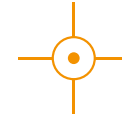InfraRed Lens

F/1.0

f=22mm

HT

Simply **everything.**

Light capacitive Touch Screen

Optical Interchangeable* Lenses
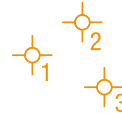
Laser Pointer*

Visual image camera*

Built-in Flash LED*

Up to 3 independent cursors

Areas with independent cursors

50 hz High resolution even for moving elements

384x288 160x120 pixel High resolution for very clear pictures

P.I.P. fusion overlay of thermal graphical + visual picture*

Memory MicroSD
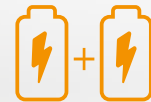
Connectivity USB UNIVERSAL SERIAL BUS

Temperature Range −20 → +400 °C

Automatic SPAN adjustment

0,06 °C Top thermal sensitivity**

2 rechargeable batteries + charger*

IR video recording

Audio notes recorging

Text notes

Preset selection of material properties

* THT70 and THT60 only.   ** THT47 and THT60: 0,08 °C

Simply **ahead.**

Industry, electric or costruction. The best, wherever you need it.

The new THT range is based on a highly innovative and reliable technology.

These cameras are headed to different sectors ranging from industrial to safety, building sector etc.

Thanks to innovative wide capacitive touch screen and icon display as well as high infrared resolution 384x288 pixel and 160x120pixel, it is easier and more intuitive to detect problems which are not visible to the naked eye.

New THT cameras are provided with Flash LED, laser pointer, camera for visual and PIP pictures, interchangeable optional lenses. Hundreds of photos can be taken as cameras are provided with 2 GB memory so enabling to draw up reports complete with pictures, sound and text notes. Thermal graphical analysis will be simple and fast from now on

HT

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Dont be shy.
Touch me.

A very gifted one.

- › 1. Optional interchangeable lenses*
- › 2. Flash LED*
- › 3. Visual image camera*
- › 4. Laser pointer*

New THT cameras can carry out tests under any condition up to 400° C while offering top flexibility with optional interchangeable 11mm, 22mm and 38mm lenses. Flash LED, laser pointer and visual image camera will enable you to find your way under poor light conditions.

* THT70 and THT60 only.

Best display ever.

- › 3,5" **Capacitive** touchscreen
- › Wide ed **extra bright**
- › Superior **sharpness** and image quality
- › **Oversampling** tecnology

New THT cameras are provided with capacitive touch-screen LCD of the latest generation. Thanks to "oversampling" technology pictures will be always clear with a degree of detail, with the best display even in the full light.

Stay connected.

› **USB** 2.0 PC connection
› Microphone input for **audio notes**
› **Video** output
› **MicroSD** data saving
› DC 12V plug for **recharge/power supply**.

With the new THT cameras you'll be able to effect simultaneously:

- Thermographical inspections while camera is powered by12V DC plug

- Projection of videos in real time through built-in Video Out.

- Saving hundreds of photos on 4GB MicroSd card .

Recording of more than 1000 pictures on **Micro SD**™ card.

Connection to power supply for recharge and power the camera.

Connection of camera to a PAL/NTSC system

Connection of camera to PC via **USB** *UNIVERSAL SERIAL BUS*

Recording of audio messages or notes up to 60" for each picture thanks to external microphone

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Unstoppable. Unbreakable.

› **Two** 4V 2700mAh Li-ION rechargeable **batteries****
› Up to **4 and a half hours** of continuous use per pack
› Built-in charger and external charger
› **Hard carrying case*** to carry both camera and accessories

Continuous use is possible. Camera is provided with 2 Li-ION batteries each granting 4.5 hours of continuous use. A 12 volt input can anyway be used both for charging the battery while it is inserted, and for longer duration (for example using a tripod).

*Soft carrying case for THT47   ** 1 battery pack THT47.

All answers.
In one software.

Your choice.

