

A FEW PRACTICAL BENEFITS:

Fully radiometric IR cameras
"Made in the EU"

Real-time measurements guarantee
high-quality thermal images

High thermal sensitivity

Maintenance-free operation using
microbolometer technology

Pivotal 3-inch colour TFT display

Image recording with an image repetition
frequency up to 50/60 Hz

DuoVision function for
Picture-in-Picture presentation

Integrated laser pointer

In-built digital camera
for real-time images

Built-in photo lamp

Memory for infrared and real images

Automatic temperature tracking
(Hot/Cold Spot)

Various measuring functions

Ergonomic and featherlight

Robust construction (IP54)

Docking charging station

Spot on measuring results!



Measuring spot sticker –
practical help for spot-on
documentation and
chronological comparison
measurements.

You will find this accessory item in the
chapter "Multi-function" on page 25.

IR cameras in the EC Series

First-Class Thermography – Economy-Class Price!



The innovative EC cameras set
completely new standards in terms of value
for money and offer a variety of equipment
otherwise only to be found with
upscale high-end models.

The maintenance-free, uncooled image
sensor with a detector resolution of up
to 19.2 kilopixels and a thermal sensi-
tivity of 0.08 °C enables fully radiomet-
ric thermal images in a temperature
measuring range between -20 °C and
+250 °C.

A high image repetition frequency guar-
antees continuous real-time thermal
imaging.

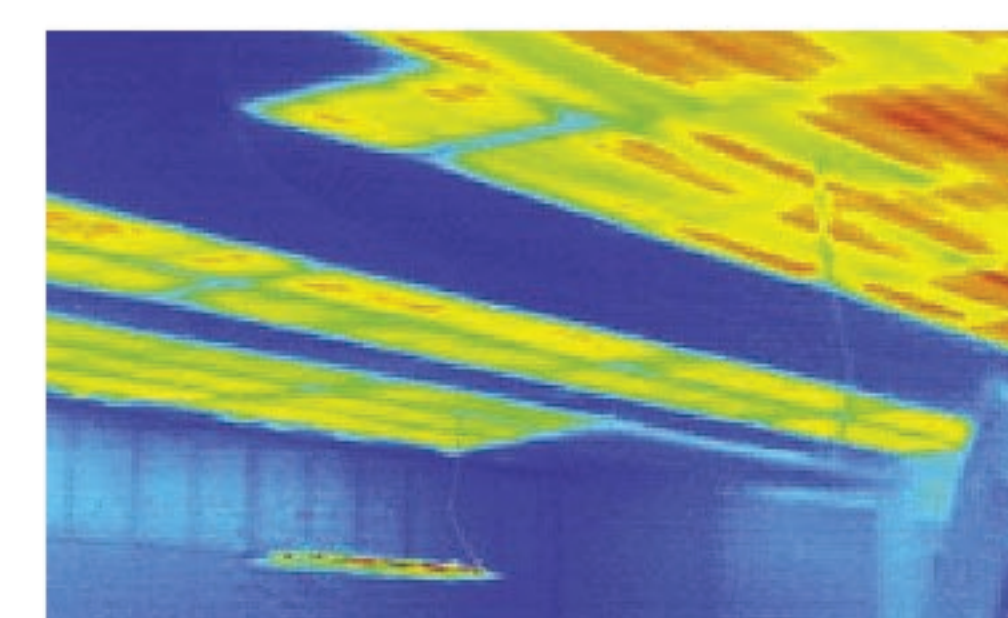
Several thousands of thermal images
can be saved on the miniSD memory
card included in the scope of delivery.

A variety of integrated measuring
functions and the automatic meas-
ured value correction function
ensure optimum results every
single time thus making the ther-
mal imaging cameras in the EC
Series extremely reliable infrared
measuring tools.

The interplay between the EC camera
and the software included in the scope
of delivery allow you to compile com-
prehensive and conclusive evaluations
and reports.

Professional thermography made easy...

