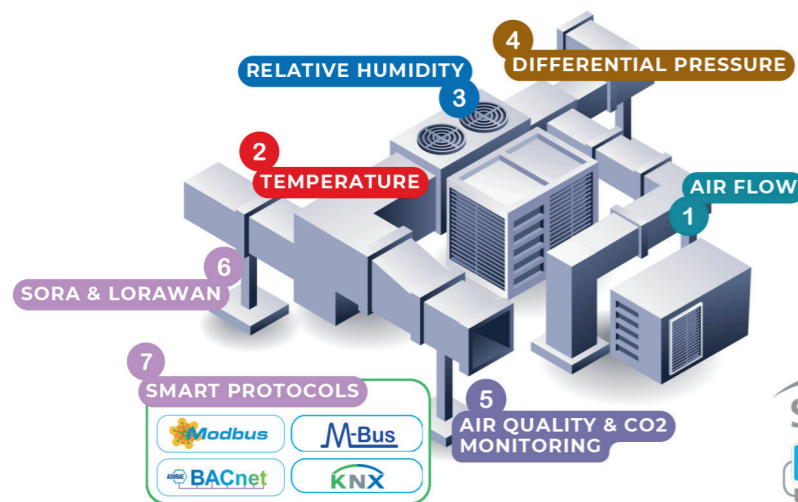


# Sontay Sensors for Air Handling Units

Sontay's sensing solutions ensure your AHU operates with precision.

SCAN HERE



Air Handling Units form the heart of every HVAC system, mixing, filtering, heating, cooling, and distributing air throughout a building. To perform efficiently, they rely on precise measurement and intelligent control of environmental variables.

Sontay's reliable sensing range supports every aspect of AHU operation from temperature and humidity to airflow, pressure, and indoor air quality. Our smart and traditional sensors help you design BMS systems that deliver consistent comfort with maximum energy efficiency.

- Improve comfort and occupant well-being.
- Optimise energy use and reduce running costs.
- Prevent downtime with reliable environmental data.
- Support compliance with indoor air quality standards.

**Real-world impact:**

At Gatwick Airport, Sontay sensors were chosen to support a major BMS upgrade, selected for their quality, ease of installation, and seamless compatibility with modern HVAC systems.

Product Code	Applications
1 FS-W	Air Flow Monitoring
2 TT	Temperature Control
3 RH	Relative Humidity
4 PA / PS	Differential Pressure
5 AQ / GS-AQ-CO2	Air Quality & CO <sub>2</sub> Monitoring
6 RF / SORA	SORA & LoRaWAN
7 SC	Smart Communication Protocols



**AIR QUALITY & VENTILATION**

- Clean, stable air is essential
- Protects sensitive equipment
- Boosts overall efficiency



**TEMPERATURE & HUMIDITY CONTROL**

- Precise control is critical
- Prevents overheating
- Maintains equipment efficiency



**ENERGY MONITORING & EFFICIENCY**

- Effective power management
- Lowers operating costs
- Improves performance

**RH-S Space Relative Humidity and Temperature Sensor**

The RH-S uses the latest high accuracy RH & T elements, and offers options such as set point adjust & momentary switch, together with a multi-line backlit LCD display. It allows effective control strategies to improve indoor environments, save energy and protect building fabric from moisture and condensation. A 0-10Vdc override status input option is also available, allowing occupancy indication on the display. A valuable feature of this sensor is, when in 3-wire mode, it automatically detects the controller input type, 4-20mA or 0-10Vdc. This removes the requirement for output jumpers. 2-wire loop powered is selectable via a DIP switch. It also provides on-board LED indication for power up status and set output mode. The terminal blocks are pluggable and allow tool free installation (ferrules required).

**FEATURES**

- Slim design for room applications
- High stability and reliability
- Auto detection 0-10Vdc or 4-20mA outputs, loop powering via DIP
- Direct thermistor option available
- LCD display and user interface options
- Easy installation: Two part, push-in spring terminal blocks



**SPACE SENSORS ±3%**



Part code	Description
RH-S	Space Mounted T and RH Sensor ±3%
RH-S-EN	Space Mounted Enthalpy and Dewpoint Sensor

**SPECIFICATION**

Active outputs	0-10Vdc or 4-20mA (3-wire) self-detecting, 4-20mA (2-wire via DIP)
AH accuracy	±2% (20 to 60% RH)
Dewpoint output ranges	-50 to 50°C
Enthalpy output ranges	-20 to +250kJ/kg
Environmental Housing	0 to 50°C, 0 to 95% RH non-condensing
Other accuracy	±3% (20 to 60% RH)
Other options	PTC/NTC Element: Any Sontay resistive type
Override optional passive outputs	VFC
Power Supply	24Vac/dc ±10%
RH output ranges	0 to 100%
Setpoint optional passive outputs	11-1kΩ/0-10kΩ. Linear
Temperature Accuracy	±0.5% (20 to 40°C)
Temperature Output range	0 to 40°C as standard. Others available on request. Range of 0 to +50°C
Weight	180g

**SPACE SENSORS ±2%**



Part code	Description
RH-S-AH	Space Mounted T and RH Sensor High Accuracy ±2%

**Notes:**

1. \*-T version uses a thermistor element for direct measurement of temperature. Please specify thermistor type when ordering.
2. When using the -x option, they are not compensated for internal heating.
3. Please see pages 90-93 for Thermistor Types and Compatibility Chart.
4. RH-S-EN outputs only enthalpy and dewpoint values.
5. \*\*Plain Front, no user interface options available (SP/MS/LCD)

Part code	Description
<b>Suffixes (add to part code)</b>	
-T*	Direct resistive temperature output
-SP	11-1kΩ/0-10kΩ set point
-MS	Momentary switch
-LCD	Integral LCD display
-TR	Custom temperature output range
-5V	0 - 5V option
-BLK**	Black space housing

Part code	Description
<b>Accessories</b>	
DECOR	Decorators trim plate
GASKET	Insulating gasket (pack of 10)

Data sheets online: www.sontay.com

Relative Humidity & Temperature Sensors

**RH-S-UN** Space Relative Humidity Sensor

A valuable feature of this sensor is its ability to automatically detect what the controller input is set to, 4-20mA or 0-10Vdc. This removes the requirement for output jumpers that can be inadvertently set incorrectly. On board LED indication of which output type is in operation is provided. Also available with passive resistive output for temperature, along with other passive outputs.

**FEATURES**

- Auto-detection 0-10Vdc or 4-20mA output, 3-wire only
- Fully configurable LCD Display
- Resistive temperature output option
- No jumpers or DIP-switches to select output type
- Direct thermistor option available



**SPACE SENSORS ±3%**



**SPECIFICATION**

Accuracy (typical)	±3% (20 to 80% RH)
Active outputs	0-10Vdc or 4-20mA (3-wire) self-detecting
Environmental Housing	0 to 50°C, 0 to 95% non-condensing
Fanspeed	Resistive
Housing Dimensions	115 x 85 x 30mm
Housing Material	ABS (Flame retardant)
Output range	0 to 100% Relative humidity
Override optional passive outputs	VFC
Power Supply	24Vac/dc ±10%
Protection	IP30
PTC/NTC Element	Any Sontay Resistive type
Setpoint optional passive outputs	1-11kΩ
Weight	180g

**Notes:**

1. \*-T version uses a thermistor element for direct measurement of temperature. Please specify thermistor type when ordering.
2. When using the -T option, they are not compensated for internal heating.
3. Please see pages 90-93 for Thermistor Types and Compatibility Chart.
4. \* -T version uses a thermistor element for direct measurement of temperature. Please specify thermistor type when ordering.
5. \*\*Plain Front, no user interface options available (SP/MS/LCD)

Part code	Description
RH-S-UN	Space Mounted RH Sensor

Part code	Description
<b>Suffixes (add to part code)</b>	
-T*	Direct resistive temperature output
-LCD	Integral LCD display
-MS	Momentary Switch
-SP	1-11kΩ set point
-BLK**	Black Space Housing

Part code	Description
<b>Accessories</b>	
DECOR	Decorators trim plate
GASKET	Insulating gasket (pack of 10)

**RH-CAL** Calibration



Calibration is available for Sontay's RH range of sensors. Sontay can provide test certificates for 3-point calibration, with additional points if required.



