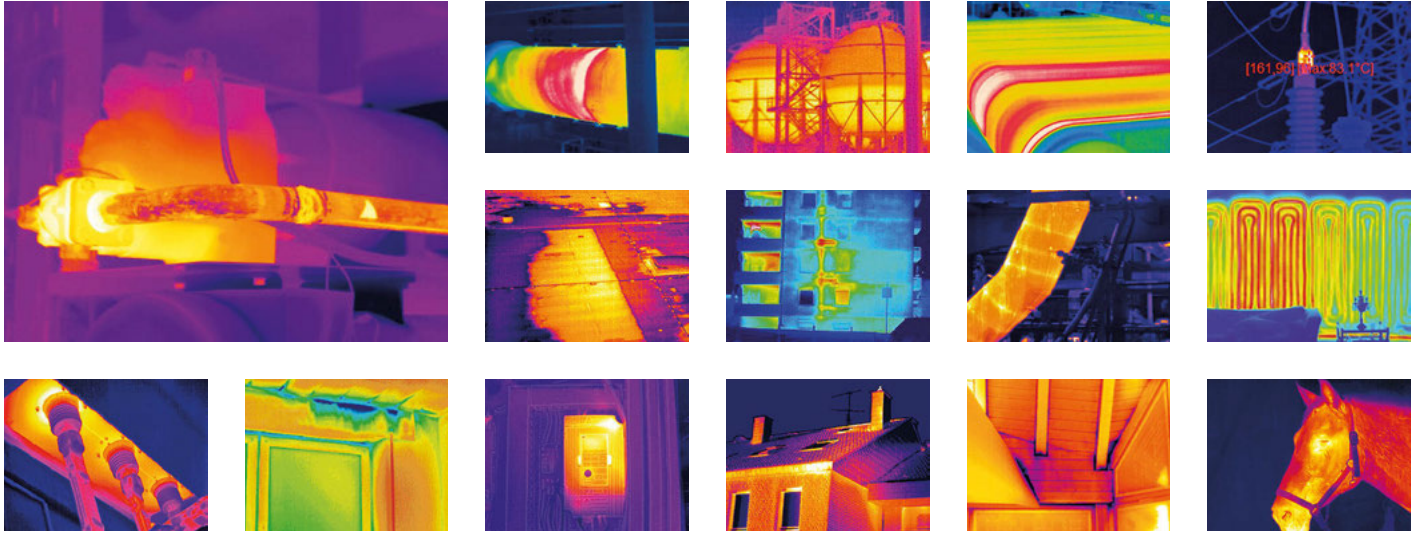


The professional thermal imaging cameras of the Trotec XC and IC series provide you with manifold application options



Production control and equipment maintenance in the industry

Use the thermal imaging cameras of our XC and IC series for surveillance and maintenance tasks in industrial facilities, e.g. to monitor combustion or temperature-controlled processes.

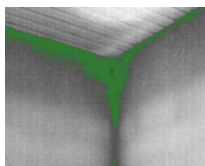
The inspection of heat insulation at machines and installations are also typical fields of application of these cameras, as is preventive maintenance. "Hot spots" in drive systems f.i. can indicate a beginning bearing failure.

Building thermography

Whether you have only a building envelope or the entire construction – by means of thermography measurements using cameras of the XC and IC series both the examination for missing heat insulation and the detection of structural-physical defects or hidden construction elements can already be achieved during the building phase. This way, warranty claims can be put forward at an early stage and so energy costs can be saved.

Prior to modernisations thermographic measurements also constitute a reliable basis for planning reconstruction work to eliminate energy loss.

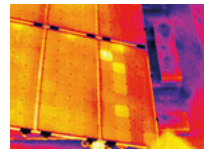
A survey regarding the indoor climate can also be carried out. Dew-point endangered areas of a building, where without appropriate structural countermeasures potentially toxic and allergenic mould would grow, can be quickly and easily localized using our professional thermal imaging cameras.



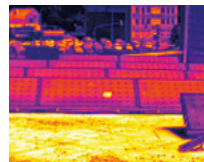
Functional check of photovoltaic power plants

Using a thermal imaging camera of the XC or IC series, defective modules or connections can easily be localized.

Right after installation, solar installers and electricians can cover their back with a significant inspection by thermographically documenting the functionality of their system.



Homeowners benefit from the possibility of periodically checking the perfect functioning and full performance of their photovoltaic installation and detecting possible damages caused by stone-chipping, dirt, humidity or short circuits early on.



