



**TRITEC**

energy for a better world

**INSTALLATION  
INSTRUCTIONS**

**SURFACE TEMPERATURE  
SENSOR PT1000**

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## INTRODUCTION

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The surface temperature sensor (STS) is designed for temperature measurements on surfaces. Installed at the back of a solar module, the STS measures the module's temperature. The temperature of the solar modules is crucial for their output which decreases by 0,43 % per Kelvin with increasing temperature (typical value for mono- and polycrystalline modules).

Monitoring the module temperature allows conclusions to be drawn about the behaviour of the output curve.

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## TECHNICAL DATA

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|---------------------|---|
| Sensor              | Pt1000  |
| Measuring principle | Platinum resistance wire  |
| Measuring range     | - 20°C to + 150°C   |
| Tolerance           | ± 0.8°C (in the range of - 20 to + 100 °C)  |
| Housing             | Injection moulded plastic with aluminium plate, incl. adhesive tape                                     |
| Dimensions          | 50 x 50 x 8mm   |
| Connection cable    | 3m Cu cable, Silicone insulation, UV resistant, 2-conductor connection, free ends with cable end sleeve |
| Max. cable length   | 20m   |
| Protection mode     | IP65  |

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## WARNINGS

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The installation may only be carried out by a qualified electrician. TRITEC does not accept any liability for improper installation or use of the STS or for damage due to a chemical reaction between the adhesive on the STS and the surface of the mounting object (e.g. solar module).

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## FIXING THE STS TO THE MODULE

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Before fitting the STS to the solar module, clean the back of the module. For an ideal fitting make sure it is dry and free of dust and grease.

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## LAYING THE CABLE

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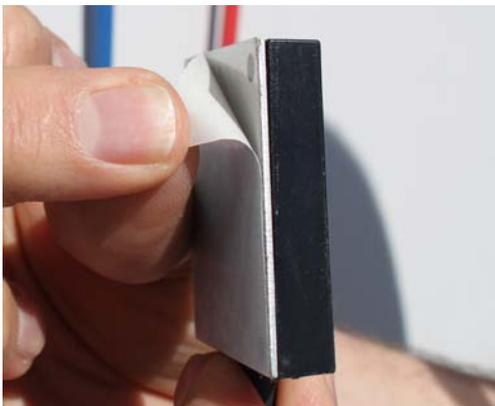
Lay the cable all the way to the solar module. Use one of the edge clips supplied to attach it to the module frame below the target measuring point to prevent rain water from penetrating into the STS.

Make sure that the cable to the target measuring point is long enough for an inspection loop. Select a measuring point that records the average temperature of the solar module/PV system.

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## FITTING THE STS

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Attach the STS to the target measuring point. After removing the protective sheet from the adhesive strip, the STS easily attaches to the clean surface of the solar module.

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## CE DECLARATION OF CONFORMITY

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In compliance with the relevant directives, this product bears the CE mark. The declaration of conformity is available on request from TRITEC.

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