractive design that blends into environment
- Built-in level for mounting
- Quick Connect terminals for fast installation
- Private labeling and custom colors available

SPECIFICATIONS

OPERATING RANGE:

-40...50°C / -40...122°F

SENSING ELEMENT:

NTC, RTD (see R/T Table pg. 32) or 0-10V transmitter (see temperature ranges on pg. 31)

WIRING:

2 pole AWG 22-16 / 0.35-1.5mm² spring-loaded

MOUNTING:

2" x 4" Junction Box or drywall mount

ENCLOSURE:

Injection-molded ABS, UL94 HB

COVER:

Quick Snap, Injection-molded ABS

BUILT-IN LEVEL AND QUICK CONNECT:

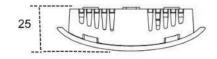
All AERO sensors feature built-in level and Quick Connect wire terminals.





Part Number: THTRA-xxx

DIMENSIONS (in mm)



ROOM AERO WITH SETPOINT AND OVERRIDE

The Tasseron Room Aero is available with setpoint and override functionality. Field Selectable dipswitches include multiple override, ground settings and direct/ reverse action potentiometer.

FEATURES

- Vertical setpoint control and override function
- Attractive design that blends into environment
- Built-in level for mounting
- Quick Connect terminals for fast installation
- Private labeling and custom colors available

SPECIFICATIONS

OPERATING RANGE:

-40...50°C / -40...122°F

SETPOINT RANGES:

0-10K, 0-20K, 20K-30K, 10-30K

SENSING ELEMENT:

NTC, RTD (see R/T table pg. 32)

WIRING:

4-pole AWG 22-16 / 0.35-1.5mm² spring-loaded

MOUNTING:

2" x 4" Junction Box or drywall mount

ENCLOSURE:

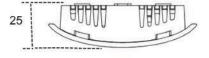
Injection-molded ABS, UL94 HB

COVER:

Quick Snap, Injection-molded ABS

DIMENSIONS (in mm)

Part Number: THTRA-xxx



ROOM MINI

The Tasseron Room Mini temperature sensors are in a high quality injection-molded plastic enclosure.

The small, lightweight design provides a NEMA 3 / IP 54 rated indoor option.

FEATURES

- Small, lightweight design
- Quick Connect wire terminals
- Quick Snap cover

SPECIFICATIONS

OPERATING RANGE:

-40...50°C / -40...122°F

SENSING ELEMENT:

NTC, RTD (see R/T Table pg. 32) or 4-20mA transmitter

WIRING:

2 pole AWG 22-16 / 0.35-1.5mm² spring-loaded

MOUNTING:

Drywall mount

ENCLOSURE:

NEMA 3 / IP 54 injection-molded ABS, UL94 HB

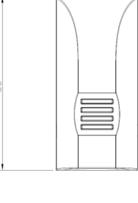
COVER:

Quick Snap, Injection-molded ABS

DIMENSIONS (in mm)

ROHS

Part Number: THTRP-xxx











WALL PLATE

The Tasseron Wall Plates provide a high quality and low profile installation onto a standard junction box.

Available in stainless steel or powder-coated white cover plates with matching mounting screws. Backing is fully insulated and equipped with Quick Connect wire terminals.

FEATURES

- Fully insulated backing
- White or Stainless plate options
- Quick Connect wire terminals
- Optional private labeling available

SPECIFICATIONS

OPERATING RANGE:

0...50°C / 32...122°F

SENSING ELEMENT:

NTC, RTD (see R/T Table pg. 32) or 4-20mA transmitter

WIRING:

2 pole AWG 22-16 / 0.35-1.5mm² spring-loaded

MOUNTING:

2" x 4" Junction Box, (2) integrated mounting holes

ENCLOSURE:

Stainless Steel or Powder Coated White Steel

QUICK CONNECT AND INSULATION:

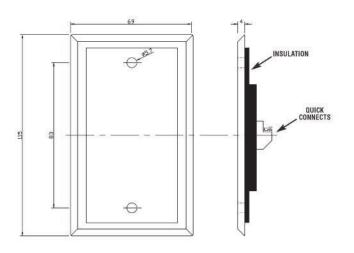
All WALL PLATE sensors feature Quick Connect wire terminals and insulated backing.







Part Number: THTRW-xxx



OUTDOOR MINI

The Tasseron Outdoor Mini remote temperature sensors are in a high quality injection-molded plastic enclosure. The small, lightweight modern design provides a NEMA 3 / IP54 rated alternative.

FEATURES

TEMPERATURE

- Small, compact design
- Quick Connect wire terminals for fast installation
- UV resistant Quick Snap cover



OPERATING RANGE:

-40...50°C / -40...122°F

SENSING ELEMENT:

NTC, RTD (see R/T table pg. 32)

WIRING:

2 pole AWG 22-16 / 0.35-1.5mm² spring-loaded

MOUNTING:

Single integrated mounting hole, complete with hardware

ENCLOSURE:

NEMA 3 / IP54, PA 6/6 30% GF,

COVER:

Quick Snap, injection-molded ABS, UV Resistant

ACCESSORY:

CONDUIT ADAPTER

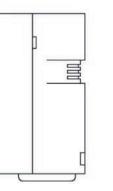
1/2" NPT threaded click into the bottom and can be purchased separately in packs of 10 or added by Part Number specification. (Change "P" to "C")

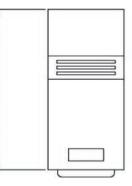


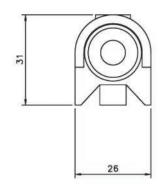


Part Number: THTOP-xxx

DIMENSIONS (in mm)







(570) 601-1971 sales@tasseronusa.com

OUTDOOR SAFE

The Tasseron Outdoor Safe Box temperature sensors are housed in a high quality, weatherproof NEMA 4X / IP65 polycarbonate enclosure with an internal hinged cover. All units have a watertight, built in 1/2" NPT threaded conduit connection on the bottom.

FEATURES

- Quick Connect wire terminals for fast installation
- Additional 1/2" conduit adapter pop-out grommets on both sides
- Hinged, removable cover with watertight O-ring
- UV resistant, white polycarbonate

SPECIFICATIONS

OPERATING RANGE:

-40...105°C / -40...221°F

SENSING ELEMENT:

NTC, RTD (see R/T Table pg. 32) or 4-20mA transmitter (see ranges on pg. 31)

WIRING:

2 pole AWG 22-16 / 0.35-1.5mm² spring-loaded

MOUNTING:

Quick mount bracket

PROBE:

AISI 316L Stainless Steel, 6mm diameter

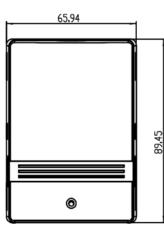
ENCLOSURE:

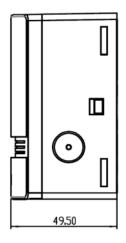
NEMA 4X, IP65 UV-resistant PC, UL94, V-2

1/2" NPT port on bottom

Internally hinged cover

Part Number: THTOS-xxx





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OUTDOOR EURO

The Tasseron Outdoor Euro temperature sensor provides a high quality solution for both commercial and industrial applications. The Euro housing offers weatherproof NEMA 4X/IP 66 ratings and is also available in passive options or multiple temperature transmitter ranges with 4-20mA analog output.