Part code	Description
RH-CAL	3-Point RH Calibration at 30, 50 & 70% RH at 20°C

Data sheets online: [www.sontay.com](http://www.sontay.com)

**RH** Duct Mounted RH & T Sensors

The RH-D range of humidity and temperature sensors offer the latest technology high precision and accuracy RH & T element. A valuable feature of this sensor is when in 3-wire mode it automatically detects the controller input type, 4-20mA or 0-10Vdc. This removes the requirement for output jumpers. 2-wire loop powering selectable via DIP switch. It also provides on-board LED indication for power up status and set output mode. The terminal blocks are pluggable and allow tool free installation (ferrules required). An optional multi-line backlit LCD display is available, along with a direct PTC/NTC sensing element.

**FEATURES**

- Robust sensor enclosure
- Easy installation with LED indication, test button and autooutput mode detection (3-wire)
- Supports 2-wire loop powering or 3-wire installation
- Pluggable terminal blocks and tool free installation

**DUCT SENSORS**



Part code	Description
RH-D	Duct Mounted T and RH Sensor ±3%
RH-D-AH	Duct Mounted T and RH Sensor High Accuracy ±2%
RH-D-EN	Duct Mounted Enthalpy and Dewpoint Sensor

**WALL SENSORS**



Part code	Description
RH-W	Wall Mounted T and RH Sensor ±3%
RH-W-AH	Wall Mounted T and RH Sensor ±2%
RH-W-EN	Wall Mounted Enthalpy and Dewpoint Sensor

**OUTSIDE**



Part code	Description
RH-O	Outside Mounted T and RH Sensor ±3%
RH-O-AH	Outside Mounted T and RH Sensor ±2%
RH-O-EN	Outside Enthalpy & Dewpoint Transmitter

**REMOTE**



Part code	Description
RH-R	Remote Probe T and RH Sensor ±3%
RH-R-AH	Remote Probe T and RH Sensor ±2%
RH-R-EN	Remote Probe Enthalpy and Dewpoint Sensor

**SPECIFICATION**

Active outputs	0-10Vdc or 4-20mA (3-wire) self-detecting, 4-20mA (2-wire via DIP)
AH accuracy	±2% (20 to 80% RH)
Dewpoint output ranges	-50 to +50°C
Duct probe dimensions	240 x 20mm dia
Enthalpy output ranges	-20 to +250kJ/kg
Housing Dimensions	125 x 105 x 85mm
Material	PC (Halogen Free Flame Retardant, UV Stabilized)
Other accuracy	±3% (20 to 80% RH)
Passive temp. output	PTC/NTC Element: Any Sontay resistive
Power Supply	24Vac/dc ±10%
RH output ranges	0 to 100%
Temperature Accuracy	±0.5°C (20 to 40°C)
Temperature Output range	-20 to 50°C as standard, Others available on request
Wall probe dimensions	90 x 20mm dia
Weight	Duct: 240g Wall: 220g Outside: 1.16kg Remote probe: 230g

**Notes:**

1. \* -T version uses a thermistor element for direct measurement of temperature. Please specify thermistor type when ordering.
2. Please see pages 85-88 for Thermistor Types and Compatibility Chart.
3. -EN versions only output enthalpy and dewpoint values.

Part code	Description
<b>Suffixes (add to part code)</b>	
-T*	Direct resistive temperature output
-TR	Custom temperature output range
-LCD	Integral LCD display
<b>Accessory</b>	
DPA	Duct probe adjustment flange (for RH-D only)

Data sheets online: [www.sontay.com](http://www.sontay.com)

**RH-x-UN Wall Mounted RH Sensor**

The RH-x-UN range offers a cost-effective single output for relative humidity measurement. These can also include a combination of familiar passive options such as temperature, set point adjustment, momentary switch and fan speed, plus an LCD display.

A unique feature of the sensor is its ability to automatically detect what sort of controller input it is connected to, 4-20mA or 0-10Vdc, removing the requirement for output jumpers which can be inadvertently set incorrectly. Just connect it to the controller input and it does the rest. PCB LED indication of which output type is in operation is provided, with diagnostic LED patterns for determining faults.

**FEATURES**

- Auto-detection 0-10Vdc or 4-20mA output, 3-wire only
- Fully configurable LCD Display
- Resistive temperature output option
- No jumpers or DIP-switches to select output type
- Direct thermistor option available

**SPECIFICATION**

Accuracy (typical)	±3% (20 to 80% RH)
Active outputs	0-10Vdc or 4-20mA (3-wire) self-detecting
Duct probe dimensions	210 x 20mm dia.
Environmental Housing	-30 to 60°C, 0 to 95% RH non-condensing
Environmental Media	-10 to 50°C
Housing Dimensions	125 x 105 x 85mm
Material	PC (Halogen Free Flame Retardant, UV stabilized)
Other protection	IP65
Output range	0 to 100% Relative Humidity
Passive temp. output	PTC/NTC Element: Any Sontay resistive
Power Supply	24Vac/dc ±10%
Shield dimensions	200 x 118mm dia.
Wall probe dimensions	90 x 20mm dia.
Wall protection	IP54
Weight	Duct: 240g Wall: 220g Outside: 1.16kg

**Notes:**

1. \* -T version uses a thermistor element for direct measurement of temperature. Please specify thermistor type when ordering.
2. Please see pages 90-93 for Thermistor Types and Compatibility Chart.

Part code	Description
<b>Suffixes (add to part code)</b>	
-T *	Direct resistive temperature output
-LCD	Integral LCD display
<b>Accessory</b>	
DPA	Duct probe adjustment flange (for RH-D-UN only)

**DUCT SENSORS**



Part code	Description
RH-D-UN	Duct Mounted RH Sensor ±3%

**WALL SENSORS**



Part code	Description
RH-W-UN	Wall Mounted RH Sensor ±3%

**OUTSIDE**



Part code	Description
RH-O-UN	Outside Mounted RH Sensor ±3%

**RH-SH Humidistats**



The RH-SH range of humidistats are designed for wall or ductmounts for the ON/OFF control of humidification and dehumidification equipment, or the initiation of alarms or override controls. High quality sensing elements ensure accurate measurement and switching differential.

**FEATURES**

- Concealed or exposed set point adjustment
- Suitable for swimming pool environments

**SPECIFICATION**

Case construction	ABS
Differential	4% RH
Duct switch rating	15(2)A @ 24 to 250Vac
Operating Range	30-100% RH
Probe Dimensions	225 x 19mm dia.
Protection	RH-SH-xD IP65
Room switch rating	2A @ 250Vac
Weight	300g max.

Part code	Description
<b>Room Humidistats</b>	
RH-SH-1R	Single-stage, concealed set point adjust.
RH-SH-1RE	Single-stage, exposed set point adjust.
<b>Duct Humidistats</b>	
RH-SH-1D	Single-stage, concealed set point adjust.
RH-SH-1DE	Single-stage, exposed set point adjust.

**ST General Purpose Thermostats**



**SPECIFICATION**

Ambient relative humidity	0 to 95% non-condensing
Ambient Temperature Range	-35 to +65°C
Capillary length (ST-C)	1.5m
Capillary weight	340g
Duct weight	700g
Housing Material	ABS (flame resistant)
Immersion pocket dimensions (ST-I)	130mm thread ½" BSP
Immersion pocket material (ST-I)	Stainless Steel
Immersion weight	580g
Protection	IP43
Sensing element	Liquid filled copper element
Switch rating	24 to 250Vac @ 16(4)A

Sontay's range of thermostats are well suited for a number of applications of temperature control or safety cut-out in pipe work systems, calorifiers, duct work systems, green houses and many other installations. They all have the set-point adjustment under the cover to prevent unauthorised tampering.

**FEATURES**

- Robust housing
- Immersion sensors supplied with pocket
- Ideal for many applications
- Volt free contacts
- Concealed adjustment

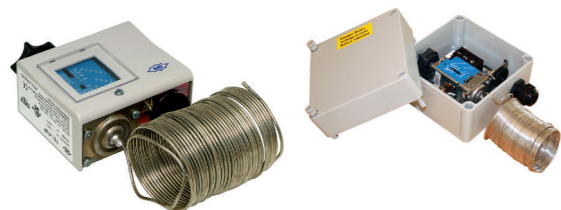
Part code	Description	
<b>Capillary</b>		
ST-C-01M	50 to 140°C	Manual Reset
<b>Duct</b>		
ST-D-01A	-35 to +35°C	Auto Reset
ST-D-02A	0 to 90°C	Auto Reset
ST-D-03A	-30 to +30°C	Auto Reset
ST-D-04M	0 to +90°C	Manual Reset
<b>Immersion</b>		
ST-I-01A	0 to 120°C	Auto Reset
ST-I-02M	0 to 110°C	Manual Reset
ST-I-03M	20 to 90°C	Manual Reset
<b>Wall</b>		
ST-W-01A	-30 to +30°C	Auto Reset
<b>Strap-on</b>		
ST-S-02A	0 to 90°C	Auto Reset
<b>Accessory</b>		
ST-IMM-PKT	Replacement stainless steel pocket (ST-I range only)	

Data sheets online: [www.sontay.com](http://www.sontay.com)

Data sheets online: [www.sontay.com](http://www.sontay.com)



**ST-FRE** Capillary Frost Thermostats



The ST-FRE range of frost thermostats provide a switch output based on the average temperature detected along a two or six metre capillary sensor. A common application is for frost protection on fresh air intakes or airconditioning systems, to prevent the icing up of filters, fans and coils. The capillary is fixed in a matrix across the duct, in a position downstream of the pre-heater or frost coil.

