

## Thermal Imager PCE-TC 33N

### Thermometer PCE-TC 33N

**Infrared thermometer with a measuring range up to 450°C (842°F) / 220 x 160 pixels / 3 GB Flash memory for more than 20,000 images / Thermal sensitivity 70 mK / Image format JPG / PC connection to transfer stored photos**

The infrared thermometer PCE-TC 33N is the ideal tool for repair work and prevention measures. This thermal imager is a must-have for electricians, fire fighters, locksmiths, or general service personnel for trouble shooting and fault prevention on electrical equipment, electromechanical equipment, production process machinery, heating, ventilation, and air conditioning systems, especially when working in harsh environments.

In preventative maintenance, the high-resolution PCE-TC 33N thermal imager is ideal for maintaining or repairing machinery or other equipment. At the heart of the PCE-TC 33N high-resolution thermography camera is an uncooled microbolometer (uncooled focal plane array) with a resolution of 220 x 160 pixels. The thermography camera was designed in ergonomic design for one-hand operation. Due to the very low weight of just 424 g, it is ideal for analyzing machinery and equipment, for building thermography and many other applications. The PCE-TC 33N thermographic camera offers a measurement accuracy of  $\pm 2^{\circ}\text{C}$  /  $3.6^{\circ}\text{F}$  or  $\pm 2\%$  in a temperature range of  $-20^{\circ}\text{C}$  ...  $450^{\circ}\text{C}$  /  $-4$  ...  $842^{\circ}\text{F}$ , with a sensitivity of less than 0.

On the color display of this thermal imager there is the possibility to automatically find and display the warmest and coldest measuring point in the measurement image. With the powerful features, irregularities are immediately detected and appropriate action can be taken on the spot. The stored thermal image recordings can be transmitted to a PC or laptop using the corresponding connection cable. The internal 3 GB memory of the thermographic camera can accommodate more than 20,000 thermal images.

- IR resolution: 220 x 160 pixels
- Measuring range:  $-20$  ...  $450^{\circ}\text{C}$  /  $-4$  ...  $842^{\circ}\text{F}$
- Thermal sensitivity: 70 mK
- Memory: 3 GB memory for more than 20,000 pictures
- 5 different color palettes
- Hot and cold point location
- Picture in Picture function

### Specifications:

#### Infrared sensor

Resolution	220 x 160 pixels
Wavelength	8 ... 14 $\mu\text{m}$
Thermal sensitivity	70 mK
Refresh rate	9 Hz
Field of view (FOV)	$35^{\circ} \times 26^{\circ}$
Focusing	Firm focus
Smallest distance	0.15 m / 5.9 in

Temperature range	-20 ... 450°C / -4 ... 842°F
Accuracy	± 2°C / 3.6°F, ± 2%
Calibration of the measurement	Auto
Number of spots	1
Number of measuring ranges	1
Emissivity	Range: 0.01 ... 1.00
Color palettes	Rainbow, iron oxide red, cold color, black & white, white & black

### **Other specifications**

Picture in picture function	Adjustable 25%, 50%, 75%, 100%
Camera resolution	300,000 pixels
Screen	3.2" TFT
Screen resolution	320 x 240 pixels
Image memory	Built-in SD card with 3 Gb for more than 20,000 images
Image format	JPG
Power supply battery	Built-in 18650 battery, about 2800-mAh
Power supply power supply	Primary: 100 ... 240V AC 50/60 Hz Secondary: 5V / 2 ADC
Interface	Micro USB for charging and memory readout on a PC
Operating time	Between 2 ... 3 hours
Menu languages	English, Chinese, Italian, German
Automatic shutdown	After 5, 20 minutes or disabled
Ambient temperature	0 ... 45°C / 32 ... 113°F
Storage conditions	-20 ... 60°C / -4 ... 140°F
Humidity	≤ 85% RH (non-condensing)
Dimensions	90 x 103 x 223 mm / 3.5 x 4.1 x 8.8 in
Weight	424 g / < 1 lb

### **Delivery scope:**

- 1 x Thermometer PCE-TC 33N
- 1 x Micro USB cable
- 1 x USB charging adapter
- 1 x Carrying bag
- 1 x User manual