

Perfect,  
beyond all limits.



HVAC/Electrical &  
Mechanical application

Industrial application/Utility

High temperature

Energy auditing/  
Building inspection

Photovoltaic application

Compact & pocket-sized

**THERMAL  
CAMERAS**



We build the future since 1983

# New THERMAL CAMERAS

THT300 • THT200 • THT100  
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THT500H • THT600H  
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THT600 • THT300  
**Energy** auditing /  
**Building** inspection

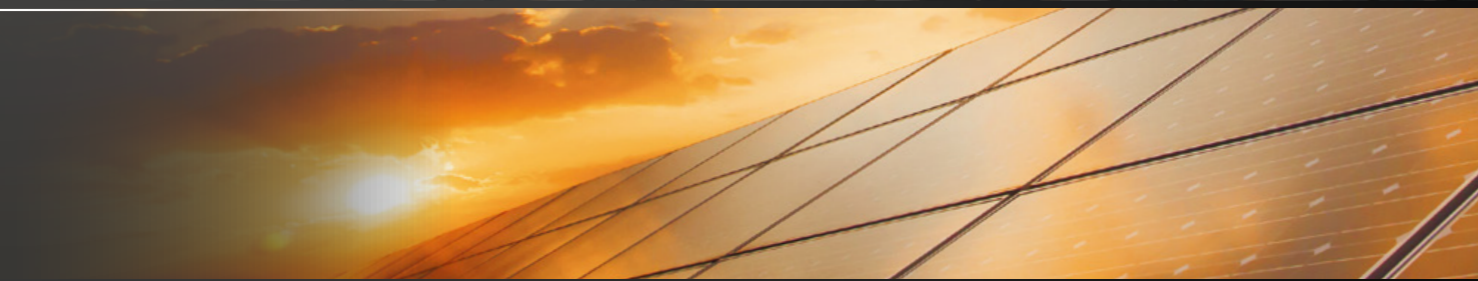
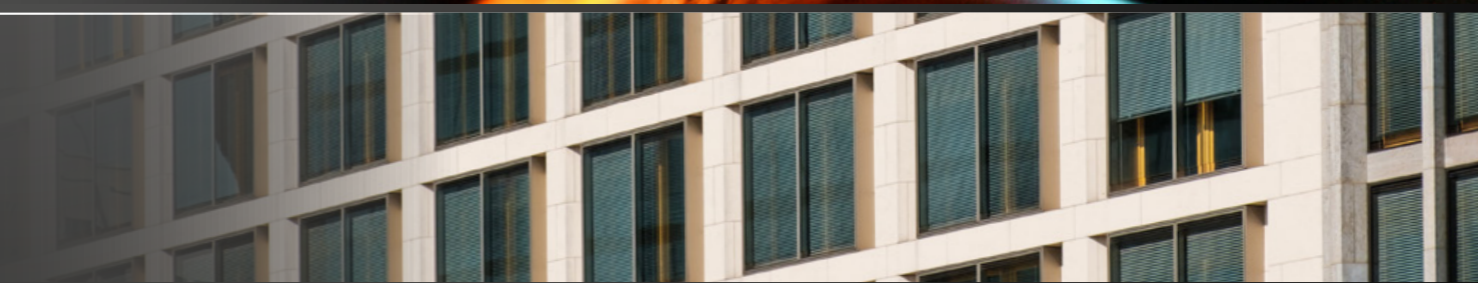
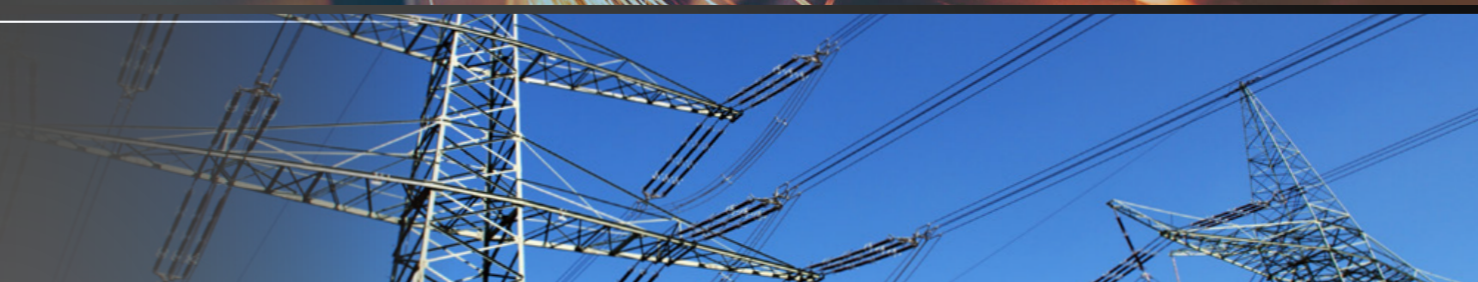
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THT600 • THT300 • THT200  
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THT80 • THT8  
**Compact** & pocket-sized

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# HVAC\R Electrical & Mechanical application

HVAC, electrical and mechanical system maintenance is of prime importance. HT new entry-level range of thermal imaging cameras composed by THT300, THT200 and THT100 allows you to detect the most common problems affecting these systems.