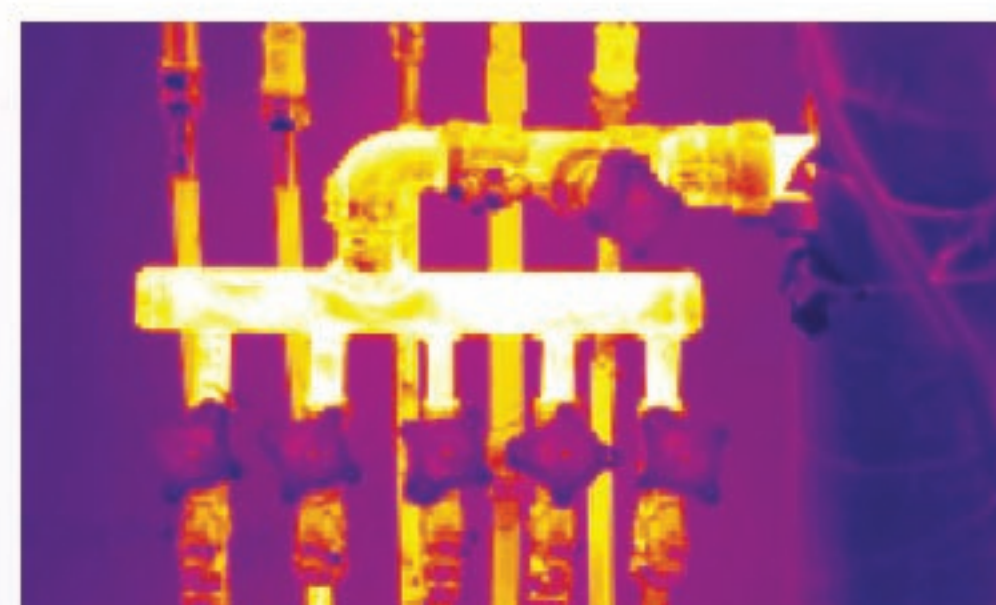
The thermal imaging cameras weighing
only 500 g perfectly fit onto your palm,
their robust construction with protection
class IP54 is shock-tested to 25G and
vibration-tested to 2.5G and
can thus also cope with
rough environments.



The convenient single-handed control of
the EC cameras via the ergonomically
arranged function keys and the neat menu
navigation increase the system's user
friendliness – and thanks to the large
TFT colour display pivotable by 270°
even poorly accessible locations can
be inspected unproblematically.

Mains and stress free ...

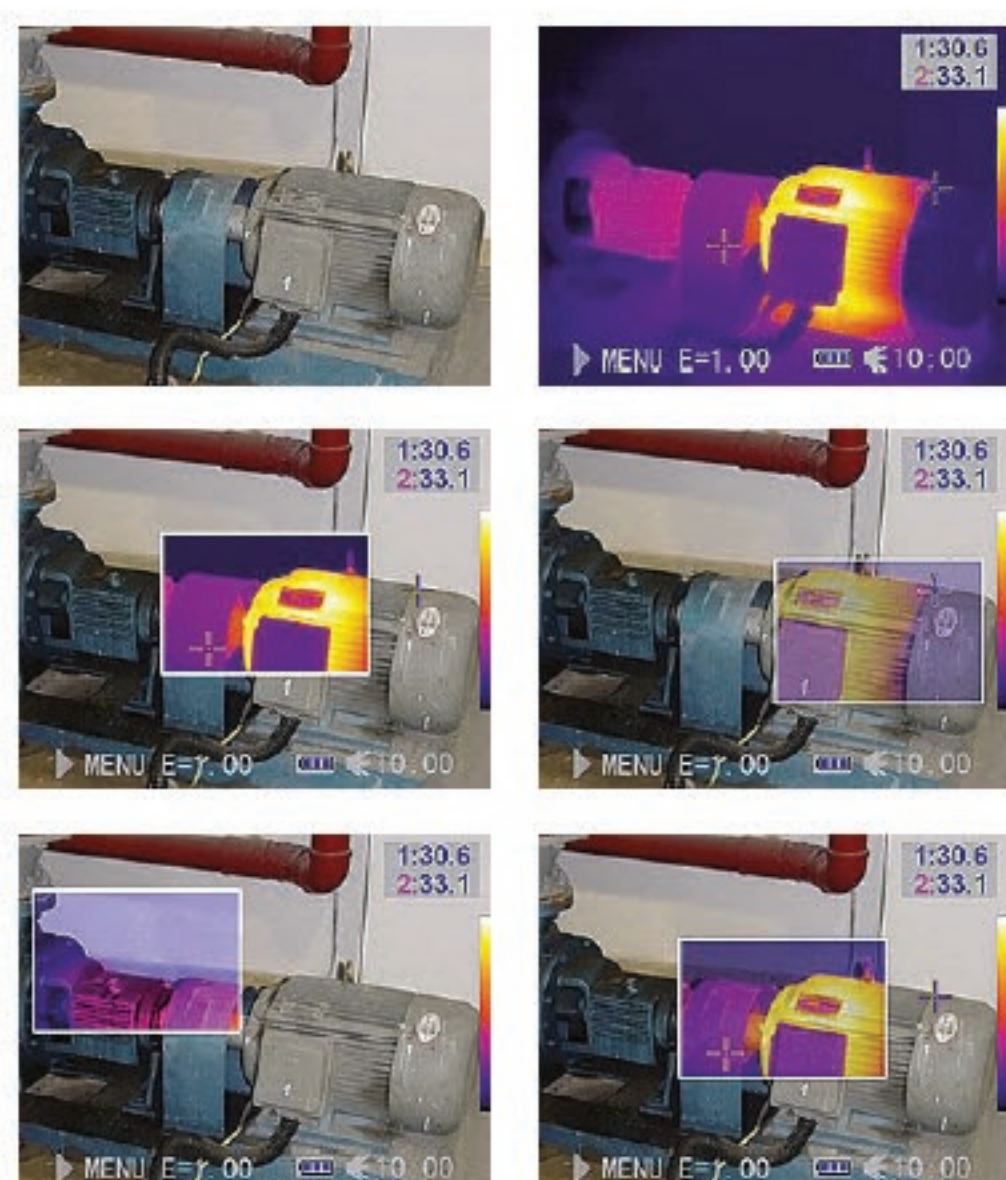
There's no need to hunt for a mains
point when you want to carry out
your measuring application when
you've got one of the IR cameras in
the EC Series. The cameras in the EC
Series do not require an external power
source because they all run on high-per-
formance Li-ion batteries to guarantee
you hours of unimpeded operation and
because this type of rechargeable battery
does not have a memory effect you can
charge them as and when you see fit.