› Fixed pointer + **2 mobile pointers**
  for **MIN and MAX temperature**
› Creation of several areas with pointers
  and independent emissivity

All necessary temperatures will be monitored thanks to a central cursor as well as independent cursors which will position themselves automatically on minimum and maximum temperatures. The average area temperature is no longer troublesome, it will be enough to create a new area to get minimum, average and maximum temperature.
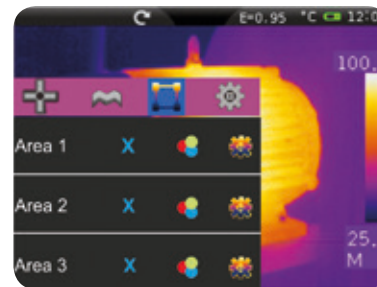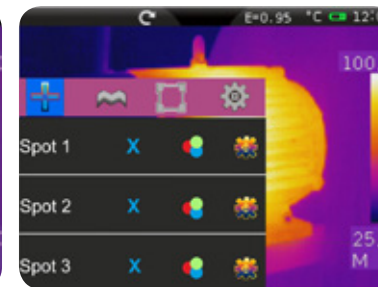Any decision will be up to you.

Simply smart.

› Innovative display
› **New icon** menu
› **Simple** and smart interface
› **Fast access** to all commands
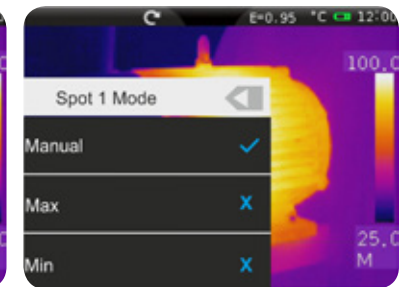› Easy and **fast updates**
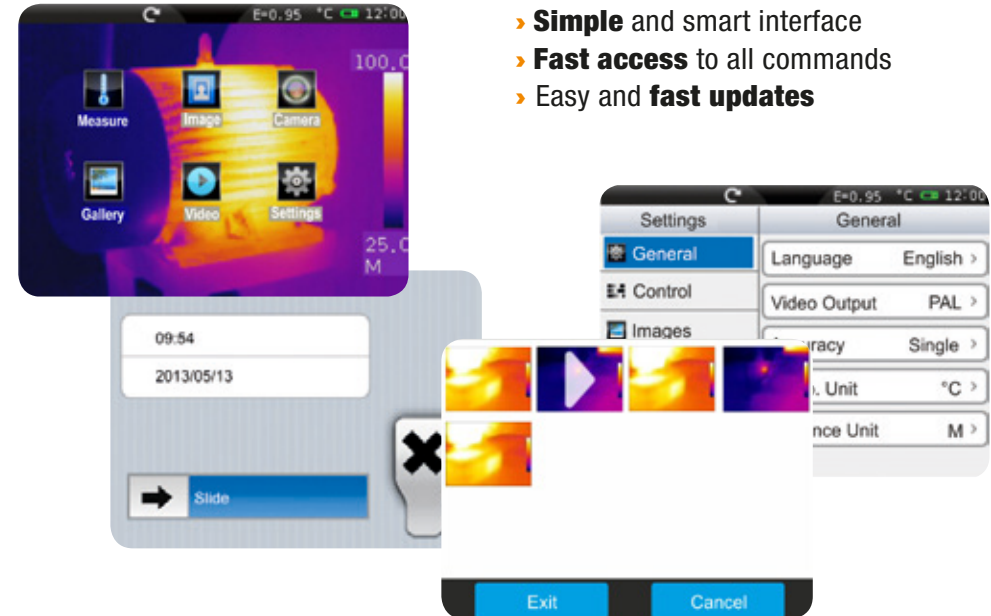
Central, Min and Max, Cursor display.

Area creation.

Additional Cursors.

Cursor setting.