ORDER CODE **HN000300**

## THT300

IR resolution **384 x 288 pxl**  
Temp. range **-20° ÷ 650°C**  
Field of view **41.5° x 31.1°**

ORDER CODE **HN000200**

## THT200

IR resolution **160 x 120 pxl**  
Temp. range **-20° ÷ 650°C**  
Field of view **20.7° x 15.6°**

ORDER CODE **HN000100**

## THT100

IR resolution **80 x 80 pxl**  
Temp. range **-20° ÷ 650°C**  
Field of view **21° x 21°**

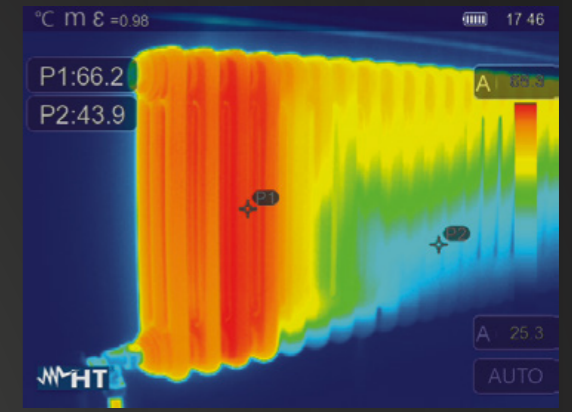
### SHARED FEATURES

- Picture in Picture
- AutoFusion image enhancement
- Temperature range -20° ÷ 650°C
- Thermal sensitivity: <0.05°C @ 30°C / 50mK

## HVAC\R

Performing an IR scanning of HVAC systems helps to find problems such as air and fluid leaks, as well as electrical shorts. IR cameras are all you need for fast troubleshooting.

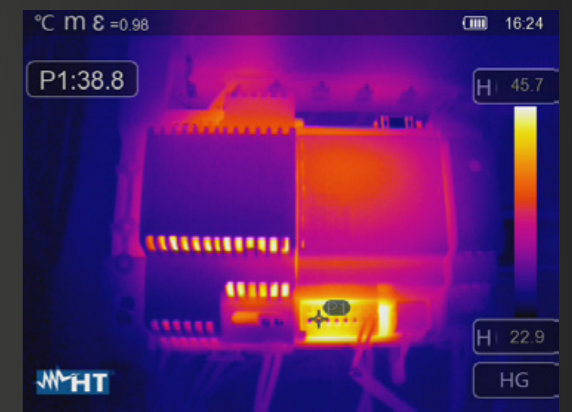
Picture: a radiator shot with THT300.



## Electrical application

Inappropriate size of protection and wire, poor connections, unbalanced loads and many other issues may lead a cable to fail in service, with the failure at its most serious resulting in fire. With THT cameras detecting the common electrical problems is very easy and quick

Picture: a radiator shot with THT300.



## Mechanical application

Lubrication-related bearing problems, misalignments and other mechanical problems may overheat mechanical components, and cause irreversible damages.

Picture: an overheated fan motor shot with THT300.



# High Resolution

High resolution means maximum performance and versatility. THT400 represents the top of the range among HT thermal imaging cameras in terms of resolution, making it perfect for inspections on mechanical systems, electrical installations, HVAC systems and for high-level building inspections.



HIGH  
RESOLUTION  
640x480  
pxl

ORDER CODE **HN000400**

## THT400

IR Resolution **640 x 480** pxl  
Field of view **31.9° x 25.7°**  
Temperature range **-20° ÷ 550°C**

### FEATURES

- PictureinPicture
- AutoFusion image enhancement
- Thermal sensitivity:  
• <math><0.05^{\circ}\text{C}</math> @ 30°C / 50mK
- Compatible with HT Pro Camera



## Building Inspections

In buildings, energy waste due to thermal bridges and poor air tightness worsen living comfort and increase energy bills. In addition, the most common building diseases such as rising damp and condensation further worsen the situation. With a high-resolution and high-sensitivity thermal imaging camera, provided the field of view was appropriate, it is much easier to identify multiple problems.

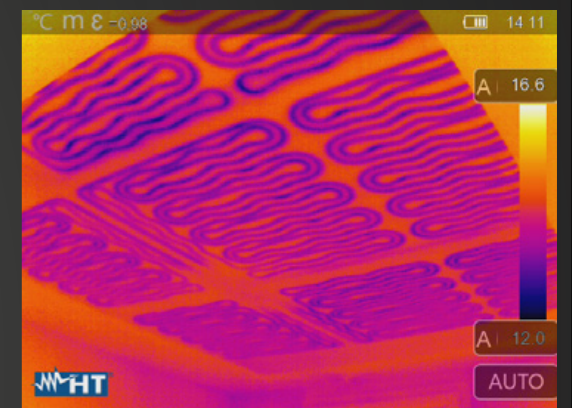
Picture: an external wall of a prefabricated reinforced concrete structure.



