Technical Temperature Meter PCE-IR 10

solid infrared thermometer with LCD for continuous measurement of surface temperature of all solid materials, designed for fixed installation

The PCE-IR10 thermometer is made up of a small sensor head and a separate electrical component. The thermometer sensor is so small that it can fit in almost any space. part from this, the device offers similar specifications as other devices. The electrical component of the PCE-IR10 facilitates the use of functions hat are not normally found in a device of this quality. Among these are adjustable emissivity, minimum, maximum and average value, as well as software to programme the device via a computer or directly from the unit's LCD. Due to its small size, this temperature tester is ideal for different systems in a production line. The device is accurate, easy to install and economical Measuring temperature with the PCE-IR10 non-contact temperature tester is an economical alternative to similar contact devices (addictinal information about the functioning principle of measuring temperature with thermometers). Also, look at this brief text about the practice of measuring temperature with infrared devices. To get the highest precision from this device, the user can adjust the emissivity, which is different for each type of surface material being measured. If the user measures a material which is not in the table, they can establish the emissivity value and adjust the temperature measured by the temperature reader.

- High temperature range of up to 600°C
- Small sensor head for use in tight spaces
- Analogue output
- USB/ RS-232/ RS-485/ relay outputs
- Operating temperature up to 180°C (sensor head); 65°C (device)
- adjustable emissivity, minimum / maximum Hold, average value
- LCD
- Can funstion in a network of up to 32 sensors connected by optional RS-485
- Power of 8 to 36 VDC

Electronic parameters

Outputs   analogue:

	4 to 20mA, 0 to 20mA, 0 to 5V (adjustable),
	Type-J or K sensors
	temperature sensor head 10 mV / °C
	alarm relay (via software)
	optional digital outputs
	USB, RS-232, RS-485, relay
Inputs	emissivity, temperature compensation, trigger (by software)
Cable length	1m, other lengths can be ordered seperately
Consumption	max. 100mA
Power	8 to 36 VDC

General parameters

Ingress protection	IP65 (NEMA-4)
Operating temperature	
- Sensor head	-20 to 180°C
Storage conditions	-40 to 85°C
Operatng relative humidity	10 to 95% without condensation
EMI	IEC 801-3, level 3 (maximum cable length of 3m)
Weight	
Sensor head	40g
Electronic component	420g

Technical parameters

Temperature range	40 to 600°C
Spectral range	8.0 to 14 µm
Optical resolution [1]	15:1
Accuracy [2]	±1% or ±1°C[3]
Repeatablility	±0.5% or ±0.5°C[3]
Temperature coefficient	±0.05°C / °C or ±0.05% / °C[3]
Temperature resolution	0.1°C[5]
Response time	150ms (95%)
Emissivity	0.100 - 1.000 adjustable in digital mode, by units of 0.001
Functions	maximum, minimum Hold and average value

[1] 90% of energy

[2] at an operating temperature of 23°C ±5°C

[3] shighest value is considered correct

[4] ISO calibration certificate based on the / DKD measurement

[5] for a temperature margin of 300K

Delivery contens:

1 x Thermometer PCE-IR 10 with sensor