Not just infrared.

- › **Picture in Picture** tecnology*
- › Visible spectrum
  thermal imaging overlap*
- › **Video IR** recording*
- › **Audio notes**
- › **Text notes**

Finding a way? It is no longer troublesome.
Thanks to PiP technology thermal and visual pictures can be overlapped and mixed.
Sound and text notes can be added, making each test complete and thorough.
You can test easily as you are using a high performance tester.
IR video recording will enable you to monitor quickly and effectively temperature over a some period of time.
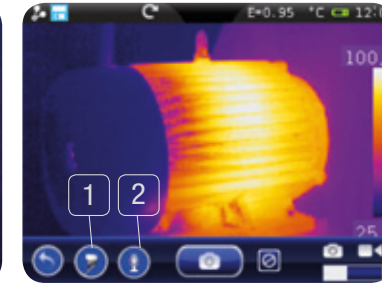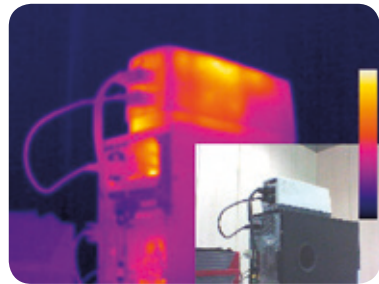
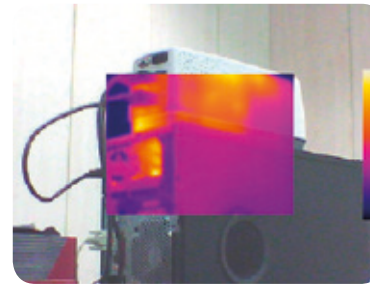* THT60 and THT70 only .
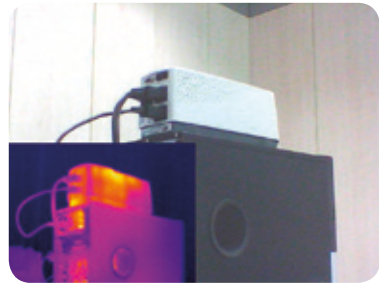
P.i.P. - Mini IR on visible picture.
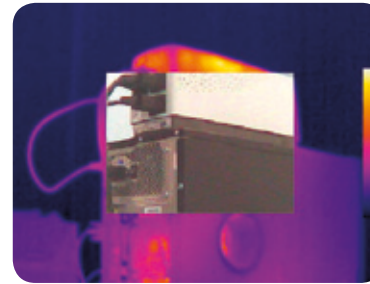
P.i.P. - Mini visible picture FUSION on IR.

1. Add text notes   **2.** Add audio notes

P.i.P. - Mini visible picture on IR.

P.i.P. - Mini IR FUSION on visible picture.
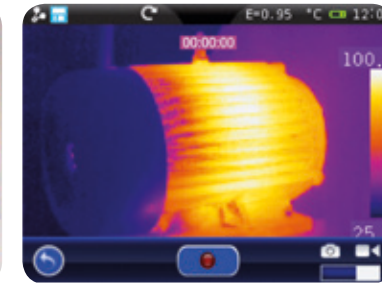
IR Video recording option.

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HT

So, so sensitive.

- › Thermal sensitivity **0,06°C***
- › Temperature range **-20/+400°C**
- › **Temperature alarm** setting
- › Picture frequency **50Hz**

Thermal sensitivity? It's hot today, temperature is 35.06°C. Never been so accurate! Temperature range from -20°C to 400°C with thermal sensitivity of 0.06°C is very powerful thanks to a 50Hz updating frequency.
After setting an alarm temperature threshold THT camera will warn user as soon as such a threshold is overcome.

* THT60 and THT47 = 0,08 °C.