## HVAC/R

HVAC&R systems require particular attention in checking the temperatures of their fluids, even if the pipes they are flowing through are usually protected with insulating sheaths. With a high-resolution and high-sensitivity thermal imaging camera, it is possible to measure operating temperature of fluids and identify any leak potentially invisible to the naked eye.

Picture: a radiant ceiling system.



## Mechanical moving parts

In many industrial applications, wherever mechanical parts are in motion or rotation, static friction and long-term dynamic friction inevitably wear mechanical parts. It is crucial to periodically check the temperatures of components such as bearings, rollers, hydraulic pistons, etc. to evaluate their wear and prevent unplanned downtime and increase production capacity.

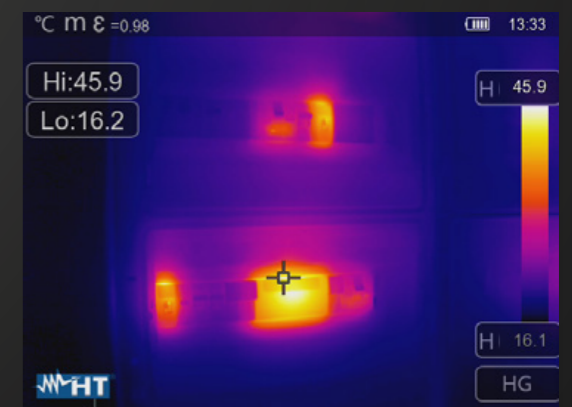
Picture: thermal image of a motor.



## Electrical Installation

Safety in electrical systems is based on careful planning of installation carried out in a workmanlike manner. However, sometimes it may be hard to verify the full functionality of devices, connections, load balancing as well as detect potential overheating with the naked eye. With a high-resolution thermal imaging camera, you can understand in a very short time the nature of potential failures by working in total safety.

Picture: thermal image of a switchgear.



# Industrial application / Utility

When it comes to industrial and high voltage applications, damages from poor maintenance of corrosion over time can be severe and very costly. Inspection and troubleshooting has to be of high quality. HT advanced thermal imaging cameras are perfect for this application.



ORDER CODE **HN00600L**

## THT600L

IR resolution **384 x 288 pxl**  
 Field of view **9.8° x 7.3°**  
 Temp. range **-20° ÷ 650°C**

ORDER CODE **HN00600**

## THT600

IR resolution **384 x 288 pxl**  
 Field of view **17° x 12.7°**  
 Temp. range **-20° ÷ 650°C**

ORDER CODE **HN00500**

## THT500

IR resolution **160 x 120 pxl**  
 Field of view **17.3° x 13°**  
 Temp. range **-20° ÷ 650°C**

### SHARED FEATURES

- Picture in Picture
- AutoFusion image enhancement
- Thermal sensitivity: <math><0.05^{\circ}\text{C}</math> @ 30°C / 50mK
- Laser distance meter
- Built in LED light
- Hand strap

## Multipurpose industrial application

In industrial environment maintenance of pumps, electric motors, coolers, piping, filters, valves, etc. has to be frequent. HT professional and versatile thermal imaging cameras such as THT500 and THT600 are designed to satisfy the need of the most demanding professionals.

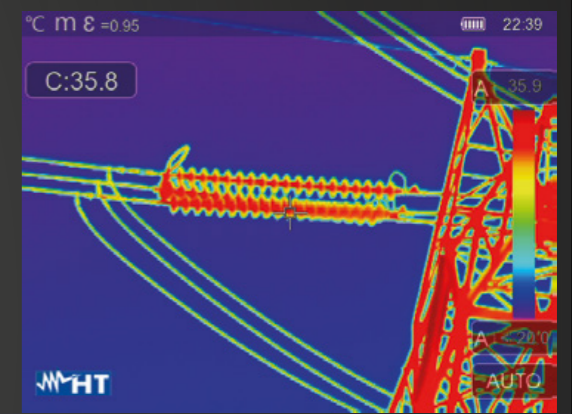
Picture: a pipe junction shot with THT600.



## Utility

Monitoring of corroded and loosened electrical connections in high voltage installations is crucial, as their increased resistance could rise the temperature and melt connections.

Picture: an high voltage insulator shot with THT600L.



# High Temperature

Where temperatures are high, risks are high too. Thanks to HT advanced thermal imaging cameras specialized in high temperature measurement, you will operate safely in any environment.