FFATURFS

- Quick Connect wire terminals for fast installation
- Additional 1/2" conduit adapter pop-out grommets on both sides
- Hinged, removable cover with watertight O-ring
- UV resistant, white polycarbonate

SPECIFICATIONS

OPERATING RANGE:

-40...105°C / -40...221°F

SENSING ELEMENT:

NTC, RTD (see R/T Table pg. 32) or 4-20mA transmitter (see ranges on pg. 31)

WIRING:

2 pole AWG 22-16 / 0.35-1.5mm² spring-loaded

MOUNTING:

Direct

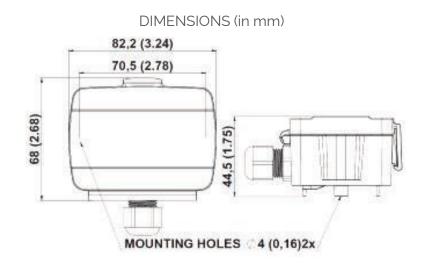
ENCLOSURE:

NEMA 4X, IP 66 UV-resistant PC/ABS, UL94, V-0

1/2" NPT conduit adapter and cable gland (m16) included

Hinged, removable snap cover

Part Number: THTOF-xxx



INCLUDED:

28

1/2" CONDUIT ADAPTER & CABLE GLAND

In addtion to the cable gland, the Euro Series is equipped with a conduit fitting m12 to 1/2" NPT









STRAP MINI

The Tasseron Strap Mini temperature sensors are the industry standard solution for pipe surface temperature measurement.

The small injection-molded plastic housing provides cost effective, NEMA 3 / IP54 enclosure with a quick snap cover.

FEATURES

- Spring Loaded contact surface
- Small, compact design
- Quick Connect wire terminals for fast installation
- Fits pipes as small as 1/2 in diameter

SPECIFICATIONS

OPERATING RANGE:

-20...90°C / -4...194°F

SENSING ELEMENT:

NTC, RTD (see R/T table pg. 32)

WIRING:

2 pole AWG 22-16 / 0.35-1.5mm² spring-loaded

MOUNTING:

Spring loaded, adjustable contact surface

ENCLOSURE:

NEMA 3 / IP54, PA 6/6 30% GF, UL 94 HB

COVER:

Quick Snap, injection-molded ABS, UV Resistant

ACCESSORY:

CONDUIT ADAPTER

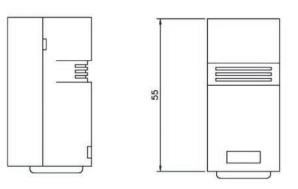
1/2" NPT threaded click into the bottom and can be purchased separately in packs of 10 or added by Part Number specification.(Change "P" to "C")

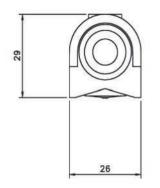






Part Number: THTSP-xxx





AVERAGING SERIES

The Tasseron Averaging Series sensors are available with any of the Tasseron Duct enclosures. All units feature the patented, water-tight, quick coupling system for one person installation.

Temperature sensor element placement is marked in the tubing, which allows for strategic location for ideal temperature measurement.





Part Number: THTAP-xxx

ROHS

Part Number: THTAS-xxx

SPECIFICATIONS

OPERATING RANGE:

-40...105°C / -40...221°F

SENSING ELEMENT:

NTC, RTD (see R/T Table pg. 32)

NUMBER OF ELEMENTS:

24' has 9 sensors, 12' has 4 sensors, 8' has 4 sensors, 18" has 4 sensors

WIRING:

2 pole AWG 22-16 / 0.35-1.5mm² spring-loaded

PROBE:

7mm aluminum or copper tubing, 18" 316L SS

PROBE LENGTH:

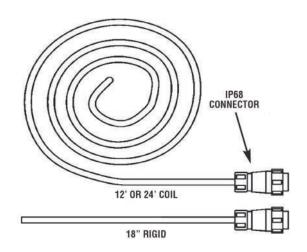
8ft, 12ft, or 24ft coiled, 18in rigid

QUICK COUPLING:

NEMA 6, IP 68 water-tight from probe to enclosure

30 ENCLOSURE:

See corresponding duct sensor information



QUICK COUPLING SYSTEM:

All AVERAGING sensors feature the patented Quick Coupling System for one-person installation.



FEATURES

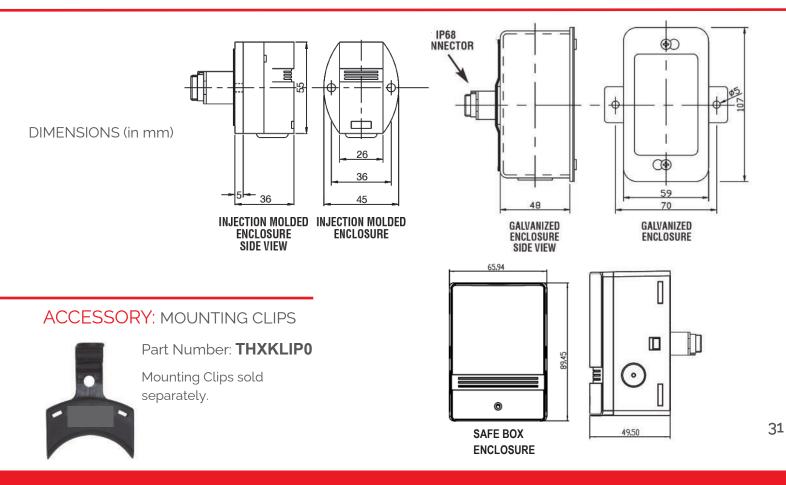
- 24' with 9 points of measurement
- 12' with 4 points of measurement
- 8' with 4 points of measurement
- 18" with 4 points of measurement
- Patented Quick Coupling from enclosure to sensing tube
- Quick Connect wire terminals
- Marked sensing element location
- Variety of housing options