**SPECIFICATION**

Ambient Range	50°C max.
Contact Configuration	SPST open-on-rise
Housing Material	ABS V0
Operating Voltage	200/240Vac @50/60Hz
Protection	IP20
Sensor system	Bi-metallic
Switching current	250Vac @ 10(2)A
Switching Differential	<1°K
Temperature Range	5 to 35°C
Weight	220g

**Note:** All these thermostats include metal capillary fixing clips as standard.

Part code	Description
<b>IP65 Housing and Thermostat</b>	
ST-FRE-3	Auto reset, 2m capillary, Frost Thermostat
ST-FRE-3-IP65	Auto reset, 2m capillary, Frost Thermostat
ST-FRE-4	Manual reset, 2m capillary, Frost Thermostat
ST-FRE-4-IP65	Manual reset, 2m capillary, Frost Thermostat
<b>Accessories</b>	
ST-DFK	Pack of six additional plastic capillary fixing clips
BRK	Mounting bracket for ST-FREx

**FEATURES**

- Easy adjustment of setpoint
- Setting indicator
- IP65 option

Part code	Description
<b>IP44 Thermostat</b>	
ST-FRE-1	Auto reset, 6m capillary, Frost Thermostat
ST-FRE-1-IP65	Auto reset, 6m capillary, Frost Thermostat
ST-FRE-2	Manual reset, 6m capillary, Frost Thermostat
ST-FRE-2-IP65	Manual reset, 6m capillary, Frost Thermostat

**ST-TY** Space Thermostats



The ST-TY series of wall mounting space thermostats are suitable for heating and/or cooling and frost protection applications.

**FEATURES**

- Tamperproof option
- Bi-metallic switch mechanism for reliability

**HEATING STAT SPECIFICATION – ST-TY92-C1**

Contact configuration	SPST open-on-rise
Temperature range	5 to 35°C
Switching current:	250Vac @ 10(2)A

**FROST STAT SPECIFICATION – ST-TY92-C1F**

Contact configuration	SPST open-on-rise
Temperature range	-5 to +15°C
Switching current	250Vac @ 10(2)A

**HEATING OR COOLING STAT SPECIFICATION – ST-TY92-C3T & ST-TY92-C3**

Contact configuration	SPDT
Temperature range	5 to 35°C
Switching current	250Vac @ 3(1)A

**COMMON SPECIFICATION**

Operating voltage	220/240Vac @ 50/60Hz
Switching differential	<1°K
Sensor system	Bi-metallic
Housing material	ABS V0
Ambient range	50°C max.
Protection	IP20
Dimensions	ST-TY92-C3T 78 x 78 x 36mm max. Others: 82 x 82 x 32mm max.
Weights	ST-TY92-C3T 120g,

Part code	Description	Range
ST-TY92-C1	Heating Thermostat	5 to 35°C
ST-TY92-C1F	Frost Thermostat	-5 to +15°C

**ST-RSTAT**



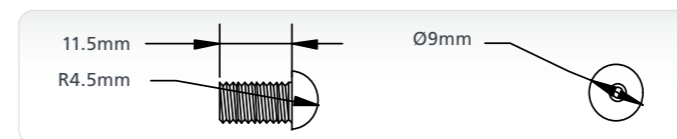
Part code	Description	Range
ST-RSTAT1	Thermostat Space with Dial	10-30°C
ST-RSTATT	Thermostat Space Tamperproof	5-30°C

**TT-512** Low Profile Temperature Sensors



The TT-512 range of low profile button temperature sensors are used for measuring air temperature in indoor space where style or a robust solution is required. Their discreet appearance offers reliable temperature monitoring without being obtrusive.

These sensors are particularly effective in applications where anti-ligature sensors are required for the safety of the building occupants. Due to the robust design and materials, the sensors are also tamperproof. They are available in either white plastic or stainless steel finishes and contain either a high quality Thermistor, Platinum or Nickel sensing element.



**SPECIFICATION**

Cable Dimensions	2 or 5 meters
Environmental Housing	-10 to +60°C, 0 to 95% RH non-condensing
Material	Black plastic
Mounting	M6, Nut supplied
Output Type	Resistive
Protection	IP20
Weight	8g

Part code			Description
Stainless Steel	White Plastic	Black Plastic	
TT-512-SS-A	TT-512-WP-A	TT-512-BLK-A	10K3A1, Trend, Cylon, Distech, Heatmiser
TT-512-SS-B	TT-512-WP-B	TT-512-BLK-B	10K4A1, Andover, Delta Controls
TT-512-SS-C	TT-512-WP-C	TT-512-BLK-C	20K6A1, Honeywell
TT-512-SS-D	TT-512-WP-D	TT-512-BLK-D	PT100A, Serck
TT-512-SS-E	TT-512-WP-E	TT-512-BLK-E	PT1000A, Cylon
TT-512-SS-F	TT-512-WP-F	TT-512-BLK-F	Ni1000A, Sauter
TT-512-SS-G	TT-512-WP-G	TT-512-BLK-G	Ni1000A/TCR (LAN1), Siemens
TT-512-SS-L	TT-512-WP-L	TT-512-BLK-L	TAC1, TAC
TT-512-SS-M	TT-512-WP-M	TT-512-BLK-M	2.2K3A1, Johnson Controls
TT-512-SS-N	TT-512-WP-N	TT-512-BLK-N	3K3A1, Alerton
TT-512-SS-P	TT-512-WP-P	TT-512-BLK-P	30K6A1, Drayton
TT-512-SS-Q	TT-512-WP-Q	TT-512-BLK-Q	50K6A1
TT-512-SS-Z	TT-512-WP-Z	TT-512-BLK-Z	10K NTC, Carel
<b>Suffix (add to part code)</b>			
-5M	5m probe length		
-LSZH	Low Smoke Zero Halogen option		

**TT-515** Low Profile Plate Sensors



The TT-515 range of low profile plate sensors are used for measuring air temperature in indoor space where style or a robust solution is required. Their discreet appearance offers reliable temperature monitoring without being obtrusive.

These sensors are particularly effective in applications where anti-ligature sensors are required for the safety of the building occupants. Due to the robust design and materials, the sensors are also tamperproof. They are available in either white plastic or stainless steel finishes and contain either a high quality Thermistor, Platinum or Nickel sensing element. Sensor types compatible with most controls manufacturers' equipment are available.

**FEATURES**

- Anti-ligature & tamperproof
- Wide range of sensing element types
- White plastic or stainless steel finishes
- Discreet temperature measurement
- For direct mounting onto a standard UK back box

**SPECIFICATION**

Ambient housing range	-10 to +60°C, 0 to 95% RH non-condensing
Housing Dimensions	85 x 85mm
Housing Material	Stainless Steel
Mounting	Flush, to standard UK wall box
Output Type	Resistive
Protection	IP20
Weight	220g

