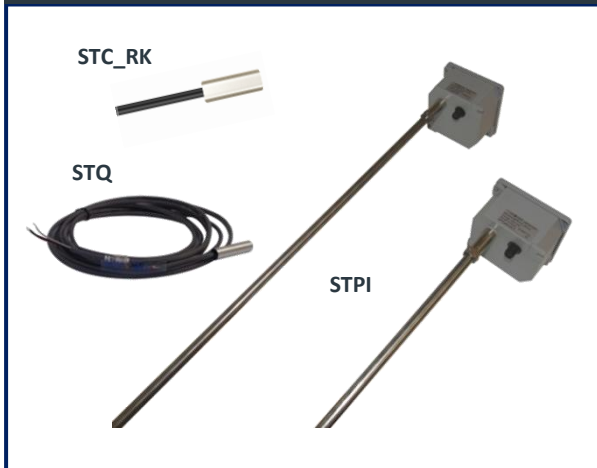


## STQ, STC\_RK, STPI – THERMOMETERS FOR: soil/water dipping, biocompost, contact (walls, photovoltaic panels, etc..) (Rev.4 250326)



### Description

Thermometers ST series are probes for temperature measuring with Pt100 1/3DIN platinum thermistor (100Ω@0°C).

These sensors are equipped with shielded waterproof cable that allows their use in several applications such as dipping in the water, in the soil or in other environmental, meteorological and industrial applications.

The sensors ST are available in two versions: natural 4 wires Pt100 output (Vers. –N) or 4...20mA analog output (Vers. –I).

### Advantages

- ✓ Versatility of use
- ✓ Mechanical ruggedness
- ✓ Reliability
- ✓ Lifetime

## STC\_RK – Contact temperature probe for walls and photovoltaic panels

### Technical Specs



| Models                                      | STC-N_RK                                                                                              | STC-I_RK                                                                               |
|---------------------------------------------|-------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| <b>Applications</b>                         | Walls, surfaces and photovoltaic panels temperature                                                   |                                                                                        |
| <b>Measuring Range</b>                      | -50...+100 °C                                                                                         | -40...+80 °C (other ranges on request)                                                 |
| <b>Transducer</b>                           | Pt100 1/3DIN Temperature                                                                              |                                                                                        |
| <b>Electrical output</b> (other on request) | <b>4 wires Pt100</b>                                                                                  | <b>4...20mA</b>                                                                        |
| <b>Power supply</b>                         | none                                                                                                  | +9...24Vdc                                                                             |
| <b>Consumption</b>                          | 1mA (ref.)                                                                                            | 4...20mA                                                                               |
| <b>Accuracy</b>                             | ±0.1°C                                                                                                | ±0.2°C                                                                                 |
| <b>Repeatability</b>                        | ±0.1°C                                                                                                |                                                                                        |
| <b>Long term stability</b>                  | <0,01°C/year                                                                                          |                                                                                        |
| <b>Response time (63%)</b>                  | <3s                                                                                                   |                                                                                        |
| <b>Maintenance</b>                          | None                                                                                                  |                                                                                        |
| <b>Working Temperature</b>                  | -50...+85°C                                                                                           |                                                                                        |
| <b>Cable</b>                                | Shielded, L=3m (other lengths on request)                                                             |                                                                                        |
| <b>Electrical Connection</b>                | Red: High Pt100 I+ (1mA)<br>White: High Pt100 V+<br>Green: Low Pt100 V-<br>Gray+shield: Low Pt100 Gnd | Red: +Vdc<br>White: +Iout<br>Gray+Shield: Gnd                                          |
| <b>Materials</b>                            | Aluminium                                                                                             | Aluminium (probe)<br>Polycarbonate (4...20mA Amplifier housing)                        |
| <b>Dimensions and weight</b>                | Probe 19x7,5x3,5mm, 20g (cable excluded)                                                              | Probe 19x7,5x3,5mm, 30g (cable excluded)<br>4...20mA Amplifier housing: ø27x103mm, 70g |
| <b>Protection</b>                           | Probe: IP68                                                                                           | Probe: IP68<br>4...20mA Amplifier housing: IP65                                        |

## STQ e STPI – Dipping water/soil and biocompost temperature probes

### Technical Specs for both models STQ and STPI

| Models                | STQ-N<br>STPI-N                                                                                       | STQ-I<br>STPI-I                                                                             |
|-----------------------|-------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| Measuring Range       | -50...+100 °C                                                                                         | STQ: -40...+60 °C (other ranges on request)<br>STP: -20...+100 °C (other ranges on request) |
| Transducer            | 1/3DIN Pt100 Temperature                                                                              |                                                                                             |
| Electrical output     | 4 fili Pt100                                                                                          | 4...20mA                                                                                    |
| Power supply          | none                                                                                                  | +9...24Vdc                                                                                  |
| Consumption           | 1mA (ref.)                                                                                            | 4...20mA                                                                                    |
| Accuracy              | ±0.1°C                                                                                                | ±0.2°C                                                                                      |
| Repeatability         | ±0.1°C                                                                                                |                                                                                             |
| Long term stability   | <0,01°C/year                                                                                          |                                                                                             |
| Maintenance           | none                                                                                                  |                                                                                             |
| Working Temperature   | -50...+85°C                                                                                           |                                                                                             |
| Cable                 | Shielded, L=10m (other lengths on request)                                                            |                                                                                             |
| Electrical Connection | Red: High Pt100 I+ (1mA)<br>Whyte: High Pt100 V+<br>Green: Low Pt100 V-<br>Gray+shield: Low Pt100 Gnd | Red: +Vdc<br>Whyte: +Iout<br>Gray+Shield: Gnd                                               |

### STQ probe - Technical Specs



| Models                | STQ-N                                                                                                | STQ-I                                                                                      |
|-----------------------|------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| Applications          | hydrology (subsoil and surface water, marine, ecc...), Agrometeorology, dam measures, dump, forestry |                                                                                            |
| Materials             | AISI304 Stainless steel (AISI316 on request)                                                         | AISI304 Stainless steel (AISI316 on request) and Polycarbonate (4..20mA housing amplifier) |
| Dimensions and weight | Probe ø13x50mm, 30g (cable excluded)                                                                 | Probe ø13x50mm, 30g (cable excluded)<br>4..20mA housing amplifier: 65x50x35mm, 50g         |
| Protection            | Probe: IP68                                                                                          | Probe: IP68<br>4..20mA housing amplifier: IP65                                             |

### STPI probe - Technical Specs



| Models                | STPI-N                                        | STPI-I                                                                                      |
|-----------------------|-----------------------------------------------|---------------------------------------------------------------------------------------------|
| Applications          | Bio-filters, bio-compost, dumps monitoring    |                                                                                             |
| Materials             | AISI304 Stainless steel (AISI316 on request)  | AISI304 Stainless steel (AISI316 on request) and Polycarbonate (4..20mA housing amplifier)  |
| Dimensions and weight | Probe ø5-12mm x 1-2m, 1kg/mt (cable excluded) | Probe ø5-12mm x 1-2m, 1kg/mt (cable excluded)<br>4..20mA housing amplifier: 65x50x35mm, 50g |
| Protection            | Probe: IP68<br>Junction box: IP65             | Probe: IP68<br>4...20mA Junction box: IP65                                                  |