ORDER CODE **HN00600H**

## THT600H

IR resolution **384 x 288 pxl**

Field of view **17° x 12.7°**

Temperature range **-20° ÷ 1200°C**

ORDER CODE **HN00500H**

## THT500H

IR resolution **160 x 120 pxl**

Field of view **17.3° x 13°**

Temperature range **-20° ÷ 1200°C**

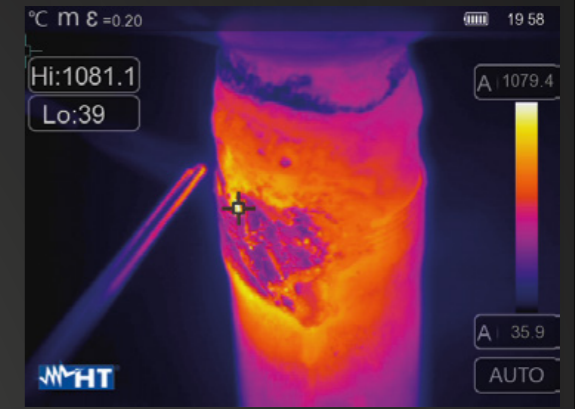
### SHARED FEATURES

- Picture in Picture
- AutoFusion image enhancement
- Thermal sensitivity: <math><0.05^{\circ}\text{C}</math> @ 30°C / 50mK
- Laser distance meter
- Built in LED light
- Hand strap

## Quality control

In manufacturing, quality control ensures customers receive defect-free products meeting their need. High temperature industrial process such as welding would require a constant temperature checking of the workpieces, as possible micro-cracks would not be visible to the naked eye.

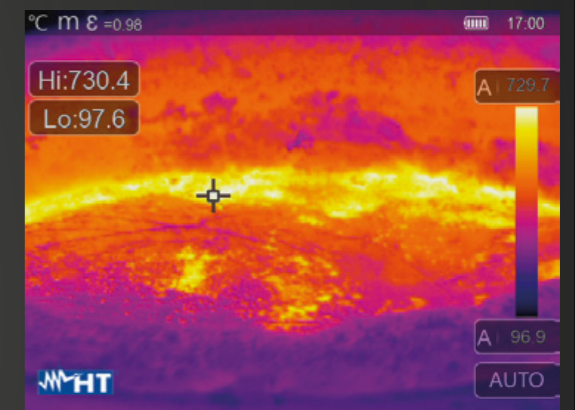
Picture: welding process on a copper pipe shot with THT600H.



## Temperature control

Any industrial process involving high temperature materials must be kept under control for the entire duration of the process itself. For example, when casting molten metal into the mold, temperature and viscosity of the molten material must be controlled.

Picture: melted aluminum shot with THT600H.



# Energy auditing Building inspection

The continuously growing energy consumption has a deep environmental impact. It is essential to save the environment and prevent any energy waste. HT thermal imaging cameras help you to perform building inspections by locating heat leaks, thermal insulation defects and humidity problems.



ORDER CODE **HN000600**

## THT600

IR resolution **384 x 288 pxl**  
Field of view **17° x 12.7°**  
Temperature range **-20° ÷ 650°C**  
Laser **distance meter**  
Built in **LED light**  
**Hand strap**

ORDER CODE **HN000300**

## THT300

IR resolution **384 x 288 pxl**  
Field of view **41.5° x 31.1°**  
Temperature range **-20° ÷ 650°C**

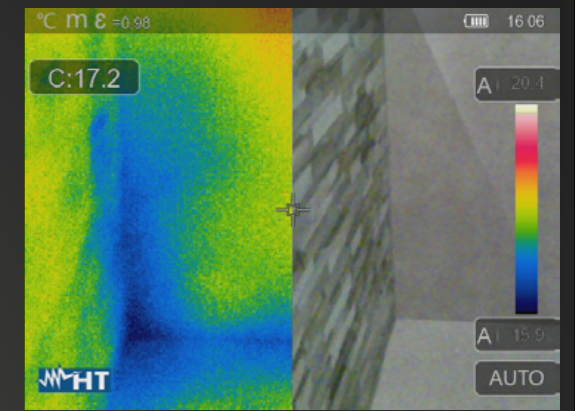
### SHARED FEATURES

- Picture in Picture
- AutoFusion image enhancement
- Thermal sensitivity: <0.05°C @ 30°C / 50mK

## Building inspection

Water can infiltrate your building damaging your property, and your inventory. Identifying the source of water infiltration can be difficult. THT cameras allow you to identify, so correct, any intrusion issues that may occur.

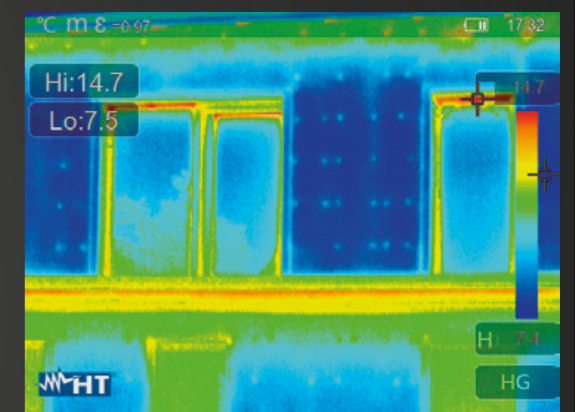
Picture: water leakage shot with THT300.