Part code		Description
Stainless Steel	White Plastic	
TT-515-SS-A	TT-515-WP-A	10K3A1, Trend, Cylon, Distech, Heatmiser
TT-515-SS-B	TT-515-WP-B	10K4A1, Andover, Delta Controls
TT-515-SS-C	TT-515-WP-C	20K6A1, Honeywell
TT-515-SS-D	TT-515-WP-D	PT100A, Serck
TT-515-SS-E	TT-515-WP-E	PT1000A, Cylon
TT-515-SS-F	TT-515-WP-F	Ni1000A, Sauter
TT-515-SS-G	TT-515-WP-G	Ni1000A/TCR (LAN1), Siemens
TT-515-SS-H	TT-515-WP-H	SAT1, Satchwell
TT-515-SS-K	TT-515-WP-K	STA1, Landis & Staefa
TT-515-SS-L	TT-515-WP-L	TAC1, TAC
TT-515-SS-M	TT-515-WP-M	2.2K3A1, Johnson Controls
TT-515-SS-N	TT-515-WP-N	3K3A1, Alerton
TT-515-SS-P	TT-515-WP-P	30K6A1, Drayton
TT-515-SS-Q	TT-515-WP-Q	50K6A1
TT-515-SS-R	TT-515-WP-R	100K6A1, York >40°C
TT-515-SS-S	TT-515-WP-S	SAT2, Satchwell
TT-515-SS-T	TT-515-WP-T	SAT3, Satchwell
TT-515-SS-W	TT-515-WP-W	SIE1, Siebe
TT-515-SS-Y	TT-515-WP-Y	STA2, Landis & Staefa
TT-515-SS-Z	TT-515-WP-Z	10K NTC, Carel

Data sheets online: [www.sontay.com](http://www.sontay.com)

Data sheets online: [www.sontay.com](http://www.sontay.com)

**TT-518** Thimble Temperature Sensors



**SPECIFICATION**

Ambient housing range	-10 to +60°C, 0 to 95% RH, non-condensing
Current Output	4 to 20mA
Metal dimensions	30mm overall x 19mm dia.
Other thread	m16 x 1.5 x 12mm
Passive output types	Resistive
Plastic dimensions	45mm overall x 22mm dia.
Plastic thread	M16 x 1.5 x 25mm
Protection	IP30
Voltage output types	0-10Vdc
Weight	8g

The TT-518 range of thimble temperature sensors are used for measuring air temperature in indoor spaces. They are available in various finishes, plastic, aluminium, stainless steel and brass. Units contain either a high quality thermistor, Platinum or Nickel sensing element. Sensor types compatible with most controls manufacturers' equipment are available.

**FEATURES**

- Wide range of sensing element types
- 2m Screened flying lead as standard
- Plastic, aluminium, brass and stainless steel finishes
- Discreet temperature measurement

Part code	Description
<b>Passive Output</b>	
TT-518-A	10K3A1, Trend, Cylon, Distech, Heatmiser
TT-518-B	10K4A1, Andover, Delta Controls
TT-518-C	20K6A1, Honeywell
TT-518-D	PT100A, Serck
TT-518-E	PT1000A, Cylon
TT-518-F	Ni1000A, Sauter
TT-518-G	Ni1000A/TCR (LAN1), Siemens
TT-518-H	SAT1, Satchwell
TT-518-K	STA1, Landis & Staefa
TT-518-L	TAC1, TAC
TT-518-M	2.2K3A1, Johnson Controls
TT-518-N	3K3A1, Alerton
TT-518-P	30K6A1, Drayton
TT-518-Q	50K6A1
TT-518-S	SAT2, Satchwell
TT-518-T	SAT3, Satchwell
TT-518-W	SIE1, Siebe
TT-518-Y	STA2, Landis & Staefa
TT-518-Z	10K NTC, Carel
<b>Active Output</b>	
TT-518-CVO	<b>Selectable:</b> 4-20mA/0-10Vdc * <b>Output ranges:</b> -10 to +40°C or -10 to +110°C (selectable)
TT-518-CVO-C	<b>Selectable:</b> 4-20mA/0-10Vdc (custom temp. scaling) *, Scaled to customer specification in the range of -10 to +60°C
<b>Suffixes (add to part code)</b>	
-AL	Aluminium thimble
-SS	Stainless steel thimble
-BLK	Black Thimble
-BR	Brass thimble
-5M	5m cable length
-LSZH	Low Smoke Zero Halogen option

**Note for ALL sensors with CVO output options:**  
The stated ambient range overrides any CVO output details.

Data sheets online: [www.sontay.com](http://www.sontay.com)

**TT-D** Duct Temperature Sensors



**SPECIFICATION**

Current Output	4 to 20mA
Environmental Housing	-30 to +70°C, 0 to 95% RH non-condensing
Environmental Media	-10 to +100°C
Housing Dimensions	80 x 79 x 44mm
Housing Material	PC (Halogen Free Flame Retardant, UV stabilized)
Passive output types	Resistive
Probe Dimensions	65, 150 or 250mm x 6mm dia.
Probe Material	Stainless steel 304
Protection	IP65
Voltage output types	0 to 10Vdc
Weight	160g

The TT-D are used to measure air temperature in ducts. The sensing element is fitted into a stainless steel probe. A flange plate is available for adjustment of penetration depth (order as TT-DFP).

Part code	Description
<b>Passive Output</b>	
TT-D-A	10K3A1, Trend, Cylon, Distech
TT-D-B	10K4A1, Andover, Delta Controls
TT-D-C	20K6A1, Honeywell
TT-D-D	PT100A, Serck
TT-D-E	PT1000A, Cylon
TT-D-F	Ni1000A, Sauter
TT-D-G	Ni1000A/TCR (LAN1), Siemens
TT-D-H	SAT1, Satchwell
TT-D-K	STA1, Landis & Staefa
TT-D-L	TAC1, TAC
TT-D-M	2.2K3A1, Johnson Controls
TT-D-N	3K3A1, Alerton
TT-D-P	30K6A1, Drayton
TT-D-Q	50K6A1

Part code	Description
<b>Passive Output</b>	
TT-D-R	100K6A1, York >40°C
TT-D-S	SAT2, Satchwell
TT-D-T	SAT3, Satchwell
TT-D-W	SIE1, Siebe
TT-D-Y	STA2, Landis & Staefa
TT-D-Z	10K NTC, Carel
<b>Active Output</b>	
TT-D-CVO	<b>Selectable:</b> 4-20mA/0-10Vdc <b>Output ranges:</b> -10 to +40°C or -10 to +110°C (selectable)
TT-D-CVO-C	<b>Selectable:</b> 4-20mA/0-10Vdc (custom temp. scaling), Scaled to customer specification in the range of -10 to +100°C
<b>Suffixes (add to part code)</b>	
-65	65mm Probe length
-250	250mm Probe length
<b>Accessory</b>	
TT-DFP	Duct flange plate

**TT-DA** Duct Averaging Temperature Sensors



**SPECIFICATION**

Output types	Passive: Resistive, Current: 4 to 20mA, Voltage: 0 to 10Vdc
Probe	Material: Nylon 12 Dimensions: 2.2m x 8mm dia.
Housing	Material: PC (Halogen Free Flame Retardant, UV stabilized) Dimensions: 80 x 79 x 44mm
Environmental	Housing -30 to +70°C, 0 to 95% RH, non-condensing Media -10 to +100°C
Protection	IP65
Weight	220g

The TT-DA temperature sensors are used for measuring temperature in ducts where an average reading across the air flow is required. Sensing elements are housed in a nylon tube, and spaced at intervals along the standard 2.2m length.

Part code	Description
<b>Passive Output</b>	
TT-DA-A	10K3A1, Trend, Cylon, Distech
TT-DA-B	10K4A1, Andover, Delta Control
TT-DA-C	20K6A1, Honeywell
TT-DA-D	PT100A, Serck
TT-DA-E	PT1000A, Cylon
TT-DA-F	Ni1000A, Sauter
TT-DA-G	Ni1000A/TCR (LAN1), Siemens
TT-DA-H	SAT1, Satchwell
TT-DA-K	STA1, Landis & Staefa
TT-DA-L	TAC1, TAC
TT-DA-M	2.2K3A1, Johnson Controls
TT-DA-N	3K3A1, Alerton

Part code	Description
<b>Passive Output</b>	
TT-DA-P	30K6A1, Drayton
TT-DA-Q	50K6A1
TT-DA-R	100K6A1, York >40°C
TT-DA-S	SAT2, Satchwell
TT-DA-T	SAT3, Satchwell
TT-DA-W	SIE1, Siebe
TT-DA-Y	STA2, Landis & Staefa
TT-DA-Z	10K NTC, Carel
<b>Active Output</b>	
TT-DA-CVO	<b>Selectable:</b> 4-20mA/0-10Vdc <b>Output ranges:</b> -10 to +40°C or -10 to +110°C – selectable
TT-DA-CVO-C	<b>Selectable:</b> 4-20mA/0-10Vdc (custom temp. scaling), Scaled to customer specification in the range of -10 to +100°C
<b>Suffix (add to part code)</b>	
-5M	5m probe length

Data sheets online: [www.sontay.com](http://www.sontay.com)

**TT-TDA True Duct Averaging Temperature Sensors**



**SPECIFICATION**

Current Output	4 to 20mA
Environmental Housing	-30 to +70°C, 0 to 95% RH non-condensing
Environmental Media	-10 to +100°C
Housing Dimensions	125 x 165 x 85mm
Housing Material	PC (Halogen Free Flame Retardant, UV Stabilized)
Probe Dimensions	2050mm (50mm collar x ¼" dia)
Probe Material	Copper
Protection	IP65
PT100B output types	Resistive output type
Voltage output types	0 to 10Vdc
Weight	420g



Sontay's true duct averaging sensor contains a PT100B element, which measures at point along the full length of the copper tube.