Setting of temperature range.
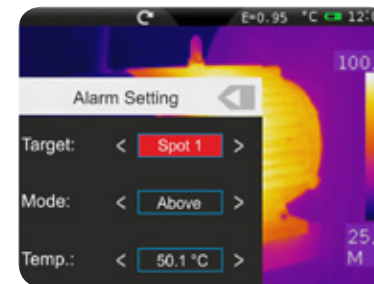
Automatic setting of temperature alarms.

Extremely fluid 50 Hz frequency picture.

It's a matter of SPAN.

› **Automatic** and **manual SPAN** adjustment
› Creation of **customized colour palettes**
› Selection of **temperature range**
› Setting of **Isoteherm**

Don't you want to worry about?
SPAN adjustment will enable you to decide which temperature is to be displayed. You will have the opportunity of clearing screen from unwanted objects so carrying out a quick and clean inspection. Through ISOTHERM function it will be easy to highlight the intended temperatures.
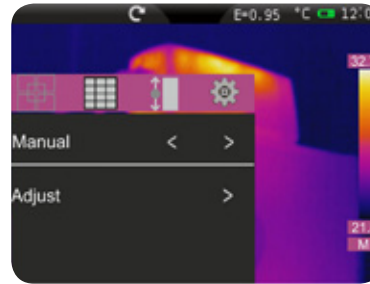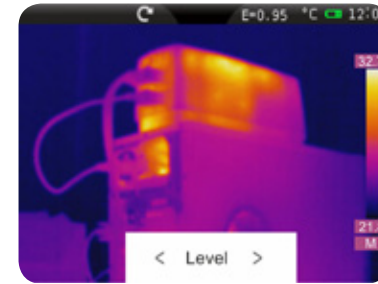

SPAN - AUTO or MANUAL setting.

SPAN - Change of temperature scale.
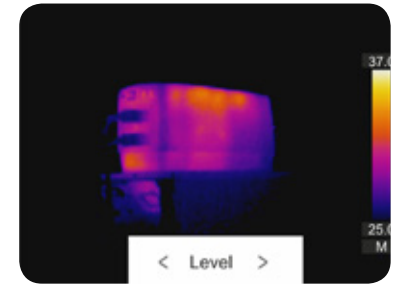
SPAN - Temperature scale limited by user.
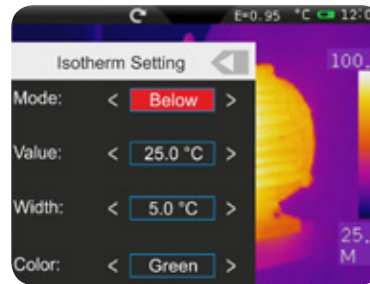
ISOTHERM setting.
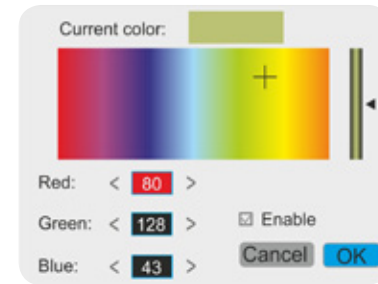
Setting of customized colour palette.

Customized colour palette.

All that glitters ain't gold!

› Selection of material to be inspected to **set automatic emissivity**.
› **Pre-set table of material**

For accurate temperature measurements it will be very easy to set emissivity.
Everything is now in place, you just need to select material to be inspected, as for the rest THT will work automatically.
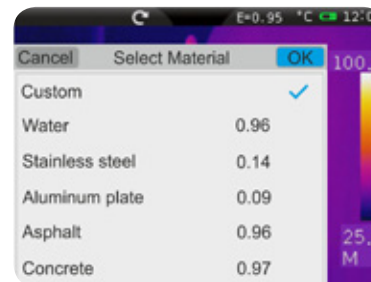
Pre-set table of material emissivity.