## Energy auditing

Thermal imaging is effective for the detection and visualization of hot and cold spots, insulation faults and a lot more. Air leakage and consequent heat loss are mostly due to bad insulation, was it damaged or insufficient, and represent a waste of energy, so money. THT cameras make building diagnostics easy, thanks to their high sensitivity up to 0,05°C.

Picture: building insulation shot with THT600.



# Photovoltaic application

Installing solar panels is a long-term investment that helps cutting your electricity bills and carbon footprint. It is necessary to keep a close eye on the efficiency of your systems. With HT thermal imaging cameras you will quickly locate faults, hot spots or damaged panels, to keep your solar installation operating at its maximum performance.



ORDER CODE **HN000600**

## THT600

IR resolution **384 x 288 pxl**  
 Temp. range **-20° ÷ 650°C**  
 Field of view **17° x 12.7°**  
 Laser **distance meter**  
 Built in **LED light**  
**Hand strap**

ORDER CODE **HN000300**

## THT300

IR resolution **384 x 288 pxl**  
 Temp. range **-20° ÷ 650°C**  
 Field of view **41.5° x 31.1°**

ORDER CODE **HN000200**

## THT200

IR resolution **160 x 120 pxl**  
 Temp. range **-20° ÷ 650°C**  
 Field of view **20.7° x 15.6°**

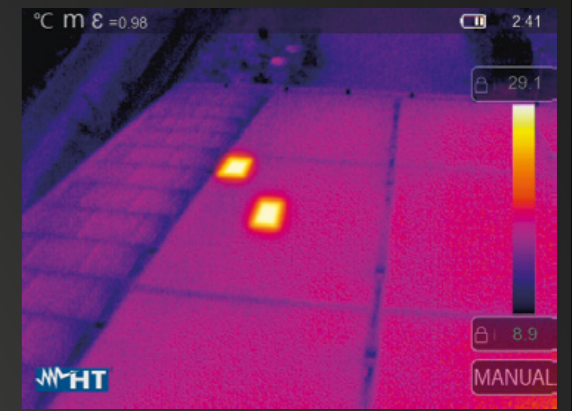
### FEATURES

- Picture in Picture
- AutoFusion image enhancement
- Temperature range -20° ÷ 650°C
- Thermal sensitivity: <0.05°C @ 30°C / 50mK

## Photovoltaic system inspection

Thanks to the thermographic inspection of photovoltaic systems, hot spots and loose connections can be easily detected.

Picture: hot spots shot with THT300.



## PV panels encapsulation

During long-term outdoor exposure, once moisture penetrates a module, it can condense and increase corrosion rates, significantly reducing the performance of the module. High resolution infrared cameras easily spot encapsulant failures.

Picture: encapsulant failure shot with THT600.





# Compact & pocket-sized

Small and excellent, HT infrared technology is now pocket-sized. Having your compact IR camera in your work pocket, you can easily and quickly carry out your inspections at any time.



COMPATIBLE WITH HT PRO CAMERA

ORDER CODE **HN008000**

## THT80

IR resolution **120 x 90 pxl**  
 Temperature range **-20° ÷ 550°C**  
 Field of view **50° x 37°**  
**AutoFusion** image enhancement  
**Touchscreen**

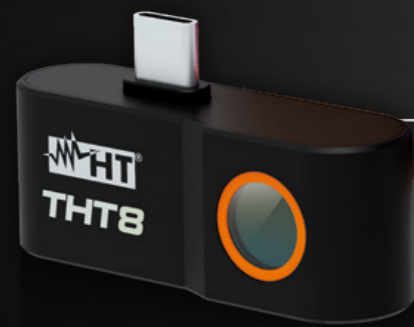


COMPATIBLE WITH HT SMART CAMERA

ORDER CODE **HN000080**

## THT8

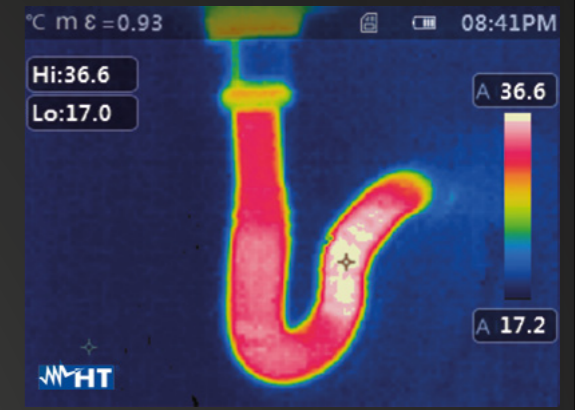
IR resolution **120 x 90 pxl**  
 Temperature range **-20° ÷ 400°C**  
 Field of view **50° x 38°**  
**Android** compatibility  
**USB type C**



## Plumbing

Thermal imaging is the best way to detect clogged pipes and water leaks, as well as other plumbing problems. Detecting hot water allows you to easily locate the problem.