Part code	Description
<b>Passive Output</b>	
TT-DTA-PT100B	PT100B Thermistor Output
<b>Active Output</b>	
TT-DTA-CVO	Selectable: 4-20mA/0-10Vdc Output ranges: -10 to +40°C or -10 to +110°C (selectable)
TT-DTA-CVO-C	Selectable: 4-20mA/0-10Vdc (custom temp. scaling), Scaled to customer specification in the range of -10 to +100°C

**TT-O Outside Air Temperature Sensors**



**SPECIFICATION**

Current Output	4 to 20mA
Environmental Housing	-30 to +70°C, 0 to 95% RH non-condensing
Environmental Media	-30 to +100°C
Housing Material	PC (Halogen Free Flame Retardant, UV Stabilized)
Passive output types	Resistive
Protection	IP65
Voltage output types	0 to 10Vdc
Weight	160g



**Note:** A calibration certificate is available on CVO Types see page 79.

The TT-O range are use for measuring outside air temperature. The sensors are housed in IP65 rated enclosures. The TT-O should always be situated in a sheltered position on a north facing wall.

**FEATURES**

- Weatherproof Housing
- Wide range of sensing element types
- Hinged lid with the facility of tamper proofing

Part code	Description
<b>Passive Output</b>	
TT-O-A	10K3A1, Trend, Cylon, Distech
TT-O-B	10K4A1, Andover, Delta Controls
TT-O-C	20K6A1, Honeywell
TT-O-D	PT100A, Serck
TT-O-E	PT1000A, Cylon
TT-O-F	Ni1000A, Sauter
TT-O-G	Ni1000A/TCR (LAN1), Siemens
TT-O-H	SAT1, Satchwell
TT-O-K	STA1, Landis & Staefa
TT-O-L	TAC1, TAC
TT-O-M	2.2K3A1, Johnson Controls

Part code	Description
<b>Passive Output</b>	
TT-O-N	3K3A1, Alerton
TT-O-P	30K6A1, Drayton
TT-O-Q	50K6A1
<b>Passive Output</b>	
TT-O-R	100K6A1, York >40°C
TT-O-S	SAT2, Satchwell
TT-O-T	SAT3, Satchwell
TT-O-V	SAT4, Satchwell
TT-O-W	SIE1, Siebe
TT-O-Y	STA2, Landis & Staefa
TT-O-Z	10K NTC, Carel
<b>Active Output</b>	
TT-O-CVO	Selectable: 4-20mA/0-10Vdc Output ranges: -10 to +40°C or -10 to +110°C – selectable
TT-O-CVO-C	Selectable: 4-20mA/0-10Vdc (custom temp.), Scaled to customer specification in the range of -10 to +100°C

Data sheets online: [www.sontay.com](http://www.sontay.com)

**TT-OR Outside Air Temperature Sensors with Radiation Shield**



**SPECIFICATION**

Current Output	4 to 20mA
Environmental Housing	-30 to +70°C, 0 to 95% RH non-condensing
Environmental Media	-30 to +100°C
Housing Material	PC (Halogen Free Flame Retardant, UV Stabilized)
Passive output types	Resistive
Protection	IP65
Voltage output types	0 to 10Vdc
Weight	160g



The TT-OR has the element fitted into a PTFE radiation shield, designed to provide fast response times to changes in outside air temperature and to protect the element from the effects of direct sunlight.

Part code	Description
<b>Passive Output</b>	
TT-OR-A	10K3A1, Trend, Cylon, Distech
TT-OR-B	10K4A1, Andover, Delta Controls
TT-OR-C	20K6A1, Honeywell
TT-OR-D	PT100A, Serck
TT-OR-E	PT1000A, Cylon
TT-OR-F	Ni1000A, Sauter
TT-OR-G	Ni1000A/TCR (LAN1), Siemens
TT-OR-H	SAT1, Satchwell
TT-OR-K	STA1, Landis & Staefa
TT-OR-L	TAC1, TAC

**TT-I Immersion Temperature Sensors**



**SPECIFICATION**

Current Output	4 to 20mA
Environmental Housing	-30 to +70°C, 0 to 95% RH non-condensing
Environmental Media	-30 to +100°C
Housing Material	PC (Halogen Free Flame Retardant, UV Stabilized)
Passive output types	Resistive
Probe Dimensions	65, 150 or 250mm x 6mm dia.
Probe Material	Stainless Steel 304
Protection	IP65
Voltage output types	0 to 10Vdc
Weight	160g



Immersion sensors are used for measuring the temperature of liquids in pipework. The sensing element is housed in a stainless steel probe fitted to an IP65 rated enclosure, for direct mounting into TT-PO-521 or TT-PO-HP range of stainless steel pockets.

Part code	Description
<b>Passive Output</b>	
TT-I-A	10K3A1, Trend, Cylon, Distech
TT-I-B	10K4A1, Andover, Delta Controls
TT-I-C	20K6A1, Honeywell
TT-I-D	PT100A, Serck
TT-I-E	PT1000A, Cylon
TT-I-F	Ni1000A, Sauter
TT-I-G	Ni1000A/TCR (LAN1), Siemens
TT-I-H	SAT1, Satchwell
TT-I-L	TAC1, TAC
TT-I-M	2.2K3A1, Johnson Controls
TT-I-N	3K3A1, Alerton
TT-I-P	30K6A1, Drayton
TT-I-Q	50K6A1
TT-I-R	100K6A1, York >40°C

Data sheets online: [www.sontay.com](http://www.sontay.com)

Part code	Description
<b>Passive Output</b>	
TT-I-S	SAT2, Satchwell
TT-I-T	SAT3, Satchwell
TT-I-W	SIE1, Siebe
TT-I-Y	STA2, Landis & Staefa
TT-I-Z	10K NTC, Carel
<b>Active Output</b>	
TT-I-CVO	Selectable: 4-20mA/0-10Vdc Output ranges: -10 to +40°C or -10 to +110°C – selectable
TT-I-CVO-C	Selectable: 4-20mA/0-10Vdc (custom temp. scaling), Scaled to customer specification in the range of -10 to +100°C
<b>Suffixes (add to part code)</b>	
-65	65mm probe length
-100	100mm probe length
-250	250mm probe length

**TT-IH High Temperature Immersion Sensors**



The TT-IH is for use in high temperature applications up to 400°C. The sensor consists of a stainless steel probe fitted to an aluminium head, and connected by a 1 m cable to a plant housing where terminations and transmitters are located. The TT-IH is available in two standard probe lengths of 150 mm or 250 mm, for direct mounting into the TT-PO-521 or TT-PO-HP range of stainless steel pockets.

**SPECIFICATION**

Current Output	4 to 20mA
Environmental Housing	-30 to +70°C, 0 to 95% RH non-condensing
Environmental Media	-30 to +100°C
Housing Material	PC (Halogen Free Flame Retardant, UV Stabilized)
Passive output types	Resistive
Probe Dimensions	65, 150 or 250mm x 6mm dia.
Probe Material	Stainless Steel 304
Protection	IP65
Voltage output types	0 to 10Vdc
Weight	160g

**Note:** A calibration certificate is available on CVO Types see page 79.

Part code	Description
<b>Active Output (150mm Probe)</b>	
TT-IH-CVO	Selectable: 4-20mA/0-10Vdc Output ranges: -10 to +40°C, -10 to +110°C, -10 to +160°C or 0 to 400°C – selectable
TT-IH-CVO-C	Selectable: 4-20mA/0-10Vdc (custom temp. scaling), Scaled to customer specification in the range of -10 to +400°C
<b>Suffix (add to part code)</b>	
-250	250mm probe length
<b>Accessory</b>	
TT-DFP	Duct flange plate

Part code	Description
<b>Passive Output (150mm Probe)</b>	
TT-IH-D	PT100A Sensor
TT-IH-E	PT1000A Sensor

**TT-C Clamp On Temperature Sensors**



The TT-C range of temperature strap-on sensors are used on pipe work systems to detect liquid temperature where fitting an immersion sensor is not practical. The sensor is housed in a 50mm long probe with two metres of PTFE 2-core cable as standard connecting the probe to an IP65 housing for termination. Units contain either a high quality thermistor, Nickel or Platinum sensing element.

