THERMAL IMAGER

PCE-TC 5N



- **Temperature measuring range: -20 ... 1000°C / -4 ... 1832°F**
- **Infrared detector resolution: 32 × 32 pixels**
- **Integrated camera for visible light (300000 pixels)**
- **Adjustable emissivity: 0.01 ... 1**
- **3 different color palettes**
- **Adjustable alarm limits**
- **IR/VIS image fusion**
- **Internal memory 8 MB, Micro-SD expansion up to 32 GB**
- **2-inch TFT color display**
- **Frame rate: 9 Hz**

The Thermal Imager is a compact measuring device for non-contact temperature measurement for tradespeople, technicians, and maintenance personnel. The Thermal Imager combines infrared measurement and visual image display for the rapid detection of heat sources and temperature differences.

The Thermal Imager measures temperatures from -20°C ... 1000°C / -4 ... 1832°F 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 undershot, 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 frame rate is 9 Hz, and the field of view is 33°.

Display is via a 2-inch TFT LCD with a resolution of 240 × 320 pixels. For different analysis requirements, the color palettes iron red, rainbow, and gray are available.

Specification

Infrared temperature	
Measuring range	-20 ... +1000 °C
Resolution	0,1 °C
Accuracy	±3°C / 5.4°F or ±3% of reading (whichever is greater), @ 15 ... 40°C / 59 ... 104°F ambient temperature

General technical data	
Resolution	Infrared detector: 32 × 32 pixels (1024 picture elements)
Display Typ	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 shutdown adjustable	5 ... 30 min.
Alarm	Acoustic
Alarm modes	upper value lower value
Emissivity Level from/to	0.01 ... 1
Wavelength range	8 ... 14 µm
Field of view (FOV)	33°
Farbpalette	Rainbow, iron red, gray
Picture / Video format	bmp
Thermal sensitivity	200 mK
Alarm settings	-20 ... 1000 °C
Frame rate	9 Hz
Menu language	English (US), English (GB), Chinese
Protection class (device)	IP20
Power supply	5 V DC
Battery/battery	1 x 3,7 V intern , lithium
Battery 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