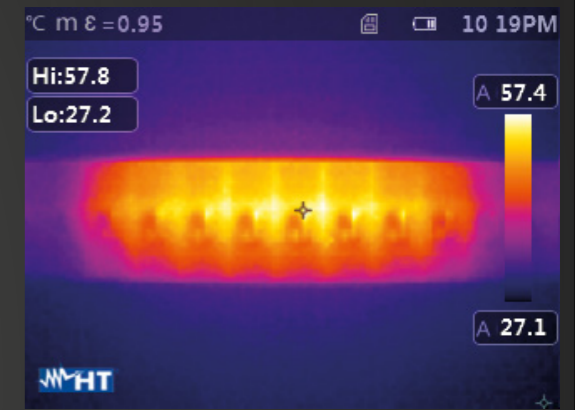
Picture: a clogged siphon shot with THT80.



## Electrical application

Overload, incorrect cable sizing, poor connections, unbalanced loads and many other issues may lead a cable to fail in service, with the failure at its most serious resulting in fire. With THT cameras detecting the common electrical problems is very easy and quick.

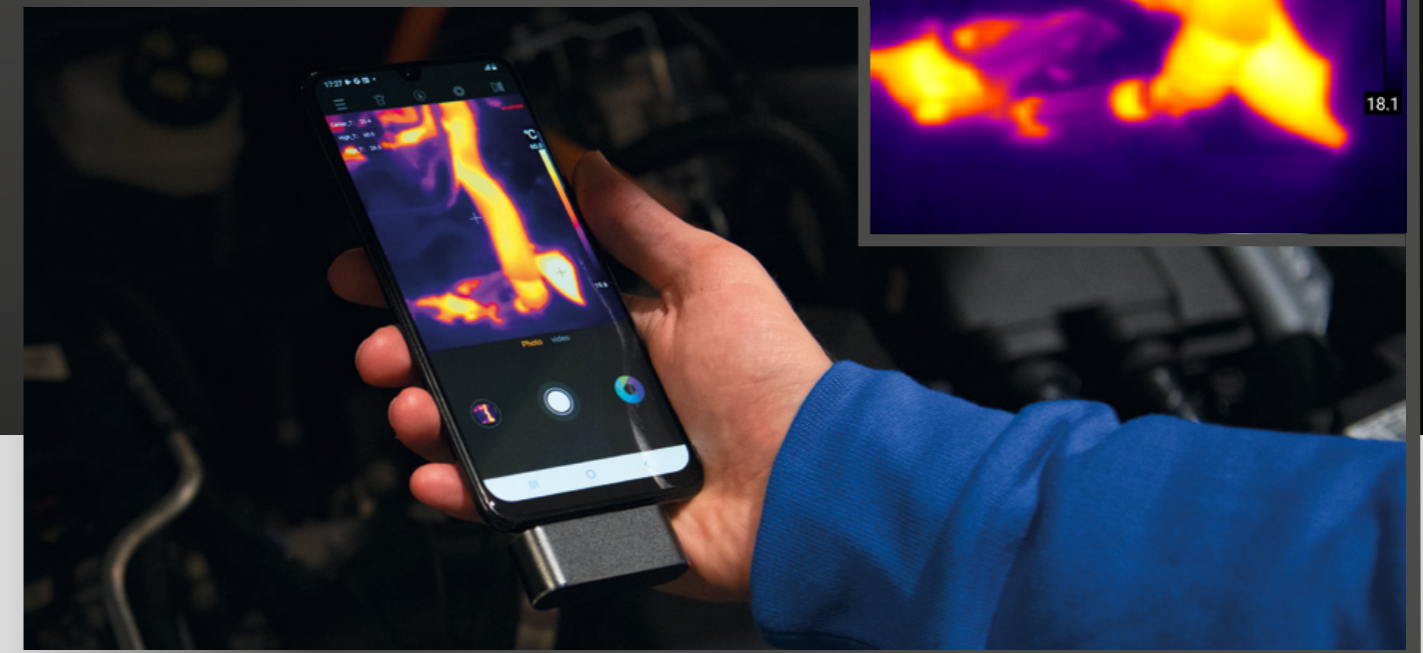
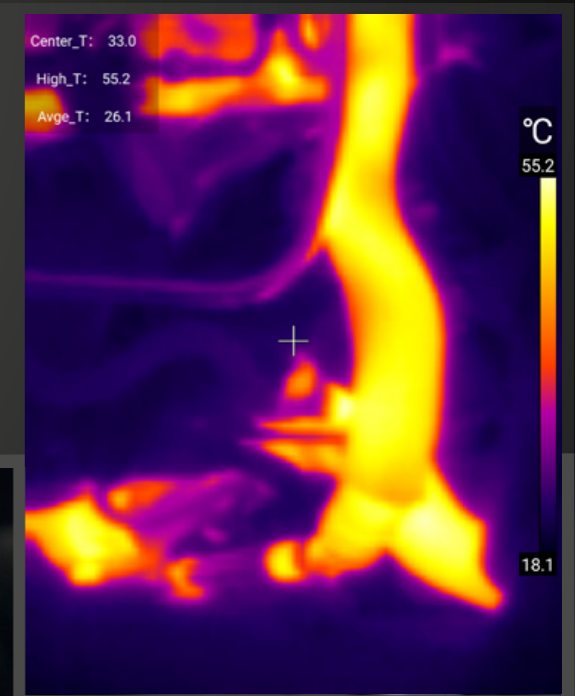
On the right: MCBs shot on THT80.