EC060V with DuoVision:

In case of the EC060V an additional digital camera for real images with integrated photo lamp for the perfect illumination of dark shooting areas provides the optional combined storage of real images and the corresponding thermal images and so simplifies a clear assignment of problematic areas.



The infrared camera's patented DuoVision technology enables either infrared or real images to be displayed exclusively or a combination of overlapping images in varying degrees of transparency. This allows any damage or defects to be detected much more easily.

In addition the software DuoVision function allows you to display the overlapped images in varying degrees of intensity. Or to put more bluntly: you decide what you would like to see.

The DuoVision images created using this method provide a far more sophisticated means of analysis and a much more graphic form of documentation.

Technical data		EC060V
Article no.		3.110.003.004
Measuring	Temperature range	-20 °C to +250 °C
	Accuracy	±2 °C, ± 2 % of the measured value
Image radiometric	Detector type	Focal Plane Array (FPA), uncooled microbolometer
	Detector resolution	160 x 120 pixels
	Spectral range	8 to 14 µm
	Field of Vision (FOV)	20° x 15°
	Geometric resolution	2.2 mrad
	Thermal sensitivity	0.08 °C at 30 °C
	Image repetition frequency	50/60 Hz
	Focus	manual
	Min. Focus Distance	0.10 m
Image visual	Digital photo camera	Colour representation 680 x 480 pixels, integrated photo lamp
	Video norm	PAL
Image representation	Display	3-inch TFT LCD
	Image display	Pseudo colours, 6 colour palettes
	Image display options	IR image, real image, different DuoVision options for combined display of IR and real images
Measuring functions	Measuring spots	Five movable measuring points (4 x manual, 1 x autom. temperature tracking)
	Isotherm	yes
	Degree of emission	User-defined variably adjustable from 0.01 to 1.0
	Measurement correction	Automatically on the basis of user-defined input with regard to the surrounding temperature, distance, rel. humidity
Data storage	Memory medium	Interchangeable memory card slot for SD card
	Data format radio metric	14 bit radiometric IR format
	Data format visual	CCD
Laser	Type / Classification	Semi-conductor AlGaInP diode laser, 1 mw/635 nm red / Class 2
Power supply	Battery type	Standard, Li-ion; rechargeable, replaceable
	Operating time	≈ 3.0 h
	Mains power	8 - 11V DC
	Energy saving mode	user defined
Environmental conditions	Operating temperature	-15 °C to +50 °C
	Storage temperature	-40 °C to +70 °C
	Relative humidity	10 % to 95 % RH (non-condensing)
	Protection class	IP 54 IEC 529
	Shock / Vibration	25G IEC 68-2-29 / 2G IEC 68-2-6
Physical characteristics	Dimensions / Weight	175 x 55 x 160 mm / 500 g
	Tripod mount	1/4-inch - 20 (Docking station)
Interfaces	Video	composite Video (via Docking station)
Scope of delivery	Standard lens	20° x 15°
	Standard equipment	IR camera with standard lens, standard software package, user guide, SD memory card, li-ion battery, docking station, battery charger, video cable, temperature test certificate;
	Optional interchangeable lens	38°, 12°, 6.4°, 3.8° lens
	Optional accessories	Transport case, power adapter for battery-independent power supply operation, further accessories and software available upon request.

Trotec

Temperature

Multi-function

Climate

Moisture

Data loggers

Software

Emission

Velocity

Optical inspection

Leak detection

Tracing and detection

Planning and survey