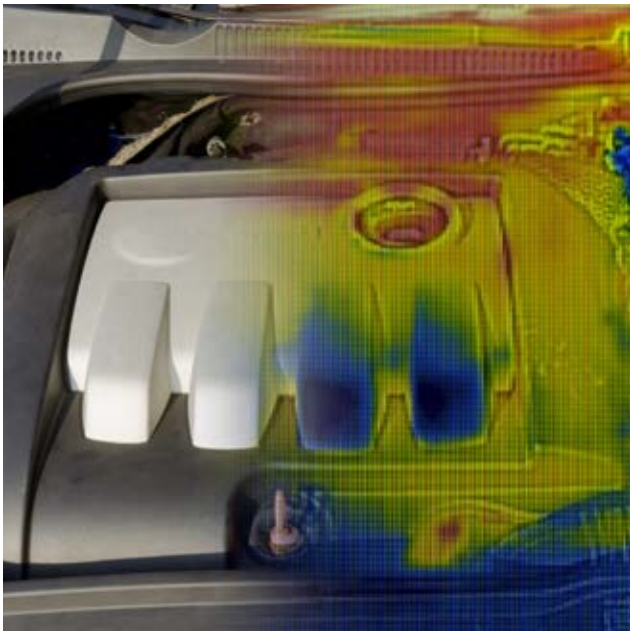
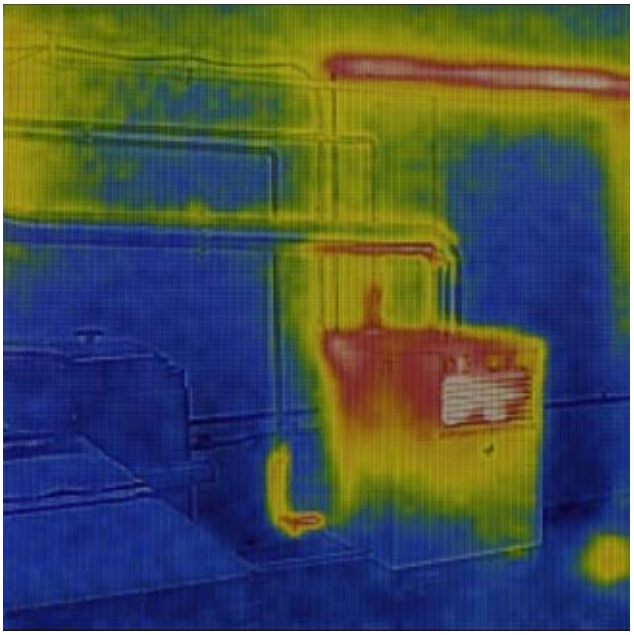
Thermographie

The world of thermal images

The imaging method for displaying surface temperatures of objects or a body is called thermography. The measure of the temperature is the intensity of the infrared radiation emanating from a point. In short Thermography is a non-contact imaging process.

In order to evaluate this information, the thermal imager was developed. Invisible to the human eye infrared radiation is converted by the thermal imager into electrical signals and generates an image in false color or, but more rarely, a monochrome grayscale image.





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Typical applications

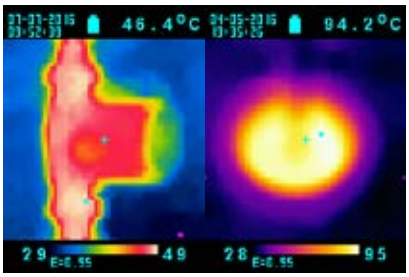
Thermal imaging cameras are used in many applications today.

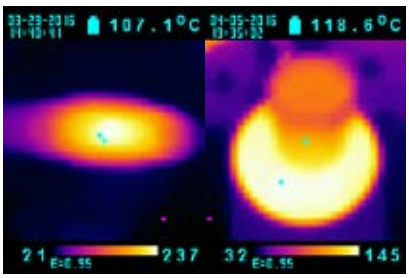
The use of thermal imagers in **building thermography**, a method for testing the insulation of houses, the control of flat roofs and analysis of masonry, for localization of cracks in pipes and for creating an energy performance certificate has already been successful in use for many years.

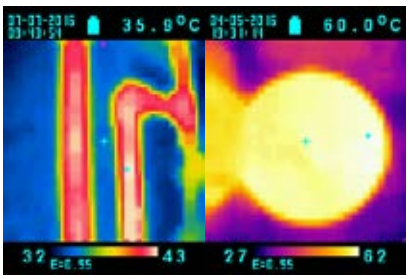
In **industrial** and **mechanical trade** thermal imagers are in use to check electrical systems. Here for example in use for the determination of the power loss of electronic assemblies and the testing of mechanical systems.