Part Number: THTAG-xxx



Part Number: THTAF-xxx



HVAC temperature measuring elements

R/T TABLES

3				RTD elements						
Temp		curve A	curve B	NTC thermisto B curve G ype 3 NTC 10K type 4	curve C	curve D NTC 3KOhm	curve E Pt1000/B	curve F Ni1000-891	curve H Pt100/B	curve K Ni1000-TC5
		a local second se	Contraction and the first of the second second							
°C	°F	R (kOhm)	R (kOhm)	R (kOhm)	R (kOhm)	R (kOhm)	R (Ohm)	R (Ohm)	R (Ohm)	R (Ohm)
-40	-40	341.4	242.1	191.9	784.6	97.40	843	697	84.3	831
-35	-31	246.2	181.0	146.6	558.8	71.53	862	719	86.2	851
-30	-22	179.5	136.6	112.9	402.7	52.80	882	743	88.2	872
-25	-13	132.2	103.9	87.59	293.6	39.16	902	766	90.2	893
-20	-4	98.34	79.64	68.47	216.3	29.24	922	790	92.2	914
-15	5	73.73	61.54	53.91	160.7	22.04	941	815	94.1	935
-10	14	55.78	47.91	42.74	120.5	16.74	961	839	96.1	956
-5	23	42.59	37.57	34.11	91.07	12.79	980	864	98.0	978
0	32	32.82	29.66	27.40	69.40	9.856	1000	891	100.0	1000
5	41	25.52	23.57	22.14	53.33	7.663	1020	916	102.0	1022
10	50	19.97	18.85	17.99	41.28	5.999	1039	942	103.9	1045
15	59	15.75	15.17	14.72	32.18	4.729	1058	968	105.8	1068
20	68	12.51	12.28	12.09	25.28	3.754	1078	994	107.8	1091
25	77	10.00	10.00	10.00	20.00	3.000	1097	1021	109.7	1114
30	86	8.048	8.184	8.308	15.92	2.416	1117	1048	111.7	1138
35	95	6.516	6.735	6.936	12.75	1.957	1136	1075	113.6	1162
40	104	5.306	5.577	5.819	10.27	1.595	1155	1102	115.5	1186
45	113	4.345	4.641	4.904	8.320	1.307	1175	1130	117.5	1210
50	122	3.578	3.877	4.151	6.779	1.076	1194	1158	119.4	1235
55	131	2.962	3.261	3.529	5.556	0.888	1213	1187	121.3	1260
60	140	2.464	2.756	3.012	4.577	0.737	1232	1216	123.2	1285
65	149	2.060	2.340	2.582	3.788	0.616	1252	1245	125.2	1311
70	158	1.730	1.996	2.221	3.150	0.518	1271	1274	127.1	1337
75	167	1.460	1.707	1.918	2.630	0.441	1290	1304	129.0	1364
80	176	1.236	1.466	1.663	2.206	0.377	1309	1334	130.9	1390
85	185	1.051	1.264	1.446	1.857	0.324	1328	1365	132.8	1417
90	194	0.896	1.095	1.262	1.570	0.278	1347	1396	134.7	1444
95	203	0.767	0.952	1.105	1.333	0.239	1366	1427	136.6	1472
100	212	0.659	0.831	0.970	1.136	0.206	1385	1459	138.5	1500
105	221	0.569	0.728	0.855	0.972	0.179	1404	1491	140.4	1528
110	230	0.493	0.640	0.755	0.834	0.156	1423	1524	142.3	1557
115	239	0.428	0.564	0.669	0.719	0.136	1442	1556	144.2	1586
120	248	0.374	0.499	0.594	0.621	0.119	1461	1590	146.1	1615
125	257	0.327	0.443	0.529	0.539	0.105	1479	1623	147.9	1645

* Other elements on request



TASSERON

TEMPERATURE PART NUMBERS

HOW TO BUILD A TASSERON TEMPERATURE PART NUMBER

Sample Part number: THTDPA06 — Duct Mini sensor with 10k Type 2 and 6" probe

Т	Н	Т	D	Р	Α	0	6

Tasseron — HVAC— Temp	APPLICATION	HOUSING	ELEMENT	DETAILS	DETAILS
	A—Averaging	F—Flange	A—10K -2	0	2—2inch
	D—Duct	G—Galvanized Box	B—10K -3	0	4—4inch
		P—Mini	C—20K	0	6—6inch
		E—Euro (NEMA 4X)	D—3K	0	8—8inch/feet(avg)
		S—Safe (NEMA 4X)	E—Pt1000	1	2—12inch/feet(avg)
		C—Mini Conduit	F—Ni1000-891	1	8—18inch
		K—Duct Cable	G—10K-4	2	4—24 feet(avg)
	V—VAV	F—Flange	H— Pt100	4	2—4in, w/ 2' leads
		P—Mini	I—4.7K	4	6—4in, w/ 6' leads
	I—Immersion	F—Flange	J—10K-3 (11K)	4	9—4in, w/ 9' leads
		G—Galvanized Box	K— Ni1000-TC5	4	D—4in, w/ 12' leads
		P—Mini	L—12K	2	A—2" w/ 1/2" adapter
		E—Euro (NEMA 4X)	M—100K	2	Q-2" w/ 1/4" adapter
		S—Safe (NEMA 4X) C—Mini Conduit	N—11K P—2.8K	2	B—2" w/ brass well S—2" w/ SS well
	R—Room	A—Aero	r—2.0K	4	A—4" w/ 1/2" adapter
		P—Mini		4	Q-4" w/ 1/4" adapter
		W—Wall Plate		4	B—4" w/ brass well
	O—Outdoor	E—Euro (NEMA 4X)		4	S—4" w/ SS well
		P—Mini	TRANSMITTERS:	6	A—6" w/ 1/2" adapter
		S—Safe (NEMA 4X)	T — 0°C100°C	6	Q—6" w/ 1/4" adapter
	S—Strap	C—Mini Conduit P—Mini	U — 20°F120°F V — 0°F100°F	6 6	B—6" w/ brass well S—6" w/ SS well
	o—otrap	C—Mini Conduit	V — 0 P100 P W— 0°C50°C	0	S— SS Wall Plate
	C—Cable	T—TPE, overmolded	X— -40°F70°C	0	W—White Wall Plate
		P— PVC HT		A—S/O w/ 0-10K range	0—Uninsulated Aero
		S—Silicone		B—S/O w/ 0-20K range	0—Uninsulated Aero
	B—Button	W—White	Y—Digital	C—S/O w/ 20-30K range	
		B—Black		D—S/O w/ 10-30K range	
				A—S/O w/ 0-10K range	I—Insulated Aero

B—S/O w/ 0-20K range

0

0

0

0

0

0

1 2

0

C—S/O w/ 20-30K range I—Insulated Aero D—S/O w/ 10-30K range I—Insulated Aero

0

0

0

I-Insulated Aero

0-Uninsulated Aero

I-Insulated Aero

2 - 2ft cable

5 - 5ft cable 0 - 10ft cable

0 - 20ft cable

DUCT SAFE HUMIDITY

The Tasseron Duct Safe Humidity or Humidity and Temperature sensors are in the UV resistant, polycarbonate weatherproof Safe Box enclosure.

All units have a 1/2" NPT water-tight port with 2 additional watertight ports on both sides for easy wiring and internally hinged cover.

FEATURES

- Quick Connect wire terminals
- Field Selectable Outputs
- Adjustable length; movable mounting flange
- Coated circuit boards for moisture resistance

SPECIFICATIONS

SUPPLY VOLTAGE:

4-20mA (100 Ohm Load): 10-35 VDC

4-20mA (250 Ohm Load):13-35 VDC

0-5V DC: 8-35 VDC / 10-35 VAC

0-10V DC: 13-35 VDC / 13-35 VAC

HUMIDITY SENSOR:

Accuracy: ±2% / ±3% / ±5%

Output: Analog (0 to 5V, 0 to 10V or 4 to 20mA) or Digital

TEMPERATURE SENSOR :

NTC or RTD (see R/T Table pg. 32)

OPERATING ENVIRONMENT:

Humidity: 0-100%, non-condensing

Temperature: -40...60°C / -40...140°F

WIRING:

4-20mA : 2 wire, spring-loaded; 0-5 / 0-10V: 3 wire, spring-loaded

MOUNTING:

Quick mount bracket

PROBE:

Adjustable up to 8in; 30% GF Nylon, UL 94 HB

ENCLOSURE:

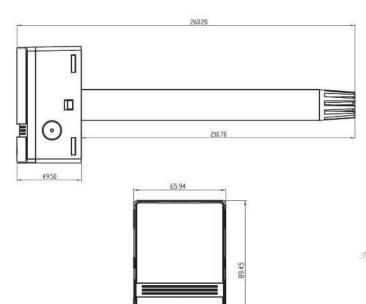
34 NEMA 4X, IP 65 UV-resistant PC, UL94 V-2

Polyethylene Filter, replaceable





Part Number: THHDS-xxx



(570) 601-1971 sales@tasseronusa.com

DUCT EURO HUMIDITY

The Tasseron Duct Euro Humidity is a high accuracy humidity and temperature duct transmitter in the weatherproof Euro Box enclosure with a 316 SS probe.

