



Module Temperature Sensor Tm-Pt100

Safety Instructions

The installation and assembly of electrical equipment must be carried out by electrically qualified persons. The sensor may not be used with equipment whose direct or indirect purpose is to prevent human death or injury, or whose operation poses a risk to humans, animals or property.

Warranty and Liability

The sensor is designed for the measurement of a surface temperature. The warranty is for 1 year from the date of the invoice for the intended use. IMT Technology does not accept any liability for possible losses or damage due to the incorrect usage of the sensor. Liability for consequential damages is excluded.

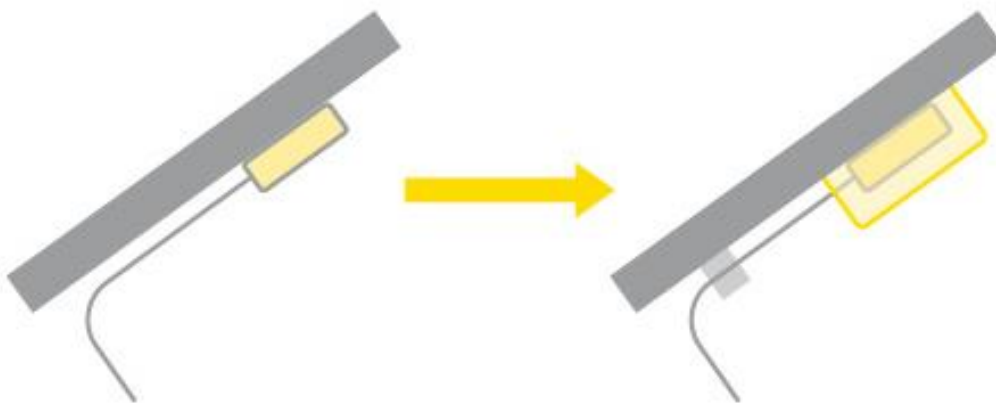
Mounting Instructions

The sensor element is mounted by gluing the rubber patch directly to the measurement surface. The surface must be dry, clean and degreased. Cleaning should NOT be done with glass cleaner, as some glass cleaners contain additives to prevent soiling after cleaning and these additives also prevent adhesion. Isopropyl Alcohol or Ethanol is recommended for cleaning. Temperature sensors shall be placed in representative locations to capture the range of variation and allow determination of an effective average. For crystalline silicon modules, select the centre of the centre-most cell within the module, or, when the module is built with even numbers of rows or columns of cells, select one of the cells closest to the centre.

For bifacial modules, rear-side temperature sensors and wiring shall obscure < 10 % of the area of any cell, and wiring should be routed in between cells when possible.

It is also recommended using an extra fixing with silicone or Sikaflex, particularly for module temperature above 75°C.

The sensor cable needs a cable grip close to the sensor housing.

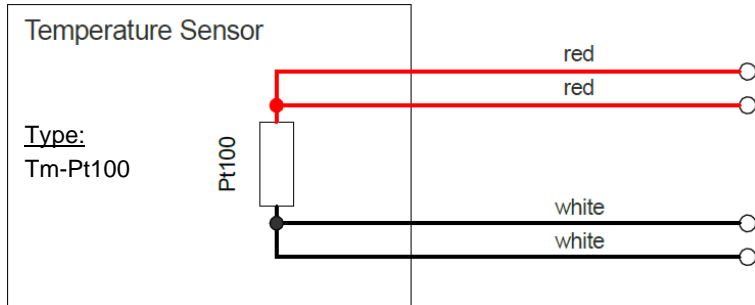


Electrical Connection

The sensors are designed for safety extra-low voltage (SELV) operation.

For keeping the accuracy of the sensor a 4 wire measurement is strongly recommended.

Due to the self-heating, the wire current affects the accuracy of the measurement. Thus, the same should not exceed 1 mA.



Maintenance

Scope of the regularly check (at least once a year): Cleaning, external damage, mechanical fastening, cable laying and any damage to the cable.

Should damage be found that degrades the function or safety, the sensor is to be replaced.

Technical Data

Sensor element	Pt100 class B as per EN 60751
Sensor housing	Self-adhesive silicone rubber patch, 45 mm x 13 mm x 5 mm
Sensor cable (Pt100)	Length: 2 m, PTFE sheath, 4 x AWG 30
Operating temperature	-50 to +150°C (see below installation instruction)
Weight	35 g

Scope of Delivery

- Sensor incl. pre-assembled connecting cable

Intelligent Measurement & Testing