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## Technical Test Instrument 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 ... +300 °C
Accuracy	±2 %, ±2 °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 μm
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 IR image	0 / 25 / 50 / 75 / 100 %
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 ... +50 °C
Storage temperature	-20 ... +60 °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