**SPECIFICATION**

Cable Dimensions	2 meters
Current Output	4 to 20mA
Environmental Housing	-30 to +70°C, 0 to 95% RH non-condensing
Environmental Media	-30 to +100°C
Housing Material	PC (Halogen Free Flame Retardant, UV Stabilized)
Passive output types	Resistive
Protection	IP65
Voltage output types	0 to 10Vdc
Weight	200g

Part code	Description
<b>Passive Output</b>	
TT-C-T	SAT3, Satchwell
TT-C-W	SIE1, Siebe
TT-C-Y	STA2, Landis & Staefa, Distech
TT-C-Z	10K NTC, Carel
<b>Active Output</b>	
TT-C-CVO	Selectable: 4-20mA/0-10Vdc Output ranges: -10 to +40°C or -10 to +110°C (selectable)
TT-C-CVO-C	Selectable: 4-20mA/0-10Vdc (custom temp. scaling), Scaled to customer specification in the range of -10 to +100°C
<b>Suffix (add to part code)</b>	
-5M	5m cable length
<b>Accessory</b>	
BAND	Additional Metal Band

Part code	Description
<b>Passive Output</b>	
TT-C-A	10K3A1, Trend, Cylon, Distech
TT-C-B	10K4A1, Andover, Delta Controls
TT-C-C	20K6A1, Honeywell
TT-C-D	PT100A, Serck
TT-C-E	PT1000A, Cylon
TT-C-F	Ni1000A, Sauter
TT-C-G	Ni1000A/TCR (LAN1), Siemens
TT-C-H	SAT1, Satchwell
TT-C-L	TAC1, TAC
TT-C-M	2.2K3A1, Johnson Controls
TT-C-N	3K3A1, Alerton
TT-C-P	30K6A1, Drayton
TT-C-Q	50K6A1
TT-C-R	100K6A1, York >40°C
TT-C-S	SAT2, Satchwell

**TT-554 Remote Probe Sensors**



The TT-554 range of remote probe temperature sensors are perfect for tight locations, hard to access areas or for applications where the usual duct (TT-D) or immersion (TT-I) sensor will not fit. A 150mm probe is used with either the TT-PO-521 or TT-DFP duct flange plate. Units contain either a high quality thermistor, Platinum or Nickel sensing element. Sensor types compatible with most controls manufacturers' equipment are available.

**SPECIFICATION**

Current Output	4 to 20mA
Environmental Housing	-10 to +60°C, 0 to 95% RH non-condensing
Environmental Media	-30 to +100°C
Lead Length	2 meters (5 meter option)
Passive output types	Resistive
Probe Dimensions	150 x 6mm
Probe Material	Stainless steel
Protection	IP65
Voltage output types	0 to 10Vdc
Weight	125g

Part code	Description
<b>Passive Output</b>	
TT-554-A	10K3A1, Trend, Cylon, Distech
TT-554-B	10K4A1, Andover, Delta Controls
TT-554-C	20K6A1, Honeywell
TT-554-D	PT100A, Serck
TT-554-E	PT1000A, Cylon
TT-554-F	Ni1000A, Sauter
TT-554-G	Ni1000A/TCR (LAN1), Siemens
TT-554-L	TAC1, TAC
TT-554-M	2.2K3A1, Johnson Controls
TT-554-P	30K6A1, Drayton
TT-554-Z	10K NTC, Carel

Part code	Description
<b>Active Output</b>	
TT-554-CVO	Selectable: 4-20mA/0-10Vdc Output ranges: -10 to +40°C or -10 to +110°C (selectable)
TT-554-CVO-C	Selectable: 4-20mA/0-10Vdc (custom temp. scaling) *, Scaled to customer specification in the range of -10 to +100°C
<b>Suffix (add to part code)</b>	
-5M	5 meter cable length
-65	65 mm probe length
-250	250 mm probe length
-LSZH	Low Smoke Zero Halogen option
<b>Accessories</b>	
TT-DFP	Duct flange plate
TT-PO-521	Stainless steel immersion pocket

**Notes:** Custom lengths available.  
1. \* These units are supplied with the transmitter in the plant housing.  
2. A calibration certificate is available on CVO Types see page 79.

**TT-555 Flying Lead Temperature Sensors**



The flying lead range of temperature sensors are designed to measure air temperature in small duct spaces such as VAV boxes, fan coil units or other restricted spaces. The standard cable length is two metres of 2-core screened cable with a 5 meter option. Longer lengths can be made to order (at extra cost). Units contain either a high quality thermistor, Nickel or Platinum sensing element. Plastic tips also available on request.

**SPECIFICATION**

Current Output	4 to 20mA
Environmental Housing	-10 to +60°C, 0 to 95% RH non-condensing
Environmental Media	-10 to +60°C
Passive output types	Resistive
Probe Dimensions	25 x 6mm dia.
Probe Material	Stainless steel
Protection	IP40 (with-R option at IP68)
Voltage output types	0 to 10Vdc
Weight	80g

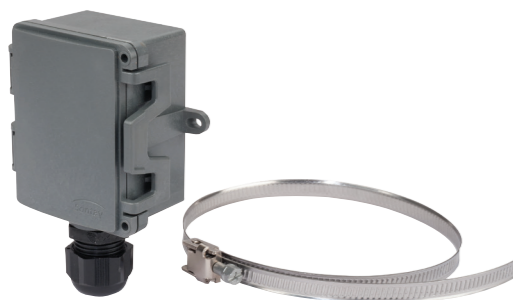
Part code	Description
<b>Passive Output</b>	
TT-555-A	10K3A1, Trend, Cylon, Distech
TT-555-B	10K4A1, Andover, Delta Controls
TT-555-C	20K6A1, Honeywell
TT-555-D	PT100A, Serck
TT-555-E	PT1000A, Cylon
TT-555-F	Ni1000A, Sauter
TT-555-G	Ni1000A/TCR (LAN1), Siemens
TT-555-H	SAT1, Satchwell
TT-555-K	STA1, Landis & Staefa
TT-555-L	TAC1, TAC
TT-555-M	2.2K3A1, Johnson Controls

Part code	Description
TT-555-N	3K3A1, Alerton
TT-555-P	30K6A1, Drayton
TT-555-Q	50K6A1
<b>Passive Output</b>	
TT-555-R	100K6A1, York >40°C
TT-555-S	SAT2, Satchwell
TT-555-T	SAT3, Satchwell
TT-555-W	SIE1, Siebe
TT-555-Y	STA2, Landis & Staefa
TT-555-Z	10K NTC, Carel
<b>Active Output</b>	
TT-555-CVO	Selectable: 4-20mA/0-10Vdc * Output ranges: -10 to +40°C or -10 to +110°C (selectable)
TT-555-CVO-C	Selectable: 4-20mA/0-10Vdc (custom temp. scaling) *, Calibration to customer specification in the range of -10 to +60°C
<b>Suffixes (add to part code)</b>	
-5M	5m cable length
-LSZH	Low Smoke Zero Halogen option
-R	Cap potted (waterproof)

Data sheets online: [www.sontay.com](http://www.sontay.com)

Data sheets online: [www.sontay.com](http://www.sontay.com)

**TT-CD Direct Clamp-On Temperature Sensors**



SPECIFICATION	
Current Output	4 to 20mA
Environmental Housing	-30 to +70°C, 0 to 95% RH non-condensing
Environmental Media	-30 to +100°C
Housing Dimensions	80 x 79 x 44mm
Housing Material	PC (Halogen Free Flame Retardant, UV Stabilized)
Passive output types	Resistive
Protection	IP65
Voltage output types	0 to 10Vdc
Weight	180g

**Note:** A calibration certificate is available on CVO Types see page 79.

Part code	Description
<b>Passive Output</b>	
TT-CD-N	3K3A1, Alerton
TT-CD-P	30K6A1, Drayton
TT-CD-Q	50K6A1
TT-CD-R	100K6A1, York >40°C
TT-CD-S	SAT2, Satchwell
TT-CD-T	SAT3, Satchwell
TT-CD-W	SIE1, Siebe
TT-CD-Y	STA2, Landis & Staefa
TT-CD-Z	10K NTC, Carel
<b>Active Output</b>	
TT-CD-CVO	Selectable: 4-20mA/0-10Vdc Output ranges: -10 to +40°C or -10 to +110°C (selectable)
TT-CD-CVO-C	Selectable: 4-20mA/0-10Vdc (custom temp. scaling), Calibration to customer specification in the range of -10 to +100°C
<b>Accessory</b>	
BAND	Additional Metal Band

The TT-CD clamp-on sensor is used for direct connection to measure pipe temperature. The sensing element is enclosed in a moulded nickel contact bar on the underside of the main housing. Units contain either a high quality thermistor, Nickel or Platinum sensing element.