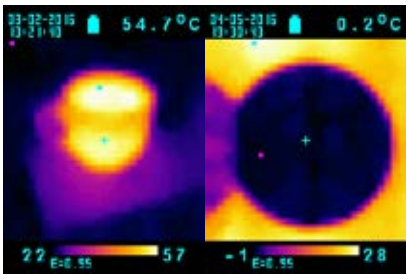
Thermal imaging cameras are also sucessful tools in **fire service**. The use of cameras without risk and fast remaining embers from fires can be detected and people are found in smoke-filled buildings.

In **veterinary medicine**, the thermal imaging camera is used in diagnosis. The measurement of the surface heat of inflammatory regions of the body of an animal helps the veterinarian to identify of the causative when he is making a diagnosis.





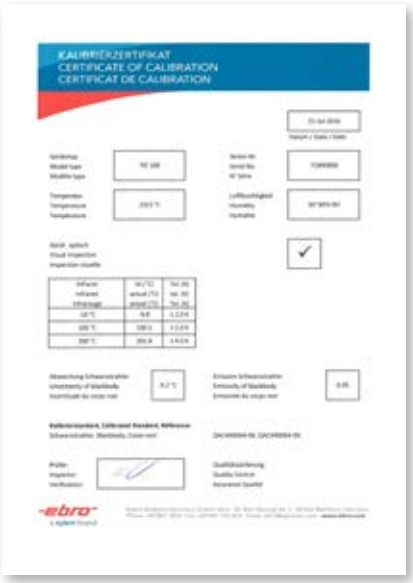




Factory certificate

Each thermal imager **TIC 100** is supplied with a calibration certificate.

Calibration is a process where data are compared and documented in the readings of your device with the measured values of a reference device.



The power of the Thermal imager TIC 100

- The infrared camera with micro SD memory shows contactless in less than one second temperature points (hot or cold)
- The thermal imaging allows for optimal evaluation of defects
- Easy of use through an easily understandable menu navigation
- Robust design with ergonomic design made for improved use
- Thermal images can be moved and saved from micro SD-card
- Pinpoint temperature measurement
- Provides heat sources and critical temperatures in a quick and safe manner
- Rapid fault diagnosis with thermal images
- Measurement technology allows to measure with a safe distance from the objects to the imager
- Particularly suitable to measure temperature on voltage-carrying or moving objects in the electrical and mechanical fields.

1. Display
2. Infrared lense
3. micro SD card reader
4. Mini USB port
5. Temperature scale
6. Menu button
7. Cursor button
8. Temperature unit
9. Trigger
10. Battery case

TIC 100 Thermal Imaging Camera
Easy to Use

Technical Data

Measurement range	-20 °C ... +250 °C (-4 °F... 482 °F)
Accuracy	±2 % for the remaining measurement range ±2 °C (4 °F)
Resolution	0.1 °C
Optic	32 x 31
Field of view (FOV)	33 ° x 33 °
Acoustic Alarm	Yes
Operation Temperature	0 °C to +50 °C (+32 °F to +122 °F)
Operation Humidity	< 85% rH non-condensing
Storage Temperature	-10 °C ... 60 °C
Spectral Range	8~14 µm
Emissivity factor	0.95 default, adjustable between 0.10 and 1.00
Display	2.8" color
Backlight	Intensity adjustable
Auto Power off	Yes
Image Format	BMP
Image size	240 x 320
USB interface	Yes
Battery	AA - 4 pcs.
Battery lifetime	Approximately 6 hours continuous use
Dimensions (L x W x H)	234 x 74 x 95 mm
Housing Material	Polycarbonate
Weight	411g
Protection class	IP 54

The thermal imager TIC 100 helps you in measuring and documenting temperature-sensitive products. You can easily determine the temperature distribution in a product during the laboratory analysis and capture it on camera. The camera can be used to check the temperature in storages, but also for temperature control in the incoming goods, especially with temperature-sensitive products.

As the temperature is measured by infrared and thus a contactless measurement, the Imager TIC 100 can be used for temperature measurements of moving or voltage-carrying parts. With the Imager TIC 100, the measured temperatures can be captured and documented quickly and easily with the camera.

- Quick contactless measurement
- Measuring and Documenting
- Easy to use
- Short failure diagnostics

Type	Description	Part No.
TIC 100	Thermal Imaging Camera TIC 100 incl. carrying case, micro SD-card and USB-cable	1340-2500