## Extreme portability

In its very small size, THT8 thermal imaging camera contains the best of HT thermographic technology. Your high quality inspections will be taken straight with your smartphone.

On the right: a clogged siphon shot on THT8.



# Mobile Apps

HT has created two different simple and intuitive apps to support and process your measures.



## HT Pro Camera

Downloading HT Pro Camera on your device it is possible to:

- Duplicate the camera's screen on your device;
- Take IR pictures
- Change the color palette
- Add pointers, lines and areas
- Generate PDF reports
- Download all pictures from IR camera's memory

SCAN TO  
DOWNLOAD  
THE APP



## HT Smart Camera

Downloading the exclusive app for THT8 HT Smart Camera on your device it is possible to:

- Take IR pictures
- Take real times IR videos
- Change the color palette
- Add pointers, lines and areas

SCAN TO  
DOWNLOAD  
THE APP



# Accessories

STANDARD ACCESSORIES	THT8	THT80	THT100	THT200	THT300	THT400
Carrying bag	•	•	•	•	•	•
Battery charger			•	•	•	•
Li-Ion battery		•	• THTBATM	• THTBATM	• THTBATM	• THTBATM
USB type C cable		•	•	•	•	•
Quick guide	•	•	•	•	•	•
ISO test report		•	•	•	•	•
16GB SD card		•	•	•	•	•

OPTIONAL ACCESSORIES	THT8	THT80	THT100	THT200	THT300	THT400
Additional Li-Ion battery			• THTBATM	• THTBATM	• THTBATM	• THTBATM
<b>THTBATKITM</b> additional battery + charging base			•	•	•	•

STANDARD ACCESSORIES	THT500	THT600	THT500H	THT600H	THT600L
Hard carrying case	•	•	•	•	•
Battery charger	•	•	•	•	•
2x Li-Ion batteries	• THTBATL	• THTBATL	• THTBATL	• THTBATL	• THTBATL
Charging base	• THTCBL	• THTCBL	• THTCBL	• THTCBL	• THTCBL
Micro USB cable	•	•	•	•	•
HDMI cable	•	•	•	•	•
Quick guide	•	•	•	•	•
Earphone set	•	•	•	•	•
SD card	•	•	•	•	•
Hand strap	•	•	•	•	•
Quick guide	•	•	•	•	•
ISO test report	•	•	•	•	•

OPTIONAL ACCESSORIES	THT500	THT600	THT600	THT500H	THT600
Additional Li-Ion battery	• THTBATL	• THTBATL	• THTBATL	• THTBATL	• THTBATL
Additional charging base	• THTCBL	• THTCBL	• THTCBL	• THTCBL	• THTCBL

