THERMAL IMAGER

PCE-TC 5N



- **Temperature measuring range: -20°C ... 1000°C**
- **Infrared detector resolution: 32 × 32 pixels**
- **Integrated camera for visible light (300000 pixels)**
- **Adjustable emissivity: 0.01 ... 1**
- **3 different colour palettes**
- **Adjustable alarm limits**
- **IR/VIS image fusion**
- **Internal memory 8 MB, Micro SD expansion up to 32 GB**
- **2 inch TFT colour display**
- **Image frequency: 9 Hz**

The Thermal Imager is a compact measuring instrument for contactless temperature measurement for tradespeople, technicians and maintenance personnel. The Thermal Imager combines infrared measurement and visible image display for the rapid detection of heat sources and temperature differences.

The Thermal Imager measures temperatures from -20°C ... 1000°C and allows the emissivity to be set from 0.01 ... 1 for precise measurement results. In addition, a lower and an upper alarm value can be set on the device. If the defined temperature limits are exceeded or not reached, the Thermal Imager can alert the user accordingly to the deviation. The thermal sensitivity of 200 mK enables the detection of small temperature differences.

The infrared detector has a resolution of 32 × 32 pixels (1024 image points). In addition, a camera for visible light with 300,000 pixels is integrated, which supports IR/VIS image fusion. The wavelength range is 8 ... 14 µm, the image frequency is 9 Hz and the field of view is 33°.

The display is via a 2 inch TFT LCD display with a resolution of 240 × 320 pixels. For different analysis requirements, the colour palettes iron red, rainbow and grey are available.

Specification

Infrared temperature	
Measuring range	-20 ... +1000 °C
Resolution	0,1 °C
Accuracy	±3°C or ±3% of reading (greater value applies), @ 15 ... 40 °C ambient temperature

General technical data	
Resolution	Infrared detector: 32 × 32 pixels (1024 image points)
Display type	TFT-LCD-Display
Display size	2 Inch
Display resolution	240 x 320 pixels
Storage medium	Internal memory
Storage capacity	8 MB
Memory capacity (additional information)	Memory expansion Micro-SD up to 32 GB
Camera resolution	300000 pixels (VIS)
Automatic power-off from...to	5 ... 30 min.
Alarm	Acoustic
Alarm modes	Upper value Lower value
Emissivity from/to	0.01 ... 1
Wavelength range	8 ... 14 µm
Field of vision (FOV)	33°
Colour palette	Rainbow, Iron red, Grey
Image / video format	bmp
Thermal sensitivity	200 mK
Alarm settings	-20 ... 1000 °C
Frame rate	9 Hz
Menu language	English, English (GB), Chinese
Protection class (device)	IP20
Power supply	5 V DC
(Rechargeable) battery	1 x 3,7 V internal , lithium
Capacity	1000 mAh
Performance	3,7 Wh
Operating conditions	-10 ... 40 °C , 0 ... 85 % RH
Storage conditions	-20 ... 75 °C , 0 ... 85 % RH
Dimensions (L x W x H)	187 x 53 x 56 mm
Weight	167 g

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