All units are equipped with analog outputs for both humidity and temperature and offered with humidity accuracies of 2%, 3% or 5% RH. Passive NTC or RTD temperature elements also available.

FEATURES

- Quick Connect spring-loaded wire terminals
- 0-10V or 4-20mA analog outputs for RH + Temp
- Removable hinged cover with snap lock lid (NEMA 4X)
- High accuracy and long-term stability

SPECIFICATIONS

SUPPLY VOLTAGE:

13-35 VDC / 13-35 VAC

HUMIDITY SENSOR:

05 (2.78)

Accuracy: ±2% / ±3% / ±5% Output: Analog (fixed) 0—10V or 4— 20mA

TEMPERATURE SENSOR :

Active: Analog (fixed) 0-10V or 4-20mA

Active Range: see ranges on pg. 39

Passive: Additonal NTC or RTD available (see R/T Table pg. 32)

OPERATING ENVIRONMENT:

Humidity: 0-100%, non-condensing

Temperature: -40...70°C / -40...150°F

WIRING:

0—10V: 5-wire, spring-loaded; **4—20mA** : 4-wire, spring-loaded

MOUNTING:

Duct; 2 screw

PROBE:

8 in. L., 12mm D; AISI 316;

ENCLOSURE:

NEMA 4X, IP65 UV-resistant PC/ABS, UL94 V-0

1/2" conduit adapter and cable gland included Polyethylene Filter

Part Number: THHDE-xxx

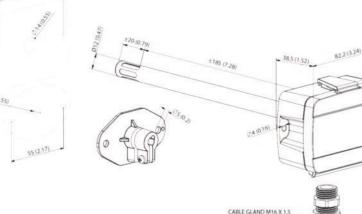
35

HUMIDITY









ROOM HUMIDITY

The Tasseron Room Humidity or combination Humidity and Temperature sensors are in the low-profile, streamlined Aero enclosure.

Onboard dipswitches enable field selectable analog outputs. Options for interchangable NTC or RTD passive temperature sensors.

FEATURES

- Quick Connect wire terminals
- Field Selectable Outputs
- Coated circuit boards for moisture resistance
- Highly accurate elements with long-term stability

SPECIFICATIONS

SUPPLY VOLTAGE:

4-20mA (100 Ohm Load): 10—35 VDC
4-20mA (250 Ohm Load):13—35 VDC
0-5V DC: 8—35 VDC / 10—35 VAC
0-10V DC: 13—35 VDC / 13—35 VAC

HUMIDITY SENSOR:

Accuracy: ±2% / ±3% / ±5% **Output**: Analog (0 to 5V, 0 to 10V or 4 to 20mA) or Digital Options

TEMPERATURE SENSOR:

NTC or RTD (see R/T Table pg. 32) or

Fixed Analog 0-10V only (see ranges on pg. 39)

OPERATING ENVIRONMENT:

Humidity: 0-100%, non-condensing

Temperature: 0...50°C / 32...122°F

WIRING:

4-20mA: 2 wire, spring-loaded; 0-5 / 0-10V: 3 wire, spring-loaded

MOUNTING:

2" x 4" Junction Box or drywall mount

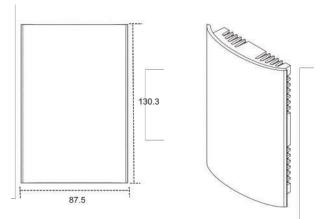
ENCLOSURE:

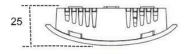
36 Injection-molded ABS, UL94 HB

Quick Snap Cover, Injection-molded ABS



Part Number: THHRA-xxx





37

BUTTON HUMIDITY

High quality wall or ceiling mount humidity and optional temperature sensor in the very low profile button enclosure. The easy-to-install units are ideal for office environments, as well as museums, galleries, or any other open indoor setting. Available as humidity only or as a combination sensor with available NTC or RTD passive temperature elements.

FEATURES

- 2% / 3% / 5% relative humidity accuracies
- Very low-profile enclosure with high airflow
- Easy and secure installation in wall or ceiling
- Paintable cover and available in white or black plastic

SPECIFICATIONS

SUPPLY VOLTAGE:

0-10V DC: 13-35 VDC / 13-35 VAC

HUMIDITY SENSOR:

Accuracy: ±2% / ±3% / ±5% Output: Analog-0 to 10V

TEMPERATURE SENSOR:

NTC or RTD (see R/T Table pg. 32)

OPERATING ENVIRONMENT:

Humidity: 0-100%, non-condensing

Temperature: 0...50°C / 32...122°F

WIRING:

3-wire RH only, 5-wire RH+T

MOUNTING:

1-1/2 inch hole wall or ceiling 3/8-3/4 inch thickness

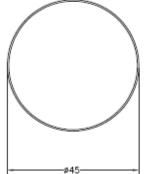
ENCLOSURE:

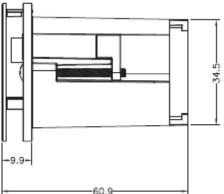
Injection-molded PC/ABS, UL94 V-0

COVER:

Snap in, injection-molded PC/ABS

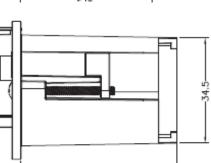
*Patent Pending Design











OUTDOOR SAFE HUMIDITY

The Tasseron Outdoor Safe Humidity or Humidity and Temperature sensors are in UV resistant, polycarbonate weatherproof NEMA 4X / IP 65 enclosure with an internal hinged cover.

All units have a watertight, ports on the side for easy wiring and internally hinged cover.

FEATURES

- Quick Connect wire terminals
- Field Selectable Outputs
- Coated circuit boards for moisture resistance
- Highly accurate elements with long-term stability

SPECIFICATIONS

SUPPLY VOLTAGE:

4-20mA (100 Ohm Load): 10—35 VDC
4-20mA (250 Ohm Load):13—35 VDC
0-5V DC: 8—35 VDC / 10—35 VAC
0-10V DC: 13—35 VDC / 13—35 VAC

HUMIDITY SENSOR:

Accuracy: $\pm 2\%$ / $\pm 3\%$ / $\pm 5\%$ with preset / Selectable Output: 0 to 5V, 0 to 10V or 4 to 20mA

TEMPERATURE SENSOR ELEMENT:

NTC or RTD (see R/T Table pg. 32)

OPERATING ENVIRONMENT:

Humidity: 0-100%, non-condensing

Temperature: -40...60°C / -40...140°F

WIRING:

4-20mA : 2 wire, spring-loaded; 0-5 / 0-10V: 3 wire, spring-loaded

MOUNTING:

Quick mount bracket

ENCLOSURE:

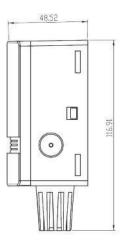
NEMA 4X, IP 65 UV-resistant PC, UL94 V-2

38 Polyethylene Filter, replaceable



Part Number: THHOS-xxx





OUTDOOR WEATHER HUMIDITY

The Tasseron Outdoor Weather Sensors are very high quality outdoor relative humidity transmitter in a NEMA 4X / IP65 injection-molded Meteorological Box enclosure.