# Technical specifications

	THT8	THT80	THT100	THT200	THT300	THT400	THT500	THT600	THT600L	THT500H	THT600H
<b>IR resolution</b>	120x90 pxl	120x90 pxl	80x80 pxl	160x120 pxl	384x288 pxl	640x480 pxl	160x120 pxl	384x288 pxl	384x288 pxl	160x120 pxl	384x288 pxl
<b>Temperature range</b>	-20° ÷ 400°C	-20° ÷ 550°C	-20° ÷ 650°C	-20° ÷ 650°C	-20° ÷ 650°C	-20° ÷ 550°C	-20° ÷ 650°C	-20° ÷ 650°C	-20° ÷ 650°C	-20° ÷ 1200°C	-20° ÷ 1200°C
<b>Image frequency</b>	25Hz	50Hz	50Hz	50Hz	50Hz	50Hz	50Hz	50Hz	50Hz	50Hz	50Hz
<b>Thermal sensitivity/NETD</b>	<0.05°C @ 30°C / 50mK	<0.06°C @ 30°C / 50mK	<0.05°C @ 30°C / 50mK	<0.05°C @ 30°C / 50mK	<0.05°C @ 30°C / 50mK	<0.05°C @ 30°C / 50mK	<0.05°C @ 30°C / 50mK	<0.05°C @ 30°C / 50mK	<0.05°C @ 30°C / 50mK	<0.05°C @ 30°C / 50mK	<0.05°C @ 30°C / 50mK
<b>Built-in visual camera</b>	-	2 MP, focus free, built in LED light	2 MP, focus free	2 MP, focus free	2 MP, focus free	2 MP	5 MP, focus free	5 MP, focus free	5 MP, focus free	5 MP, focus free	5 MP, focus free
<b>Picture in Picture</b>	-	●	●	●	●	●	●	●	●	●	●
<b>AutoFusion image enhancement</b>	●	●	●	●	●	●	●	●	●	●	●
<b>Accuracy</b>	±3°C (±5.4°F) or ±3% of the reading	±2°C (±3.6°F) or ±2% of the reading	±2°C (±3.6°F) or ±2% of the reading	±2°C (±3.6°F) or ±2% of the reading	±2°C (±3.6°F) or ±2% of the reading	±2°C (±3.6°F) or ±2% of the reading	±2°C (±3.6°F) or ±2% of the reading	±2°C (±3.6°F) or ±2% of the reading	±2°C (±3.6°F) or ±2% of the reading	±2°C (±3.6°F) or ±2% of the reading	±2°C (±3.6°F) or ±2% of the reading
<b>Field of view (FOV) / Focal length / Lens</b>	50° x 38° / f 1.13 2.3mm	50° x 37° / f 1.13 2.3mm	21° x 21° / f 1.0 7.5mm	20.7° x 15.6° / f 1.0 7.5mm	41.5° x 31.1° / f 1.0 9mm	31.9° x 27° / f 1.0 9mm	17.3° x 13° / f 1.0 9mm	17° x 12.7° / f 1.0 22mm	9.8° x 7.3° / f 1.0 38mm	17.3° x 13° / f 1.0 9mm	17° x 12.7° / f 1.0 22mm
<b>IFOV</b>	7.29mrad	7.3mrad	4.53mrad	2.26mrad	1.89mrad	1.89mrad	1.89mrad	0.77mrad	0.45mrad	1.89mrad	0.77mrad
<b>Focus mode</b>	focus free	focus free	focus free	manual	manual	manual	manual	manual	manual	manual	manual
<b>Digital zoom</b>	-	1–32x continuous	1–32x continuous	1–32x continuous	1–32x continuous	1–32x continuous	1–32x continuous	1–32x continuous	1–32x continuous	1–32x continuous	1–32x continuous
<b>Measurement tools (in live mode)</b>	5 spots, center spot, hot/cold spots, 2 areas, 4 lines	3 spots, center spot, hot/cold spots, 3 areas, vertical and horizontal lines			none,	center spot, 3 spots, hot/cold spots, 3 areas, vertical and horizontal lines, screening mode					
<b>Measurement corrections</b>	-	emissivity, reflected temperature,				ambient temperature, atmospheric humidity, infrared compensation, distance compensation					
<b>Color palettes</b>	iron, rainbow, white hot, black hot, medical, artic, hot iron, fulgurite	iron, rainbow, white hot, black hot,				brown hot, blue/red, hot/cold, feather, above max alarm, below min alarm, interval alarm					
<b>Span modes</b>	-	auto, manual, histogram	auto, manual, histogram	auto, manual, histogram	auto, manual, histogram	auto, manual, histogram	auto, manual, histogram	auto, manual, histogram	auto, manual, histogram	auto, manual, histogram	auto, manual, histogram
<b>Laser pointer</b>	-	-	-	-	-	-	●	●	●	●	●
<b>Laser distance meter</b>	-	-	-	-	-	-	●	●	●	●	●
<b>Built in LED light</b>	smartphone torch	●	-	-	-	-	●	●	●	●	●
<b>Area measurement information</b>	max, min, AVG	max, min, center	max, min, AVG	max, min, AVG	max, min, AVG	max, min, AVG	max, min, AVG	max, min, AVG	max, min, AVG	max, min, AVG	max, min, AVG
<b>IR Video recording</b>	●	●	●	●	●	●	●	●	●	●	●
<b>Internal memory storage</b>	smartphone storage	3,4 GB	3,4 GB	3,4 GB	3,4 GB	3,4 GB	3,4 GB	3,4 GB	3,4 GB	3,4 GB	3,4 GB
<b>On-camera report building</b>	-	text annotation	text annotation	text annotation	text annotation	text annotation	text annotation, voice annotation	text annotation, voice annotation	text annotation, voice annotation	text annotation, voice annotation	text annotation, voice annotation
<b>Communication modes</b>	USB type C	USB type C, Wi-fi, micro SD	USB tipo C, Wi-fi, micro SD	USB tipo C, Wi-fi, micro SD	USB tipo C, Wi-fi, micro SD	USB tipo C, Wi-fi, micro SD	micro USB, Wi-fi, micro SD, micro HDMI	micro USB, Wi-fi, micro SD, micro HDMI	micro USB, Wi-fi, micro SD, micro HDMI	micro USB, Wi-fi, micro SD, micro HDMI	micro USB, Wi-fi, micro SD, micro HDMI
<b>Display</b>	smartphone display	touch screen	touch screen	touch screen	touch screen	touch screen	touch screen	touch screen	touch screen	touch screen	touch screen
<b>Battery operation time</b>	-	3 hours	4 hours	4 hours	4 hours	4 hours	4 hours	4 hours	4 hours	4 hours	4 hours
<b>Dimensions (L x W x H)</b>	50 x 30 x 20mm	133 x 87 x 24mm	240 x 101 x 110mm	240 x 101 x 110mm	240 x 101 x 110mm	240 x 101 x 110mm	272 x 101 x 168mm	272 x 101 x 168mm	272 x 101 x 168mm	272 x 101 x 168mm	272 x 101 x 168mm

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