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Technical Infrared Imaging Camera PCE-TC 28

Infrared Imaging Camera PCE-TC 28 Infrared camera for non-contact temperature measurements / adjustable emissivity built-in digital camera / auto power-off / adjustable threshold levels / SD card memory

The infrared camera was designed for taking non-contact temperature measurements. To get accurate readings, the emissivity of the infrared camera can be adjusted, depending on the operation purpose. Besides taking infrared images, the infrared camera can also take normal pictures, as well as a mixture of both, due to the built-in digital camera. This makes it easier for the operator to aim at the target and to recognize and locate hotspots.

The infrared camera is well-suited for a large variety of applications. This includes monitoring of machinery, building inspection or different applications in the hobby and leisure domain, for example. The infrared camera comes with a built-in SD card slot for MicroSD cards. The device supports different memory card capacities. It is possible to store up to 6000 images per gigabyte on the SD card of the infrared camera.

- built-in digital camera
- adjustable emissivity
- fast sampling time
- MIN/MAX indication
- exchangeable Li-ion battery
- auto power-off function
- TFT display with backlight
- protective cap for the lens

Technical specifications:

Temperature

Measurement range $-20 \dots +300 \, ^{\circ} \text{C}$ Accuracy $\pm 2 \, ^{\circ} \text{C}$

Emissivity correction on screen Yes
Setting of background temperature Yes

Image

Frequency image recording 9 Hz

Type of detector Uncooled pyroelectric ceramics

Thermal sensitivity ≤150 mK
Infrared spectral band 6.5 ... 14 μ m
Camera 48608 Pixel
Field of view 38 x 38 °
Mechanism of focus Fixed focus

Parallax correction of visual and IR image 0.5 m, 1.0 m, 2.0 m, 3.0 m Picture-in-picture coverage of visual and 0 / 25 / 50 / 75 / 100 %

IR image

Hot / cold spot localisation Yes

Image recording and data storage

Image recording Image can be viewed before saving

Storage medium MicroSD card can save 6000 images per GB

File format .bmp

Memory view Possibility to scroll through all saved images

Operating temperature $0 \dots +50 \, ^{\circ}\text{C}$ Storage temperature $-20 \dots +60 \, ^{\circ}\text{C}$

Relative air humidity 10 ... 90 %, non-condensing

Display 2.2 " diagonal, (320 x 240 TFT LCD)

Emissivities

Material	Thermal emissivity	Material	Thermal emissivity
Asphalt	0.90 0.98	Fabric (black)	0.98
Concrete	0.94	Human skin	0.98
Cement	0.96	Foam	0.75 0.80
Sand	0.90	Coal	0.96
Soil	0.92 0.96	Lacquer	0.80 0.95
Water	0.92 0.96	Lacquer (matt)	0.97
Ice	0.96 0.98	Rubber (black)	0.94
Snow	0.83	Plastics	0.85 0.95
Glass	0.90 0.95	Wood	0.90
Ceramics	0.90 0.94	Paper	0.70 0.94
Marble	0.94	Chromium (oxidised)	0.81
Plaster	0.80 0.90	Copper (oxidised)	0.78
Mortar	0.89 0.91	Iron (oxidised)	0.78 0.82
Brick	0.93 0.96	Textiles	0.90

Delivery contents

- 1 x Infrared Imaging Camera PCE-TC 28
- 1 x rechargeable Li-Ion battery
- 1 x USB data cable
- 1 x mini tripod
- 1 x mains adaptor
- 1 x carrying case
- 1 x user manual