The solar shield provides additional protection from rain and snow while protecting both relative humidity and temperature sensors when installed in areas where sunlight may be present.

FEATURES

- 2% or 3% RH accuracy options available
- Solar shield included for radiation protection
- Coated circuit boards for moisture resistance
- Highly accurate elements with long-term stability

SPECIFICATIONS

SUPPLY VOLTAGE:

15-35 VDC / 15-35 VAC

HUMIDITY SENSOR:

Accuracy: ±2% / ±3%

Output: 0-10V Analog (fixed)

TEMPERATURE SENSOR ELEMENT:

Active: Analog 0-10V (fixed)

Active Range: -10...40°C (RANGE "R")

Passive: Additonal NTC or RTD available (see R/T Table pg. 32)

OPERATING ENVIRONMENT:

Humidity: 0-100%, non-condensing

Temperature: -40...60°C / -40...140°F

WIRING:

RH ONLY: 3 wire, spring-loaded

RH+T: 5-wire, spring-loaded

MOUNTING:

Direct: AISI 304 bracket, 2-screw

Pole: M6 bracket 35-53mm

ENCLOSURE:

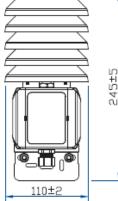
NEMA 4X, IP65 UV-resistant PC, UL94 V-2

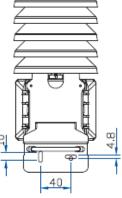
Polyethylene Filter, replaceable

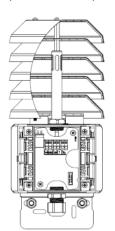


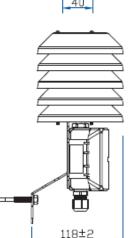
Part Number: THHOW-xx-C

DIMENSIONS (in mm)









39

OEM HUMIDITY SERIES

The Tasseron OEM Humidity or Humidity and Temperature sensors are compact, easy to mount, and very effective with digital or analog signals for implementation.

Built for high-volume OEM applications, these provide highly accurate measurement of both temperature and humidity while providing a cost effective alternative over less specialized models.

FEATURES

- 2% RH accuracy
- Very low supply voltage for digital models
- Highly accurate elements with long-term stability
- Customizable to provide cost savings

SPECIFICATIONS

SUPPLY VOLTAGE:

1.65V to 3.6V DC (Digital Version)

HUMIDITY SENSOR:

±2% (20-80% RH) ±3.5% (0-100% RH) Digital (Modbus or I2C)

TEMPERATURE SENSOR :

Digital or Passive Resistance

OPERATING ENVIRONMENT:

Humidity: 0-100%, non-condensing

Temperature: -40...125°C / -40...257°F

WIRING:

4-wire 16-22AWG;

Screw down terminals

MOUNTING:

Direct mounting with through hole flange on both sides.

PROBE:

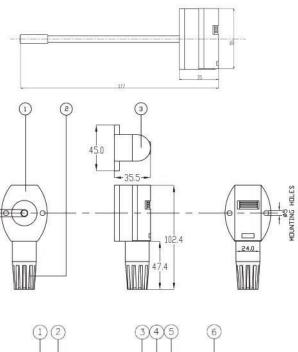
AISI 316L Stainless Steel, 6mm diameter

ENCLOSURE:

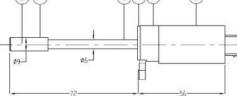
40 Injection-molded PA 6/6 nylon 30%GF, NEMA 3 / IP54



DIMENSIONS (in mm)



WIRING



OEM SURFACE MOUNT HUMIDITY

The Tasseron Surface Mount Utility Humidity or Humidity and Temperature sensors are in a compact, easy to mount enclosure.

Built for high-volume OEM applications, these provide highly accurate measurement of both temperature and humidity while providing a cost effective alternative over less specialized models.

FEATURES

- Standard 3% RH accuracy, other options available
- 1/4" Faston Tabs or Molex Minifit termination options
- Analog or Digital outputs
- Highly accurate elements with long-term stability

SPECIFICATIONS

SUPPLY VOLTAGE:

4-20mA (100 Ohm Load): 10—35 VDC
4-20mA (250 Ohm Load):13—35 VDC
0-5V DC: 8—35 VDC / 10—35 VAC
0-10V DC: 13—35 VDC / 13—35 VAC

HUMIDITY SENSOR:

±3% (10%-90% RH); 5% (0-100% RH) Digital (Modbus, I2C) or Analog Outputs

TEMPERATURE SENSOR:

Digital or Passive Resistance

OPERATING ENVIRONMENT:

Humidity: 0-100%, non-condensing

Temperature: 0...50°C / 32...122°F

WIRING:

4-20mA : 2 wire, 0-5 / 0-10V: 3 wire; Digital: 4 wire

1/4" Faston Tabs or Molex Minifit

MOUNTING:

Direct mounting with through hole flange on both sides

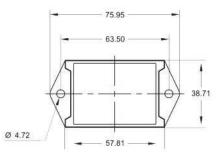
ENCLOSURE:

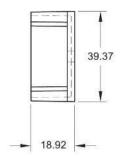
Injection-molded ABS with UL 94 V-0 rating

Fully potted sensor



Part Number: THHS-xxxx





DEW POINT SWITCH

The Tasseron Dew Point Switch is a pipe or surface mount early-warning switch for dew-point or condensation in critical environments.

Status LED light indicates if 90% condensation level, before dew point is reached, as well as potential electronic or wiring failure.

FEATURES

- Status LED indicator at 90% dew-point
- Compact and high airflow design
- Ability to mount direct to pipes or flat surfaces
- Coated electronics for dust and moisture protection

SPECIFICATIONS

SUPPLY VOLTAGE:

24V DC/AC ±20%

SWITCH POINTS:

 $\label{eq:RH} $$RH > 90\pm3\%$ - OPEN on clamp DRY, CLOSED on clamp WET $$RH < 90\pm3\%$ - CLOSED on clamp DRY, OPEN on clamp WET $$$

STATUS / LED:

ON: No Condensation

FLASHING: Condensation Danger

OFF: Power Off / Failure

OPERATING ENVIRONMENT:

Humidity: 0-100%, non-condensing

Temperature: 0...50°C / 32...+122°F

WIRING:

5-wire; 16-22AWG;

Spring-loaded wire terminals

MOUNTING:

Surface, duct, pipe-strap

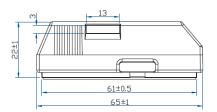
ENCLOSURE:

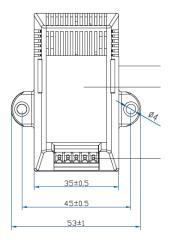
IP 40; Injection-molded PC/ABS UL 94 V-0, UV resistant





