

## Analogue Ambient Temperature Sensors Ta-Pt100 / Ta-Pt1000 / Ta-ext-Pt1000



### 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 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 ambient 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.

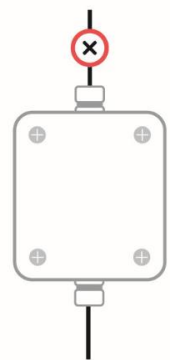
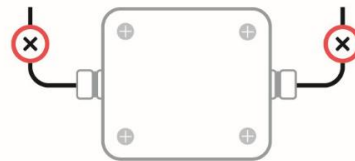
### Mounting Instructions

If mounted outdoors, avoid direct exposure to sunlight and rain to the sensor housing (INOX steel tube). For Ta-ext-Pt1000 if necessary, provide protection from the sun and rain with the optional Shield-Tamb-Si.

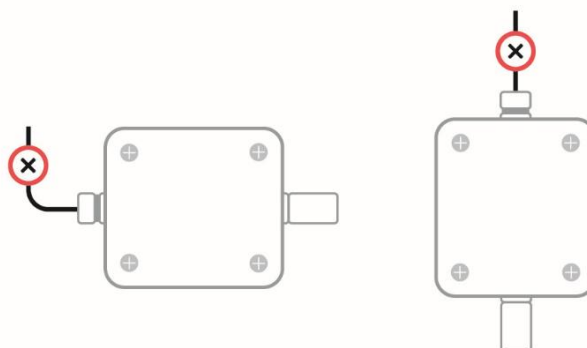
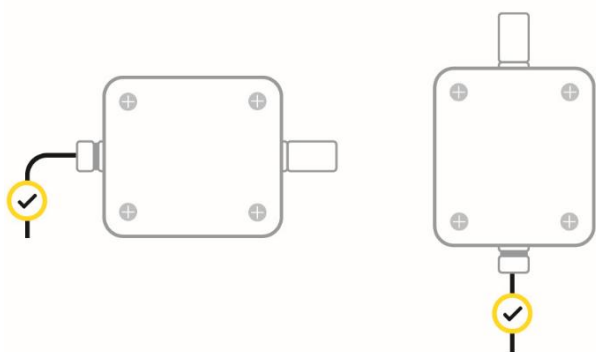
The through holes used to fix the sensor to a stable and suitable surface shall be accessible when the housing is opened. The tightening torque of the case cover is 180 Ncm.

When installing the sensor, the cables must be routed downwards from the housing.

### Mounting direction Ta-ext-Pt1000:



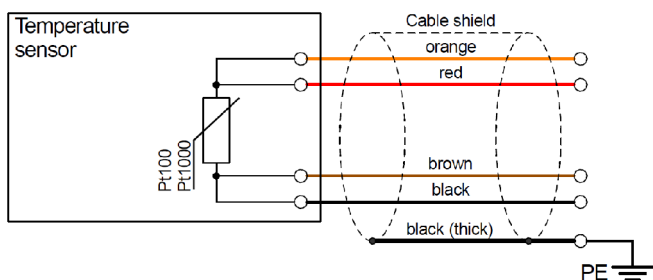
**Mounting direction Ta-Pt100 / Ta-Pt1000:**



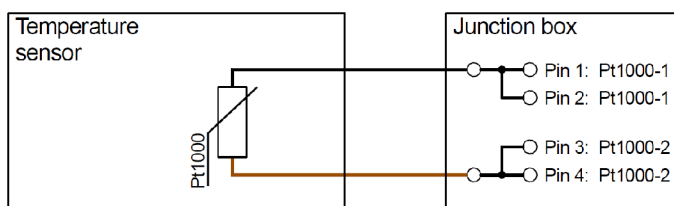
**Electrical Connection**

The sensors are designed for safety extra-low voltage (SELV) operation. The cable shield shall be connected to the PE during installation.

**Ta-Pt100 / Ta-Pt1000:**



**Ta-ext-Pt1000:**



### Cable Length

Type	Cable cross section in mm <sup>2</sup>						
	0.14	0.25	0.34	0.5	0.75	1.0	1.5
Ta-Pt100 2-wire	2-wire measurement not allowed						
Ta-Pt100 4-wire	20 m	20 m	20 m	20 m	20 m	20 m	20 m
Ta-Pt1000 2-wire	5 m	10 m	10 m	15 m	20 m	20 m	20 m
Ta-Pt1000 4-wire	20 m	20 m	20 m	20 m	20 m	20 m	20 m

Maximum additional cable length of sensors with 3 m connection cable.