Part code	Description
<b>Passive Output</b>	
TT-CD-A	10K3A1, Trend, Cylon, Distech
TT-CD-B	10K4A1, Andover, Delta Control
TT-CD-C	20K6A1, Honeywell
TT-CD-D	PT100A, Serck
TT-CD-E	PT1000A, Cylon
TT-CD-F	Ni1000A, Sauter
TT-CD-G	Ni1000A/TCR (LAN1), Siemens
TT-CD-H	SAT1, Satchwell
TT-CD-L	TAC1, TAC
TT-CD-M	2.2K3A1, Johnson Controls

**TT-EBB External Black Bulb Sensor**



SPECIFICATION	
Resistive output type	Resistive
Housing Material	PC (Halogen Free Flame Retardant, UV Stabilized)
Black bulb material	Anodised Aluminium
Housing Dimensions	125 x 105 x 85mm
Black bulb dimensions	17.5 x 37mm dia.
Environmental Housing	-30 to +70°C, 0 to 95% RH non-condensing
Protection	IP65
Weight	160g

$$T_{\text{comfort}} = \frac{(T_{\text{radiant}} + T_{\text{conductive}})}{2}$$

The TT-EBB sensor is used for radiant heat in outdoor spaces. Black bulb temperature sensors are used to calculate comfort temperature which is specified as the average of the conductive temperature and the radiant temperature. Units contain either a high quality thermistor, platinum or nickel sensing element.

Part code	Description
<b>Passive Output</b>	
TT-EBB-A	10K3A1, Trend, Cylon, Distech
TT-BBE-B	10K4A1, Andover, Delta Control
TT-BBE-C	20K6A1, Honeywell
TT-BBE-D	PT100A, Serck
TT-BBE-E	PT1000A, Cylon
TT-BBE-F	Ni1000A, Sauter
TT-BBE-G	Ni1000A/TCR (LAN1), Siemens
TT-BBE-H	SAT1, Satchwell
TT-BBE-K	STA1, Landis & Staefa

Part code	Description
<b>Passive Output</b>	
TT-BBE-L	TAC1, TAC
TT-BBE-M	2.2K3A1, Johnson Controls
TT-BBE-N	3K3A1, Alerton
TT-BBE-P	30K6A1, Drayton
TT-BBE-Q	50K6A1
TT-BBE-S	SAT2, Satchwell
TT-BBE-T	SAT3, Satchwell
TT-BBE-W	SIE1, Siebe
TT-BBE-Y	STA2, Landis & Staefa
TT-BBE-Z	10K NTC, Carel

Data sheets online: [www.sontay.com](http://www.sontay.com)

**TT-S Space Temperature Sensors**



This range of innovative space sensors is designed to meet the exacting standards of today's architects, specifiers and building owners. Its unique low profile, curved style allows it to blend seamlessly into the architecture of modern and older buildings alike. The TT-S can be supplied with a wide range of user interface options such as setpoint adjustment and momentary switches etc. To give the customer additional functionality. Sontay also offers a complete range of customised user interfaces for every requirement.

- FEATURES**
- Designed to be aesthetically pleasing
  - Blends into the fabric of any building
  - Meets exacting standards of today's specifiers
  - LCD display options on -ACT models

**TT-S**



**SETPOINT**



**SETPOINT AND LCD DISPLAY**



SPECIFICATION	
Current Output	4 to 20mA (2- or 3-wire)
Environmental Housing	0 to 50°C, 0 to 95% RH non-condensing
Housing colour	Polished White finish
Housing Material	ABS (Flame Retardant)
Momentary switch	N/O push button
Passive output types	Resistive
Protection	IP30
Set-point	2-wire 11-1kΩ/0-10Ω linear
Voltage output types	0 to 10Vdc
Weight	120g

Part code	Description
<b>Passive Output</b>	
TT-S-A	10K3A1, Trend, Cylon, Distech
TT-S-B	10K4A1, Andover, Delta Controls
TT-S-C	20K6A1, Honeywell
TT-S-D	PT100A, Serck
TT-S-E	PT1000A, Cylon
TT-S-F	Ni1000A, Sauter
TT-S-G	Ni1000A/TCR (LAN1), Siemens
TT-S-H	SAT1, Satchwell
TT-S-K	STA1, Landis & Staefa
TT-S-L	TAC1, TAC
TT-S-M	2.2K3A1, Johnson Controls
TT-S-N	3K3A1, Alerton
TT-S-P	30K6A1, Drayton
TT-S-Q	50K6A1
TT-S-S	SAT2, Satchwell
TT-S-T	SAT3, Satchwell
TT-S-W	SIE1, Siebe
TT-S-Y	STA2, Landis & Staefa
TT-S-Z	10K NTC, Carel
<b>Active Output</b>	
TT-S-ACT	Selectable: 4-20mA/0-10Vdc, output range 0 to 40°C
TT-S-ACT-TR	Selectable: 4-20mA/0-10Vdc, (customer temp. scaling), between -10 to +50°C
<b>Accessories</b>	
-SP	2-wire, 11-1kΩ/0-10Ω setpoint
-MS	Momentary Switch
-LCD*	Integral Display
-LEDG**	24V Green LED
-BLK***	Black Housing

**Notes:**  
 A calibration certificate is available on -ACT Types see page 79.  
 \* Only available on -ACT types  
 \*\* Not available on -ACT types  
 \*\*\* Plain front, no user interface options available (SP/MS/LCD/LEDG)

Data sheets online: [www.sontay.com](http://www.sontay.com)

**TT-CVO Active Sensors 3-wire 4-20mA/0-10Vdc**

A range of active temperatures gives a 3-wire 0-10Vdc or 4-20mA output based on a 10K3A1 thermistor. They offer advantages over the traditional PT100a-based active output sensors in the speed of reaction, physical robustness, and absence of self-heating. The sensors are available with an output of -10 to +40°C.

**FEATURES**

- Duct
- Outside
- Outside with Radiation Shield
- Immersion
- Clamp-on
- Flying Lead

**SPECIFICATION**

Accuracy	±0.4°C @ 25°C
Conformity	EMC, CE & UKCA Mark
Country of origin	UK
Environmental Housing	-30 to 70°C, 0 to 95% non-condensing
Housing Dimensions	80 x 79 x 44mm
Housing Material	PC (Halogen free, flame retardant & UV stabilized)
Media	-10 to +60°C (TT-555), -30 to +100°C (others)
Output range	-10 to +40°C
Power Supply	24Vac/dc
Probe	TT-D & TT-I S/S 65, 100, 150, 250mm x 6mm dia, TT-OR PTFE 40 x 16mm dia, TT-C Die-cast zinc, 2 meter lead, TT-555 S/S 30 X 6mm dia.
Protection	IP65
Weight	200g max

Part code	Description
<b>Passive Output</b>	
TT-D-UN	Active Duct Sensor
TT-O-UN	Active Outside Air Sensor
TT-OR-UN	Active Outside Air Sensor with Rad. Shield
TT-I-UN	Active Immersion Sensor
TT-C-UN	Active Clamp-on Sensor
TT-555-UN	Active Flying Lead Sensor
<b>Suffixes (add to part code TT-D &amp; TT-I only)</b>	
-65	Active Duct Sensor
-100	Active Duct Sensor
-250	Active Duct Sensor
-65	Active Immersion Sensor
-100	Active Immersion Sensor
-250	Active Immersion Sensor

**DUCT**



**OUTSIDE WITH RADIATION SHIELD**



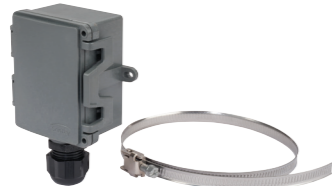
**OUTSIDE**



**IMMERSION**



**CLAMP-ON**



**FLYING LEAD**



**TT-BB Black Bulb Temperature Sensors**



**SPECIFICATION**

Black bulb material	Anodised aluminium
Bulb dimensions	17.5 x 37mm dia.
Environmental Housing	0 to 50°C, 0 to 95% RH non-condensing
Housing colour	Polished white finish
Housing Dimensions	115 x 85 x 30mm
Housing Material	ABS (Flame Retardant)
Output Type	Resistive
Protection	IP30
Weight	120g

The TT-BB range of black bulb temperature sensors are used for radiant heat in indoor spaces. They are used to calculate comfort temperature which is specified as the average of the conductive and the radiant temperature. Units contain either a high quality thermistor, Nickel or Platinum sensing element.