Part Number: THHSDPS0





HUMIDITY PART NUMBERS

TEMPERATURE ACCURACY

HOW TO BUILD A TASSERON HVAC RELATIVE HUMIDITY PART NUMBER

Tasseron— HVAC— H— Humidity APPLICATION

TASSERON SENSORS & CONTROLS

Humidity Duct sensor in Safe Box with 10k Type 2, 2% accuracy RH, and 4-20mA output

Т	Н	Н	D	S	Α	2	Α

HOUSING

2—2% D—Duct A—Aero A-10K -2 A-4-20 mA D-Dew Point B-10K -3 O—Outdoor 3-3% B-0-5V E-Euro 5-5% C-0-10V R-Room C-20K D-Modbus S—Surface / M—Weather D—3K P-Mini E-Pt1000 F—I2C Or Strap T-Threaded S-Safe F-Ni1000-891 **B**—Button T—Tabs G—10K-4 W—White H- Pt100 B—Black I-4.7K J-10K-3 (11K) K-Ni1000-TC5 L-12K M-100K N-11K P-2.8K Transmitter: *R*— -10...40°C *Weather Only T- 0...+100°C (32...212°F) U-+20...+120°C V- 0...+100°F W- 0...+50°C X— -40...+70°C Y-DIGITAL **Z—NO TEMP**

OUTPUT

AIR VELOCITY SERIES

Air velocity transmitters are dedicated for accurate and reliable measurement in building automation and ventilation applications. Transmitters employ sensor element which operates on the thermal anemometer principle based on thin film technology.

The Tasseron Air Flow sensors offer two field selectable measuring ranges: 0...10 m/s (0...2000ft/min) and 0...20 m/s (0...4000ft/min). The ranges are preset to the desired range and are able to be easily changed. The output signal is fixed analog 0-10V for the programmed range.

The probe is clearly marked with measurements for accurate installation. The sensor is also equipped with an adjustable mounting flange to allow for proper depth installation depending on the application requirements.

Duct Mount Version Part Numbers: THFDE-x-oC

SPECIFICATIONS

OPERATING RANGE:

Working temperature probe: -25...+50 °C (-13...122 °F) Working temperature electronics: -10...+50 °C (14...122 °F)

SENSING ELEMENT:

Thermal anemometer thin film

SUPPLY VOLTAGE:

44

19-29VDC or 24VAC±20%

MEASUREMENT RANGE:

Measurement Range 1: 0...10m/s; 0...2000ft/min. (selectable) Measurement Range 2: 0...20m/s; 0...4000ft/min. (selectable)

WIRING:

4-pole 22-16 / 0.35-1.35mm² spring-loaded

PROBE:

AISI 316L; 12mm diameter

PROBE LENGTH:

Duct: 8in. Length (205mm),

Remote: 14in. Length (350mm),

ACCURACY:

0.2 m/s + 3% measured value (@20°C, 45% RH, 1013 hPa)

ENCLOSURE:

NEMA4x / IP65 PC/ABS UL 94 V-0, UV resistant

ORDERING INFORMATION:

THFDEAOC-DUCT AIR FLOW 0...10m/s (0...2000ft/min), 0-10V THFMA1C-REMOTE AIR FLOW 0...10m/s (0...2000ft/min),

THFDEBOC—DUCT AIR FLOW 0...20m/s (0...4000ft/min), 0-10V

THFMA1C—REMOTE AIR FLOW 0...10m/s (0...2000ft/min), 1m CABLE, 0-10V

THFMB1C—REMOTE AIR FLOW 0...20m/s (0...4000ft/min), 1m CABLE, 0-10V

FEATURES

- High accuracy and long term stability
- Resistance to pollution and mechanical stress
- Duct mount and remote probe versions available
- Analog 0-10V output signal

- Easy installation with adjustable mounting flange
- Field selectable ranges of 0..10m/s (0...2000ft/min) or 0..20m/s (0..4000ft/ min)
- Clearly marked depth measurements

Remote Mount Version Part Numbers: THFRM-x-1C

DIMENSIONS (in mm) 2% 0 125 DETAIL ENGRAVING 82.2+0 38 70.5±0 e Ēđ 350± 1000±50 45 48± 80

(570) 601-1971

AIR FLOW

ROOM AERO CO2

The Tasseron Room CO2 or combination CO2 / Temperature sensors are housed in the low-profile, streamlined Aero enclosure.

The Dual Channel NDIR CO2 technology and solid state infrared source ensures long lifetime, excellent accuracy and repeatability with low drift and quick start up.

FEATURES

- Selectable measurement and output ranges
- Quick connect wire terminals for fast installation
- Dual beam infrared sensing CO2 technology (NDIR)

SPECIFICATIONS

SUPPLY VOLTAGE:

AIR QUALITY

24 VAC +/-20%; 18-35 VDC Max

CO2 SENSOR ELEMENT:

Accuracy: ±30ppm +3%; Dual beam infrared NDIR;

Response: <2 min with <1 min start-up

Ranges: 0-2000ppm, 0-5000ppm, 0-10000ppm

Outputs: Analog (0 to 5V, 0 to 10V or 4 to 20mA) or Digital*

TEMPERATURE SENSOR ELEMENT:

NTC or RTD (see R/T Table pg. 32)

OPERATING ENVIRONMENT:

Humidity: 0-100%, non-condensing

Temperature: 0...50°C / 32...122°F

WIRING:

4-20mA: 2 wire, spring-loaded; 0-5 / 0-10V: 3 wire, spring-loaded

MOUNTING:

2" x 4" Junction Box or drywall mount, built in level

ENCLOSURE:

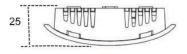
Injection-molded ABS, UL94 HB

Quick Snap Cover, Injection-molded ABS

DIMENSIONS (in mm)

Part Number: THCR-xxxx

130.3









ROOM AERO CO2 / RH COMBO

The Tasseron Room CO2 and Relative Humidity or combination CO2/RH and Temperature sensors are housed in the low-profile, streamlined Aero enclosure.

The Dual Channel NDIR CO2 technology and solid state infrared source ensures long lifetime, excellent accuracy and repeatability with low drift and quick start up.

FEATURES

- Standard 2% RH Accuracy
- Selectable measurement and output ranges
- Quick connect wire terminals for fast installation
- Dual beam infrared sensing CO2 technology (NDIR)

SPECIFICATIONS

SUPPLY VOLTAGE:

24 VAC +/-20%; 18-35 VDC Max

CO2 SENSOR ELEMENT:

Accuracy: ±30ppm +3%; Dual beam infrared NDIR;

Response: <2 min with <1 min start-up

Ranges: 0-2000ppm, 0-5000ppm, 0-10000ppm

Outputs: Analog (0 to 5V, 0 to 10V or 4 to 20mA) or Digital*

HUMIDITY SENSOR ELEMENT:

Accuracy: ±2%

Outputs: Analog (0 to 5V, 0 to 10V or 4 to 20mA) or Digital*

TEMPERATURE SENSOR ELEMENT:

NTC or RTD (see R/T Table pg. 32)

OPERATING ENVIRONMENT:

Humidity: 0-100%, non-condensing

Temperature: 0...50°C / 32...122°F

WIRING:

4-20mA: 2 wire, spring-loaded; 0-5 / 0-10V: 3 wire, spring-loaded

MOUNTING:

2" x 4" Junction Box or drywall mount

ENCLOSURE:

Injection-molded ABS, UL94 HB

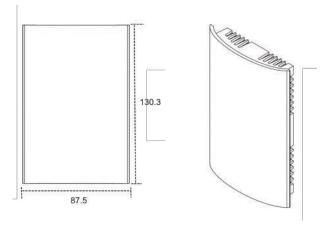
Quick Snap Cover, Injection-molded ABS

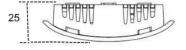
DIMENSIONS (in mm)

Part Number: THCR-xx-2-x

RoH

A444 44444





47

BUTTON CO2

High quality wall or ceiling mount CO2 and optional temperature sensor in the very low-profile button enclosure. The easy-to-install units are ideal for office environments, as well as museums, galleries, or any other open indoor setting where concealability is important.