Camera will calibrate emissivity automatically depending on the target material you set.
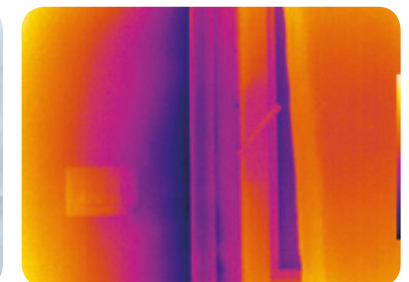
THTLink. That's it.

- › **Thorough analysis**
- › Picture **Adjustment**
- › Creation of **professional reports**

New software THT Link will enable you to make out thorough and professional reports quickly and easily. Adding pointers, creating areas, lines, polygons will be extremely easy and this thanks to new THT Link interface.

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Tech specs

THT 70   THT 60   THT 47

› 1. IMAGING PERFORMANCE

Thermal

	THT 70	THT 60	THT 47
Detector type	UFPA	UFPA	UFPA
Spectral range	8 ÷14µm	8 ÷14µm	8 ÷14µm
Resolution / Pxl size	384 x 288 pxl / 25µm	160 x 120 pxl / 25µm	160 x 120 pxl / 25µm
Thermal sensitivity	<0.06 °C @ 30°C	<0.08 °C @ 30°C	<0.08 °C @ 30°C
Field of view (FOV)	24.6° x 18.6° (22mm lens)	29,8° x 22,6° (7.5 mm lens)	29.8° x 22.6° (7.5 mm lens)
Minimum focal distance	0.3m	0.2m	0.2m
IFOV (@1m)	1.14mrad	3.33mrad	3.33mrad
Focusing	Manual on lens	Manual on lens	Manual on lens
Image frequency	50Hz	50Hz	50Hz
Color palettes	8 (Standard) + 10 (Customized)	8 (Standard) + 10 (Customized)	8 (Standard) + 10 (Customized)

Visible

	THT 70	THT 60	THT 47
Integrated camera	CMOS sensor 640x480 pxl, FOV 62.3°	CMOS sensor 640x480 pxl, FOV 62.3°	--

› 2. IMAGING / IR VIDEO DISPLAY

	THT 70	THT 60	THT 47
Display type	3.5" TFT color, capacitive touch-screen, high brightness	3.5" TFT color, capacitive touch-screen, high brightness	3.5" TFT color, capacitive touch-screen, high brightness
Infra PiP Fusion	IR image inside visible & visible image inside IR	IR image inside visible & visible image inside IR	--
IR Video	Recording and saving on Micro SD card MPEG4 file format	Recording and saving on Micro SD card MPEG4 file format	Recording and saving on Micro SD card MPEG4 file format
Video output	PAL / NTSC	PAL / NTSC	PAL / NTSC
Electronic zoom	x1 ÷ x20 in continuous way	x1 ÷ x20 in continuous way	x1 ÷ x20 in continuous way
Image rotation	0° ÷ 360° in step of 1°	0° ÷ 360° in step of 1°	0° ÷ 360° in step of 1°

› 3. MEASUREMENT

	THT 70	THT 60	THT 47
Temperature range	-20°C ÷ 400°C	-20°C ÷ 400°C	-20°C ÷ 400°C
Measurement unit	°C, °F, °K	°C, °F, °K	°C, °F, °K
Accuracy	±2 % reading or ±2°C	±2% reading or ±2°C	±2% reading or ±2°C
Measurement cursors	3 (selection temperature MIN, MAX, Customized position on image)	3 (selection temperature MIN, MAX, Customized position on image)	3 (selection temperature MIN, MAX, Customized position on image)
Laser pointer	Class 2 according to IEC 60825-1	Class 2 according to IEC 60825-1	--
Built-in illuminator	White light LED	White light LED	--
Measurement modes	Automatic / Manual / Histogram	Automatico / Manuale / Istogramma	Automatico / Manuale / Istogramma
Emissivity correction	0.01 ÷ 1.00 + built-in table with common materials	0.01 ÷ 1.00 + built-in table with common materials	0.01 ÷ 1.00 + built-in table with common materials
Measurements features	Automatic correction based on distance, relative humidity, atmospheric temperature, offset	Automatic correction based on distance, relative humidity, atmospheric temperature, offset	Automatic correction based on distance, relative humidity, atmospheric temperature, offset
Advanced analysis	Spots (max 3), Lines (max 2), Areas (max 3), Isotherm	Spots (max 3), Lines (max 2), Areas (max 3), Isotherm	Spots (max 3), Lines (max 2), Areas (max 3), Isotherm
Alarm on temperature	Associated to measurements spots	Associated to measurements spots	Associated to measurements spots