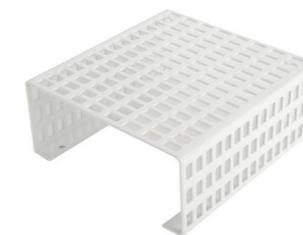
$$T_{\text{comfort}} = \frac{(T_{\text{radiant}} + T_{\text{conductive}})}{2}$$

Part code	Description
TT-BB-A	10K3A1, Trend, Cylon, Distech
TT-BB-B	10K4A1, Andover, Delta Controls
TT-BB-C	20K6A1, Honeywell
TT-BB-D	PT100A, Serck
TT-BB-E	PT1000A, Cylon
TT-BB-F	Ni1000A, Sauter
TT-BB-G	Ni1000A/TCR (LAN1), Siemens
TT-BB-H	SAT1, Satchwell
TT-BB-K	STA1, Landis & Staefa
TT-BB-L	TAC1, TAC
TT-BB-M	2.2K3A1, Johnson Controls
TT-BB-N	3K3A1, Alerton
TT-BB-P	30K6A1, Drayton
TT-BB-Q	50K6A1
TT-BB-S	SAT2, Satchwell

Part code	Description
TT-BB-T	SAT3, Satchwell
TT-BB-W	SIE1, Siebe
TT-BB-Y	STA2, Landis & Staefa
TT-BB-Z	10K NTC, Carel
<b>Interface Options</b>	
-SP	2-wire, 11-1kΩ/0-10Ω setpoint
-MS	Momentary switch
-LEDG	24V Green LED
-BLK *	Black housing
<b>Accessory</b>	
DECOR	Decorators trim plate
GASKET	Insulating gasket (pack of 10)

**Note:** A Sensor Guard (TT-GD) is available – see below.  
\* Plain front, no user interface available (SP/MS/LEDG)

**TT-GD Space Sensor Guard**



**FEATURES**

- Robust construction
- Easy fixing

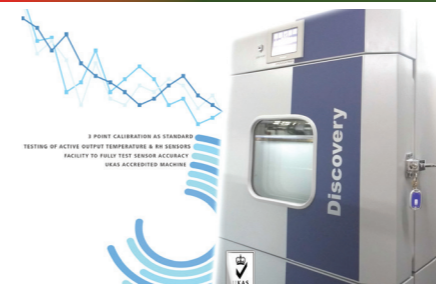
**SPECIFICATION**

Material	Powder coated mild steel
Weight	180g

The TT-GD is designed to protect TT-S and TT-BB temperature sensors from accidental damage.

Part code	Description
TT-GD	Space Sensor Guard

**TT-CAL**



In house calibration is available for Sontay's RH range of sensors using our state of the art environmental chamber. Sontay can provide test certificates for 3-point calibration, with additional points if required -CVO & -ACT types ONLY.

Part code	Description
TT-CAL	3-Point Temp Calibration at 15, 25 & 35°C

Data sheets online: [www.sontay.com](http://www.sontay.com)

Data sheets online: [www.sontay.com](http://www.sontay.com)

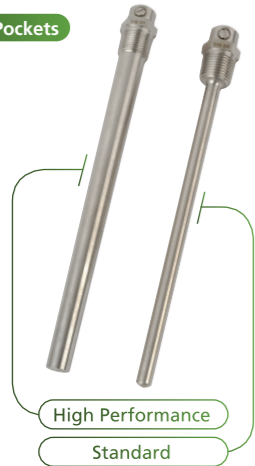
**TT-PO Immersion Sensor Pockets**

**POCKETS THAT CAN WITHSTAND HIGHER PRESSURES AND FLOW RATES**  
 TT-PO-521 and TT-PO-HP range of stainless steel pockets are for use with immersion sensors TT-I and TT-IH. The two part welded TT-PO-521 pockets are intended for low flow applications. They may be used in applications such as sumps or storage tanks or low flowing water in pipes. For applications requiring installation in high flowing water, the TT-PO-HP should be used. Pockets are designed to accept Sontay TT-I and TT-IH sensors. These pockets can be installed in any system that is constructed from compatible materials whose operating pressures and flow rates are within the specified ranges.

For applications requiring installation in high flowing water, the TT-PO-HP should be used. Pockets are designed to accept Sontay TT-I and TT-IH sensors. These pockets can be installed in any system that is constructed from compatible materials whose operating pressures and flow rates are within the specified ranges.



**TT-PO - 250mm Pockets**



**SPECIFICATION**

Material	Stainless Steel 316
Max.pressure (out to in)	16 bar
Temperature Range	-20 to +400°C
Water velocity max. (o to 100°C)	3.7m/s
Weight	140g

Part code	Description
<b>65mm Pockets</b>	
TT-PO-521-65	Stainless Steel Immersion Pocket
<b>100mm Pockets</b>	
TT-PO-521-100	Stainless Steel Immersion Pocket
<b>150mm Pockets</b>	
TT-PO-521	Stainless Steel Immersion Pocket
TT-PO-HP	High Performance Stainless Steel Immersion Pocket
<b>250mm Pockets</b>	
TT-PO-521-250	Stainless Steel Immersion Pocket
TT-PO-HP-250	High Performance Stainless Steel Immersion Pocket

**TT-PO - 150mm Pockets**



**TT-PO - 65mm Pockets**



Industry requirements, recently introduced, are for pockets that can withstand higher pressures and flow rates.

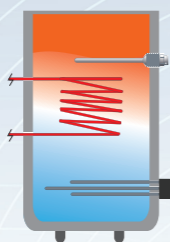
To ensure these standards are met we have worked hard to supply a robust stainless steel pocket at a similar price to the brass version.

Our new range of stainless steel pockets offer the robustness and reliability you would expect, with an exceptionally competitive price.

**High Performance Pocket**



Fast Flowing Water Pipes



High Pressure Tanks

Our customers asked us for a 65mm version which we now supply in our standard range.

A high performance version is available for those projects that require that extra strength, such as for fast flowing water.

Data sheets online: www.sontay.com

**UI-500 Interface Options**



**INDIVIDUAL SOLUTIONS**

In addition to our standard range of sensors we are able to manufacture user interface equipment to your specifications. Typically this would be a single or twin gang plate styled to match other equipment on a project. We can fit a large range of devices to UI-500 products including sensors, setpoint adjustments and LCDs.

THE EXAMPLES ON THIS PAGE ARE JUST A FEW OF THE TYPES, DESIGNS AND OPTIONS WE CAN SUPPLY. PLEASE CONTACT THE SALES SUPPORT TEAM FOR MORE INFORMATION OR TO DISCUSS YOUR REQUIREMENTS.



**CUSTOMISED INTERFACE SOLUTIONS**

All of our user interface products are designed and built to your exact requirements. From custom engraving to LCD displays, switches and setpoints, we can supply a solution that fits your needs.

If you have a requirement, please call our technical support on +44 (0) 1732 861218 or email support@sontay.com.



**UI-AA-I-F Alarm Annunciators**



**SPECIFICATION**

Input signals	0-10Vdc, 4-20mA. relay or 24Vac
Alarm delay time (sec)	5 to 45 secs
Relay output	SPC O. 6A @ 240Vac
Buzzer output	85dB @ 1 metre
LED indication	Green = OK, flashing red = alarm
Power supply	24Vac/dc ±15%
Housing	Panel mounting or UK standard single gang box
Ambient range	-10 to +40°C
Protection	IP32
Dimensions	85 x 85 x 37mm
Weight	140g

Data sheets online: www.sontay.com

The UI-AA-I-F is used in conjunction with one analogue or VFC signals to provide local audible and visual alarm facilities. The units can accept voltage, current and VFC switched inputs. Adjustment of alarm threshold and the time delay before an alarm is standard. A mute button silences the audible alarm, whilst the visual alarm will not reset until the monitored parameter returns to within its desired range.

**FEATURES**

- LEDs for OK/alarm indication
- Audible alarm mute button
- Alarm output relay

Part code	Description
UI-AA-1-F	1-channel Interface Panel