The Tasseron Button Series is available as a CO2 only or as a combination sensor with available NTC or RTD passive temperature elements.

FEATURES

- CO2 0...2000PPM analog output with options for combination passive temperature sensor
- Very low-profile enclosure with high airflow
- Easy and secure installation in wall or ceiling
- Paintable cover and available in white or black plastic

SPECIFICATIONS

SUPPLY VOLTAGE:

24V DC +/-20%; 24V AC +/-20%

CO2 SENSOR:

Accuracy: ±40 ppm ±5% m.v.

Range: 0...2000 ppm

Output: Analog-0 to 10V

TEMPERATURE SENSOR:

NTC or RTD (see R/T Table pg. 32)

OPERATING ENVIRONMENT:

Humidity: 0-100%, non-condensing

Temperature: 0...50°C / 32...122°F

WIRING:

CO2 ONLY: 3-wire

CO2+T: 5-wire RH+T

MOUNTING:

1-1/2 inch hole wall or ceiling 3/8-3/4 inch thickness

ENCLOSURE:

Injection-molded PC/ABS, UL94 V-0

COVER:

48

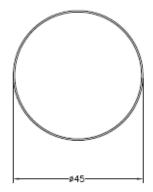
Snap in, injection-molded PC/ABS

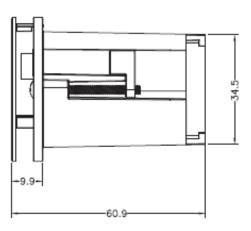


*Patent Pending Design



Part Number: THCB-xxx-C





DUCT EURO CO2

The Tasseron Duct Mount CO2 sensor with options for Relative Humidity (RH) and Temperature (T) outputs in the Euro Box with hinged cover and toolfree Quick Connect wire terminals.

Dual channel technology and a solid state infrared source ensures long lifetime, excellent accuracy and repeatability with low drift and quick start up.

FFATURFS

- Analog 0-10V output signals for CO2+Temp (optional RH)
- Dual beam infrared sensing technology (NDIR)
- Additional passive NTC/RTD temperature elements available

SPECIFICATIONS

SUPPLY VOLTAGE:

24 VAC +/-20%; 18-35 VDC Max

CO2 SENSOR ELEMENT:

Accuracy: ±30ppm +3%; Dual beam infrared NDIR; Response: <2 min with <1 min start-up Ranges: 0—2000ppm *(other ranges on request) Outputs: Analog 0-10V

HUMIDITY SENSOR ELEMENT (optional):

Accuracy: ±2.5% Outputs: Analog 0-10V

TEMPERATURE SENSOR ELEMENT:

Range: 0...50°C / 32...122°F Outputs: Analog 0-10V

Or NTC or RTD (see R/T Table pg. 32)

WIRING:

5-wire, spring-loaded (no RH); 6-wire, spring-loaded

MOUNTING:

Duct: 2 screw

ENCLOSURE/PROBE:

Box: NEMA 4X, IP65 UV-resistant PC/ABS, UL94, V-0 1/2" conduit adapter and cable gland included Probe: 8 in. L., 12mm D; AISI 316;

Part Number: THCDA-xxx



ROHS



DUCT CO2, VOC, RH, TEMP 4-IN-1 DIGITAL

The Tasseron Duct Mount Air Quality sensor for Carbon Dioxide (CO2), Volatile Organic Compounds (VOC), Relative Humidity (RH) and Temperature (T) over digital Modbus output.

This combo sensor is in the NEMA 4X/ IP65 Euro Box, offering a hinged removable cover and tool-free Quick Connect wire terminals. Additional options for 3-in-1 or 2-in-1 version also available.

FEATURES

- Superior IAQ metrics with VOC and CO2 measurement
- Options for 4-in-1, 3-in-1, or 2-in-1 combinations
- Field configurable Modbus parameters
- NEMA 4X / IP65 rated enclosure

SPECIFICATIONS

SUPPLY VOLTAGE:

24 VAC +/-20%; 18-35 VDC Max

CO2 SENSOR ELEMENT:

Accuracy: ±30ppm +3%; Dual beam infrared NDIR; Response: <2 min with <1min start-up Range: 0—2000ppm *(other ranges on request) Outputs: Modbus

VOC SENSOR ELEMENT

Range: 0...100%

HUMIDITY SENSOR ELEMENT

Accuracy: ±2%

Outputs: Modbus

INTERFACE:

Modbus RTU

50

TEMPERATURE SENSOR ELEMENT:

Range: 0...50°C / 32...122°F

Outputs: Modbus

WIRING:

5-wire

MOUNTING:

Duct; 2 screw

ENCLOSURE/PROBE:

Box: NEMA 4X, IP65 UV-resistant PC/ABS, UL94, V-0 1/2" conduit adapter and cable gland included **Probe**: 8 in. L., 12mm D; AISI 316;



ROHS

DUCT SAFE VOC / RH

The Tasseron Duct Mount Volatile Organic Compound (VOC) transmitter with optional Humidity and/or Temperature sensors are in the UV resistant, polycarbonate weatherproof Safe Box enclosure.

All units have a watertight internally hinged cover, added ports on the sides for easy wiring, and a 1/2" NPT threaded port on the bottom.

FFATURFS

- Total VOC from 60,000ppb with 15% accuracy
- CO2 equivalent measurement of 0-2000ppm •
- Standard 2.5% RH accuracy

SPECIFICATIONS

SUPPLY VOLTAGE:

17-35 VDC or VAC

VOC SENSOR ELEMENT:

Accuracy: ±15% measured value;

Resolution: 1ppb, 6ppb, 32ppb

Range: 0—60,000ppb;

Outputs: Analog (0 to 5V, 0 to 10V or 4 to 20mA)

HUMIDITY SENSOR ELEMENT:

Accuracy: ±3%

Outputs: Analog (0 to 5V, 0 to 10V or 4 to 20mA)

TEMPERATURE SENSOR ELEMENT:

NTC or RTD (see R/T Table pg. 32) for custom orders only*

OPERATING ENVIRONMENT:

Humidity: 0-100%, non-condensing

Temperature: 0...50°C / 32...122°F

WIRING:

4-20mA: 0-10V: 3 wire, spring-loaded

MOUNTING:

Quick mount bracket

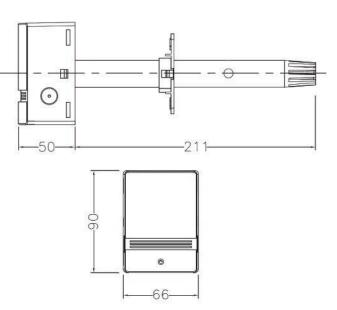
ENCLOSURE:

NEMA 4X, IP65 UV-resistant PC, UL94, V-2

Internally hinged cover



Part Number: THVDA-xxx







HOW TO BUILD A TASSERON HVAC AIR QUALITY PART NUMBER

Sample Part number (THCRAA2A) —

Carbon Dioxide (CO2) Room sensor, 0-2000ppm range with 10k Type 2 temp (passive), 2% relative humidity (RH) accuracy, with 4-20mA analog outputs for CO2 & RH

Т	Н	С	R	А	Α	2	А
T		C CC02 VVOC	R APPLICATION D—Duct R—Room S—Surface T—Threaded B—Button	A RANGE A—0-2000ppm B—0-5000ppm C—0-10000ppm	TEMPERATURE A—10K-2 B—10K-3	2 HUMIDITY 2— 2% Acc. 3— 3% Acc. Z— NO RH	A OUTPUT A— 4-20 mA B— 0-5V C—0-10V D—Modbus F—I2C
					vv— 0+30 C		

Y—DIGITAL **Z—NO TEMP**

OEM SENSORS CUSTOM SOLUTIONS



Tasseron builds millions of temperature sensors in over 1000 different models annually for OEMs in various industries including boiler manufacturers, air conditioners, coffee makers, catering equipment, solar transportation, medical, and many others.

Any size, any type of material, any sensing element, Tasseron can make it.

Many times we realize that it's not what you want but what you need that is important.

CONTACT TEMPERATURE SENSORS - TSA SERIES

FEATURES

- Small size
- Simple installation
- Short response time
- -20...150°C
- Indirect measurement
- EN 60730-2-9 approved

APPLICATIONS

- Central heating systems
- Boilers
- Heat exchangers
- Air conditioning equipment
- Heat pumps

OPTIONS

- Dual sensor (2 x NTC/PTC/Pt)
- Pipe mounting bracket

GENERAL INFORMATION

Thanks to indirect, derivative temperature measurement on the outside of the application, these miniature contact temperature sensors offer significant cost and installation advantages over traditional immersion sensors.

This product series differentiates itself by an extremely broad selection of measurement elements (NTC, PTC, RTD etc.), electrical connectors, and the means of mounting the sensor to the application.

Besides the standard (single) model featuring one measurement element for use as either a controller or a safety sensor, there are also models with two separate measurement elements (duplex) for use as a combined controller and safety sensor.



CLIP ON TEMPERATURE SENSORS - TSB, TSC & TSF SERIES

FEATURES

- Easy mounting
- Short response time (0.4 sec)
- High measuring accuracy
- Bracket for Ø10, 12, 15, 18, 22 & 28 mm pipes
- EN 60730-2-9 approved

APPLICATIONS

- Boilers
- Central heating systems
- Compressors
- Heat exchangers
- Heat pumps OPTIONS
- Dual sensor (2 x NTC)
- Lockable bracket





GENERAL INFORMATION

The Tasseron clip-on sensor is developed for indirect measurement of the medium (water) by clipping it onto a pipe. The clipping system makes a quick and certain fit which offers a cost advantage in installation and servicing. The clipping is simple and there is no chance of breaking thanks to the strong red Polyamide housing.

Even though the sensor features indirect measurement it still has a short response time and high accuracy as a result of the smart construction and the use of high quality materials.

Tasseron has this sensor EN 60730-2-9 approved, which means it can also be used as a safety device.

Even more advantages can be achieved by having two NTC's in one housing. With complimentary electronics one NTC can be used for temperature controlling and the other for safety. One product, one assembly, two functions.

IMMERSION TEMPERATURE SENSORS - TSD SERIES

FEATURES

- Direct measurement
- Short response time
- -20...180°C
- EN 60730-2-9 approved

APPLICATIONS

- Central heating systems and boilers
- Compressors, motors
- Ovens
- Heat exchangers
- Heat pumps
- Kitchen equipment
- Humidifiers

OPTIONS

- Dual sensor (2 x NTC/PTC/Pt)
- O-ring

GENERAL INFORMATION

Featuring direct temperature measurement in the medium (water, oil, gas, air etc.), these top-quality miniature immersion sensors offer advantages over surface sensors in terms of response time and accuracy.

This product series differentiates itself by an extremely broad selection of measurement elements (NTC, PTC, RTD etc.), electrical connectors, dimensions, materials, and the means of mounting the sensor to the application.

AIR/FLUE GAS TEMPERATURE SENSORS - TSD2 SERIES

FEATURES

- Direct measurement
- Stainless steel tube
- Short response time
- EN 60730-2-9 approved

APPLICATIONS

- Central heating systems and boilers
- Heat exchangers
- Humidifiers
- Air conditioning

OPTIONS

- Dual sensor (2 x NTC/Pt)
- O-ring
- Bayonet mount
- Connection cable
- Thermal fuse



GENERAL INFORMATION

Featuring direct temperature measurement in the flue gas, these top-quality flue gas sensors offer advantages over standard immersion sensors in terms of easy installation, response time and accuracy

This product series differentiates itself by a broad selection of measurement elements (NTC, RTD etc.), electrical connectors, dimensions, materials, and the means of mounting the sensor to the application.

*SPECIFIC DATASHEET ON REQUEST

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PIPE MOUNTED CABLE TEMPERATURE SENSORS - TSK SERIES

FEATURES

- Pipe mounted
- Small design housing
- Universal pipe size
 Ø12...40mm (ؽ"...1½")
- Various measuring elements (NTC / Pt)

APPLICATIONS

- HVAC & Building controls
- Industrial applications
- Micro CHPs
- Horticulture
- Heat pumps

OPTIONS

- Mounting set
- Connector
- IP68

GENERAL INFORMATION

The Tasseron pipe mount cable sensor is developed for indirect temperature measurement of the medium (water) by strapping it onto a pipe. It can be mounted onto any pipe between 012...40mm ($0\frac{1}{2}$ "...1 $\frac{1}{2}$ ") diameter. This makes it ideal for various applications or various pipe diameters.

The sensor has a cavity for a secure mounting and a good thermal contact. This results in a quick and accurate measurement.

As an option this sensor can be made IP68 submersible which guarantees a reliable temperature measurement on a condensed pipe.



HIGH TEMPERATURE CABLE TEMPERATURE SENSOR - TSK3 SERIES

FEATURES

- High temperature 260°C
- Universal application
- High measuring accuracy
- Mounting in any direction
- EN 60730-2-9 approved

APPLICATIONS

- Solar
- Ovens
- Catering equipment
- Fryers
- Pellet burners

OPTIONS

- Dual sensor (2 x NTC/Pt)
- Tube fixing strip
- Mounting bracket or flange



The Tasseron high temperature cable sensor is developed specifically for application in extreme conditions. The line-welded wire connections and the PTFE cable guarantee a long-term functioning in a temperature range of -40...260°C. The stainless steel (AISI 304) tube is available in various dimensions.

The sensor measures indirectly when placed in an immersion well or installed onto a pipe or surface. For direct measurement it can be placed in the medium (water, oil, gas, air etc.), using a flange.

*SPECIFIC DATASHEET ON REQUEST



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