Max. uncertainty with 2-wire measurement: 1 K

### 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

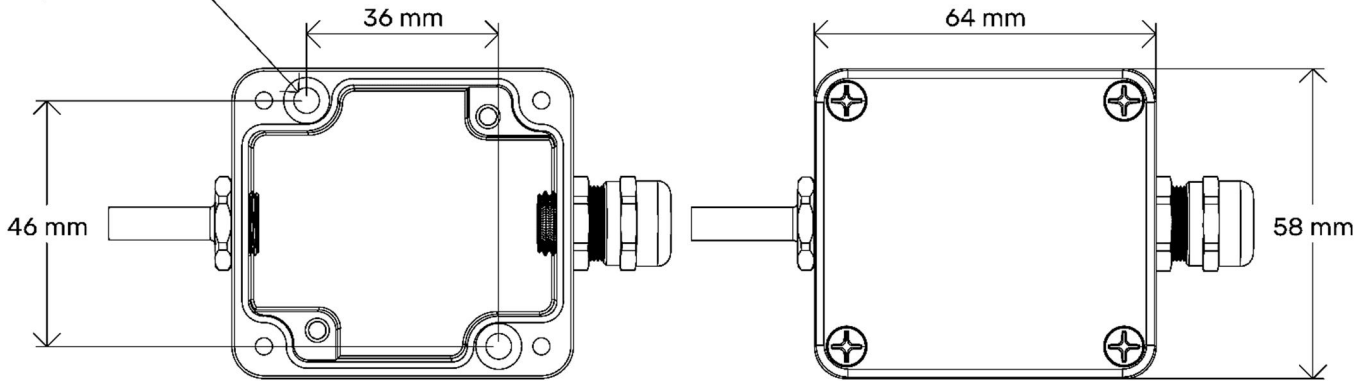
Type	Ta-Pt100	Ta-Pt1000	Ta-ext-Pt1000
Unertainty (-40 to +80°C)	0.3 K	0.3 K	0.4 K
Sensor element	Pt100 class A as per EN 60751	Pt1000 class A as per EN 60751	Pt1000 class AA as per EN 60751
Sensor housing	INOX steel tube, diameter 6 mm, length 23 mm		INOX steel tube, diameter 6 mm, length 50 mm
Sensor cable	–		Length: 3 m, PUR coated, shielded (LiYC11Y, 2 x 0.25 mm <sup>2</sup> )
Case material	Powder coated aluminium		
Case size / protection level	64 mm x 58 mm x 34 mm / IP 67		
Weight	260 g		160 g
Operating temperature	-40 to 80°C		
Electrical connection	Length: 3 m, PUR coated, shielded (LiYC11Y, 4 x 0.14 mm <sup>2</sup> )		Spring terminals

## Dimensions

### Ta-Pt100 / Ta-Pt1000:

#### Mounting Holes

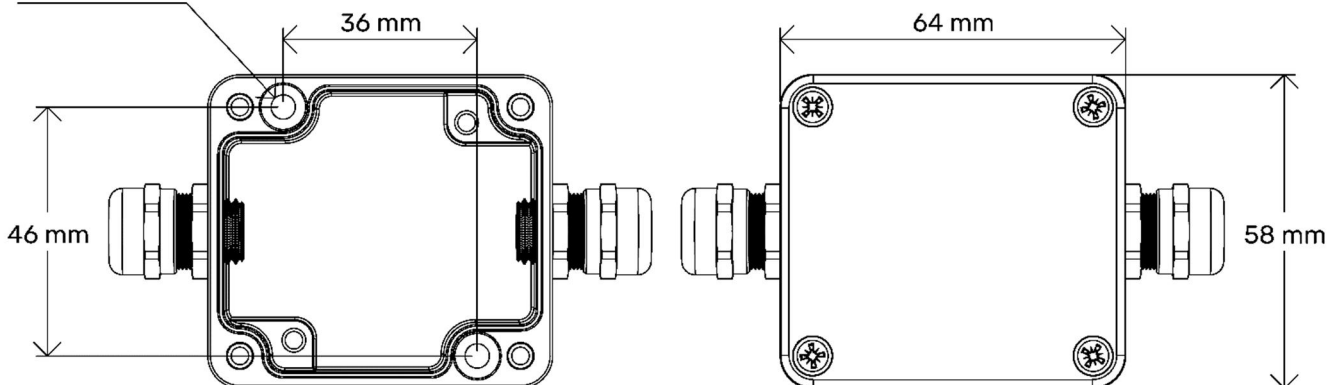
Ø 4.5 mm - 2x



### Ta-ext-Pt1000:

#### Mounting Holes

Ø 4.5 mm - 2x



## Scope of Delivery

- Sensor incl. pre-assembled connecting cable (without cable for Ta-ext-Pt1000)
- Instruction sheet

## Intelligent Measurement & Testing