› 4. IMAGE STORAGE AND PC INTERFACE

	THT70	THT60	THT47
Memory	Micro SD card 4GB	Micro SD card 4GB	Micro SD card 4GB
File format	JPEG standard	JPEG standard	JPEG standard
Memory size	> 1000 images	> 1000 images	> 1000 images
Voice notes	60" / image	60" / image	60" / image
Text notes	With internal virtual keyboard	With internal virtual keyboard	With internal virtual keyboard
PC interface	USB 2.0 (for video and image transfer)	USB 2.0 (for video and image transfer)	USB 2.0 (for video and image transfer)

› 5. POWER SYSTEM

Battery type	Rechargeable Li-ION - 7,4V 2700mAh	Rechargeable Li-ION - 7,4V 2700mAh	Rechargeable Li-ION - 7,4V 2700mAh
Charging system	In camera or in base charger	In camera or in base charger	In camera or in base charger
Battery life	4.5 hours of continuous use	4.5 hours of continuous use	4.5 hours of continuous use
External power	External adapter 100/240VAC (50/60Hz)/12VDC	External adapter 100/240VAC (50/60Hz)/12VDC	External adapter 100/240VAC (50/60Hz)/12VDC

› 6. GENERAL SPECIFICATIONS

Operating temperatures	-20°C ÷ 50°C	-20°C ÷ 50°C	-20°C ÷ 50°C
Operating humidity	10% ÷ 90%HR	10% ÷ 90%HR	10% ÷ 90%HR
Storage temperature	-40°C ÷ 70°C	-40°C ÷ 70°C	-40°C ÷ 70°C
Storage humidity	10% ÷ 90%HR	10% ÷ 90%HR	10% ÷ 90%HR
Encapsulation	IP65 according to IEC529	IP65 according to IEC529	IP65 according to IEC529
Shock	25G, according to IEC60068-2-29	25G, according to IEC60068-2-29	25G, according to IEC60068-2-29
Vibrations	2G, according to IEC60068-2-6	2G, according to IEC60068-2-6	2G, according to IEC60068-2-6
Drop test	2m	2m	2m
Dimensions (L x W x H)	243 x 103 x 160mm	243 x 103 x 160mm	243 x 103 x 160mm
Weight (battery included)	0.92kg	0.92kg	0.92kg

› 7. ACCESSORIES

Standard lens	22 mm f/1.0	7,5 mm f/1.0	7,5 mm f/1.0
Optional lenses	11 / 38 mm	11 / 22 / 33 mm	--
Micro SD Card	•	•	•
Rechargeable Li-ION battery	2x	2x	1x
USB cable	•	•	•
Video cable	•	•	•
AC/DC power/recharge unit	•	•	•
Headset + Microphone	•	•	•
Usage manual	•	•	•
Hard carrying case	•	•	Soft carrying case
Battery charger	•	•	•
Tripod adapter	•	•	Optional
Hood	•	•	Optional

www.valuetronics.com

DIGITAL
INFRARED CAMERAS

THT
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HT ITALIA S.r.l.
Via della Boaria, 40
48018 Faenza (RA)
ITALY
T +39 0546 621002
F +39 0546 621144
E-mail export@htitalia.it

www.ht-instruments.com

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