Leak detection

The infrared cameras of the XC and IC series enable a quick and exact reduction of leaks, barely perceivable by the human eye, in inaccessible or concealed pipes, e.g. floor heating systems. Therefore, maintenance work can be performed while minimizing damage and reducing costs.

Electrical thermography

Whether control cabinets, electric motors or other live systems, with professional thermal imaging cameras from Trotec dilapidated components or faulty connections can be detected early on, so that expensive production downtime can be prevented and fire risks reduced.

Energy consulting

Professional thermal imaging cameras from Trotec are excellently suited to capture and document energy losses at outer windows, external doors, roller shutter casings, heater recesses, the roof construction and the entire building envelope, e.g. due to missing or defective insulation. Use these ideal measuring tools for comprehensive diagnosis or maintenance applications relating to energy consulting.

Many more fields of application

Thanks to the undisputed process advantages, thermographic measurements have for a considerable time now been firmly established in many fields of application. Based on the convincing value-for-money ratio of our innovative pro models the use of thermal imaging cameras now appeals to highly diverse crafts, users and application scenarios, which so far could not benefit from the advantages of non-contact and non-destructive thermography for financial reasons.

Do you have questions regarding the possible use of our professional thermal imaging cameras in your specific case of application?

Don't hesitate to contact us – we're happy to be of service!



A clearly laid out comparison of the equipment features of our XC and IC series along with explanatory notes on the practical benefits is provided on the following catalogue spread ...

XC/IC equipment overview

Always optimally prepared with our professional thermal imaging cameras

XC or IC – using this equipment overview you can find out quickly and conveniently which of the professional thermal imaging cameras from the Trotec products range meets your requirements best.

Unlike the XC300, both IC085LV and IC125LV have identical equipment features. Their only distinguishing feature is the temperature measuring range.



Equipment feature :	Your practical benefit :	XC300	IC085LV	IC125LV
All information regarding the professional thermal imaging cameras of your interest can be found starting on catalogue page ...		8	10	10
Laser distance measuring function	An integrated distance meter permitting laser-supported distance measurements ranging up to 30 m eliminates the need for you to take an external distance measuring device with you. That way, accessibility and distance of the measuring objects can be easily determined.	■	–	–
1x to 10x zoom via infinitely variable electronic regulation	An infinitely adjustable zoom with high magnification factor offers you more flexibility when looking at faraway details. This increases the number of possible applications for the inspection of poorly accessible or especially secured areas.	■	–	–
Autofocus system	Thanks to a motorized lens you can quickly zero in on the desired measuring object with high precision even in unclear environments.	■	–	–
PanoFold display – inclinable, swivel-mounted 3.5-inch folding LCD	The combined motion range of the folding display (inclinable by 180° and pivoting by 270°) provides you with an ergonomically optimized viewing position in every situation for looking at the test object from any angle. Fully folded it protects monitor and operator keypad from dirt.	■	–	–
High-capacity Li-ion battery	More than double the operating time of a standard Li-ion battery. Less battery changes required, fewer charging intervals, longer non-stop measuring applications.	■	–	–
Periodic image storage	Permits periodic recordings of thermal images with a preselectable recording frequency, e.g. every 30 minutes. With this recording interval you can easily document the thermal long-term behaviour of an object.	■	■	■
High refresh rate of 50/60 Hz	The high refresh rate ensures a permanent real-time thermal image reproduction. Not a single image and thus no important thermographic information is omitted in real-time presentations.	■	■	■
Fully radiometric thermal images	Precise temperature measurement in the entire picture, no interpolation interferences. For every single pixel the sensor has an individual measuring spot, supplying accurate temperature values for this pixel only. The absolute temperature can be read pixel for pixel.	■	■	■
High thermal sensitivity	Reliable diagnoses even with the smallest changes in temperature. Even the smallest changes in temperature become apparent. A high sensitivity reduces thermal noise in the infrared image. The smaller the value, the better the quality of the image.	■	■	■
Uncooled microbolometer sensors	No movable sensor parts, extreme durability, clear and detailed images. Small size, light weight, low power consumption, completely maintenance-free.	■	■	■
Image sensor with 384 x 288 measuring spots	Maximum measurement accuracy due to 110,592 independent temperature measuring spots. With this detector you can be located more than twice as far away from the target than with a 160 x 120 detector and still measure with the same accuracy.	■	■	■
High geometric resolution of 1.1 mrad	Defines the solid angle measure for the smallest resolvable measuring spot. The smaller this value, the more precise are the measurement results. At a camera-to-subject distance of one metre the individual measuring spot of each thermal pixel on principle has a diameter of 1.1 mm.	■	■	■
Hinged 3.5-inch LCD display	Optimum ergonomic view from every angle. Fully folded it protects monitor and operator keypad from dirt.	–	■	■
Dual keypad/touchscreen control	Owing to the combination of control keys and capacitive touchscreen it has become still easier and more intuitive to use the thermal imaging camera. This way, you can meet your target faster and use your camera more effectively.	■	■	■
Automatic temperature tracking (hot/cold spot)	Coldest or hottest spots on the measuring objects are detected in real time and displayed automatically.	■	■	■



<i>Equipment feature :</i>	<i>Your practical benefit:</i>	XC300	IC085LV	IC125LV	Trotec
All information regarding the professional thermal imaging cameras of your interest can be found starting on catalogue page ...		8	10	10	
Temperature alarm	Acoustic and visual alarm help you to faster detect critical areas. Also ideal for dew point detection at surfaces.	■	■	■	Temperature
Robust two-component construction with IP54 type of protection	Robust housing, dust- and splash-proof – ideal for rough industrial applications and all kinds of weather when measuring outside. Thanks to two-component construction with integrated rubber protectors impact-proof to a drop height of 1.80 metres.	■	■	■	
Integrated laser pointer	Simplifies the quick location of problematic areas and the visual targeting in poorly lit surroundings.	■	■	■	Multi-function
Diverse measuring and analysis functions	Reliable, quick and precise results due to dynamic eight-point measuring, automatic temperature tracking, differential measurements, line profile analysis, sector analysis, isotherm and alarm function.	■	■	■	
Intelligent power management	High battery performance, longer non-stop measuring applications.	■	■	■	Climate
Correction of the reflected ambient temperature	When the surface of the object to be measured has a low degree of emission and the object temperature contrasts rather strongly with the surface temperature, the temperatures measured by the thermal imaging camera are being influenced. Such measurement errors can be compensated for by adapting the reflected ambient temperature.	■	■	■	
Professional analysis software	No additional costs for expensive software: Full-fledged analysis and documentation program with numerous functions for evaluation, organization and documentation already included in the scope of delivery.	■	■	■	Moisture
Bluetooth (optional)	Wireless connection facility for an optional headset.	■	■	■	
Voice recording	Comment every image on site with valuable additional information (optionally available headset required).	■	■	■	Data loggers
microSD memory card slot	Uncomplicated storage management, several thousand images fit onto the supplied microSD card. Basically unlimited memory capacity by simple card replacement.	–	■	■	Software
Standard file format	Storage of the entire infrared image information in one fully radiometric JPEG format. No special software required for processing as with proprietary file formats. Advantage: More flexibility for analyses and evaluations, quicker report generation.	■	■	■	
Picture-in-picture display function DuoVision	In this display mode, infrared and real images can be used for better orientation superimposed in any intensity.	■	–	–	Emission
Picture-in-picture display function DuoVision Plus	Combines the infrared image information with high-contrast details of the visible light spectrum from the real image camera for the real-time indication of an extremely detailed thermal image fusion on the camera display. Advantage: Easier orientation, localization and assessment during the measurement.	■	■	■	
Software function DuoVision	Infrared and real images can be on the software side for a better evaluation and professional overlay documentation in any intensity and finally save it as a new file.	■	■	■	Air Flow
Software function DuoVision Plus	For a better evaluation and professional documentation, infrared and real image can be superimposed as desired via the software. Then it can be stored as contour emphasizing thermal image in which the radiometric image information is combined with the high-contrast details of the real image.	■	■	■	Optical inspection
IR video function	Non-radiometric IR videos can be used to visualize processes such as the heating and cooling behaviour of electronic and mechanical components or other objects over a specified period of time.	■	■	■	
Fully radiometric real-time IR videos <small>(with optionally available real-time upgrade)</small>	Fully radiometric real-time videos on your PC, connected to the thermal imaging camera via a fast USB 2.0 interface, enable the detailed examination of thermal processes. All temperature information of each individual image sensor are contained in the video for evaluation.	■	■	■	Leak detection
Integrated 5 megapixel digital camera	Quicker and easier object inspection thanks to simultaneous display and recording of fully radiometric infrared and high-resolution real images.	■	■	■	
Integrated photo lamp	Improved photo results due to optimum illumination of dark target areas during real image recording.	■	■	■	Tracing and detection
Connection possibility for optional interchangeable lenses	In most situations the standard lens is the best solution, but with some applications a different field of view is required. In contrast to cameras with fixed lenses, when examining particularly small or large objects here you can simply connect telephoto or wide-angle lenses as required.	■	■	■	Planning and survey