

# ITc series

# Thermal imager



ITc series



Complete set

## Ordering Informations

<b>ITc 25</b>	Thermal Imager
<b>ITc 60</b>	Thermal Imager
<b>ITc 150</b>	Thermal Imager

Each HotFind is supplied with 20°C optics, LCD display and laser, battery charger 110/230V, Li-Ion rechargeable battery, USB and video Cable, software package, calibration certificate and robust transport case.

## Accessories

In-car charger

Lens wide angle 28° x 21°

Lens telescope 6.4° x 4.8°

Tripod



These fully radiometric thermal imager provide precise temperature measurement up to 1500°C. In addition, these cameras offer an excellent geometric resolution of 2.2 mrad and high sensitivity making them ideal tool for spotting even the smallest temperature differences.

The automatic hotshot detection, up to 4 moving measuring spots, the Acoustic alarm signal and an extreme close focus operating distance of only 0.1m, make the ITc series cameras a unique range of instruments.

The camera offer a 2.5" movable tilt colour display which provide an excellent mean of protection when the unit is not in use.

Light and ergonomic ITc series have been designed for one hand operation. The new Li-Ion field replaceable battery pack provides a 2.5 hrs continuous operation.

These cost effective camera can store up to 1000 fully radiometric pictures.

The camera is supplied as standard complete with the new IR Report software which provide an excellent tool for reporting procedure and images analysis.

Additional telescope and wide angle lense are available.

## TECHNICAL SPECIFICATION

	ITc 25	ITc 60	ITc 150
<b>Imaging Performance</b>			
Resolution	120 x 160 pixels		
Detector type	Focal Plane Array (FPA) uncooled microbolometer		
Sensitivity	0.1°C at 30°C		
Field of view	20°C x 14°C		
Minimum focus distance	0.1 m		
Focus	manual		
Spectral band	8-14 um		
<b>Image Presentation</b>			
Full IR picture	•	•	•
<b>Measurement</b>			
Temperature Range (Calibrated)	-20°C to 250°C	-20°C to 650°C	-20°C to 1500°C
Accuracy	±2 % reading or ±2°C which ever is greater		
<b>Measurement modes</b>			
Points (movable)	3 movable, 1 fix	3 movable, 1 fix	3 movable, 1 fix
Isotherm hot/cold point detection	automatic	automatic	automatic
Visible colour alarm	•	•	•
<b>Measurement correction</b>			
Emissivity	Between 0.1 and 1.00 with 0.01 increment		
Ambient temperature, distance, relative humidity	•	•	•
Image controls	Level, span , auto adjustment automatic (continuous/manual		
Set up controls	Temperature scale, Min/Max, Unit (°C or °F), date/time, display contrast		
<b>Image Presentation</b>			
Display	2.5" colour LCD		
Colour palettes (6)			
<b>Image Storage</b>			
Internal image capacity	Internal flash memory, 1000 images		
<b>Laser</b>			
Type	Semiconductor AlGaInP Diode Laser, 1 mw/635 nm red		
Class	Class II		
<b>Interfaces</b>			
Video output	composite video		
Image transfer (PC)	USB 2.0		
Desktop include softwares	SAT software		
Physical	<b>Operating temperature:</b> -15°C to 50°C <b>Storage temperature:</b> -40°C to 70°C <b>Humidity:</b> 10% to 90 % non condensing <b>Protection:</b> IP54 IEC 529 <b>Shock:</b> 25G IEC 68-2-29 <b>Vibration:</b> EG IEC 68-2-6 <b>Weight:</b> 750 g <b>Dimension:</b> 211 x 80 x 195 mm <b>Tripod mounting:</b> 1/4" <b>Warranty:</b> one year		
Power	<b>Battery Type:</b> Li-Ion rechargeable, field replaceable <b>Battery run time:</b> 2.5 Hrs continuous		

# ITc D/HD series

# Thermal imager



ITc D series

## DuoVision Concept See twice, see better!!!!!!

The DuoVision technology automatically capture and store a digital picture and the corresponding infrared image and blend them together providing the users clear and reliable information to fast identifying critical faults and anomalies which could potentially lead to failures. ITc cameras will help you in identifying faults before the occurs.



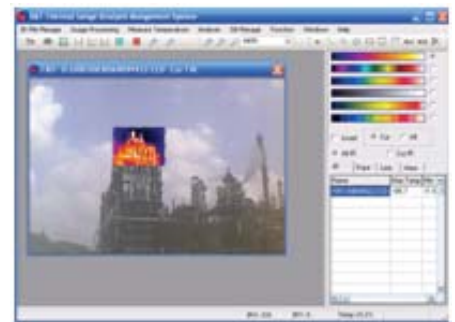
## How it works?

The ITc D version series are equipped with an high resolution visible camera which incorporate a lamp torch to comfortably operate in poor light conditions. ITc capture two pictures together, visible and infrared, and offer the users a choice of four selectable modes to present the two pictures blended together. Visible and Infrared images are store separately in the camera memory

## SELECTION TABLE

	ITc 60D	ITc 150D	ITc 60HD	ITc 150HD
Detector	160 x 120	160 x 120	384 x 288	384 x 288
Temperature range	-20 to 600 °C	-20 to 1500 °C	-20 to 600 °C	-20 to 600 °C
Thermal sensitivity	0.1 °C	0.1 °C	0.08 °C	0.08 °C
Image presentation	Ir/PIP/VIS/ DuoVision	Ir/PIP/VIS/ DuoVision	Ir/PIP/VIS/ DuoVision	Ir/PIP/VIS/ DuoVision
Field of view	20 °C x 15 °C	20 °C x 15 °C	24 °C x 21 °C	24 °C x 21 °C
DuoVision technology	•	•	•	•
Choice of pallets	6	6	6	6
Built-In digital camera	680 x 480 pixels	680 x 480 pixels	680 x 480 pixels	680 x 480 pixels
Torch light	•	•	•	•
Video output	•	•	•	•
Display	2.5" LCD	2.5" LCD	2.5" LCD	2.5" LCD
Voice annotation	•	•	•	•
On board analysis tool	•	•	•	•
Data storage	SD card	SD card	SD card	SD card
Laser	•	•	•	•
Software	IR Report	IR Report	IR Report	IR Report

## IR REPORT

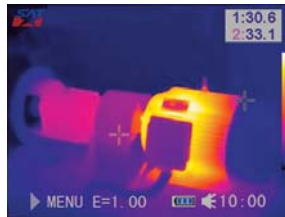


Each ITc thermal imager is supplied with the IR reporting software as standard. The software is a powerful tool for editing, viewing, analysing and annotating infrared images. It also generates professional looking reports, fully costumazibale. The DuoVision technology is fully supported.

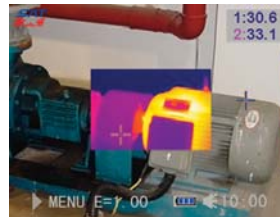
## IMAGE PRESENTATION



Full Visible light



Full IR



Picture-in-Picture



Picture-in-Picture



Blended



Picture-in-Picture

# ITc D/HD series

# Thermal imager



ITc series



Complete set

## Ordering Informations

ITc series Thermal imager

**ITc 60D** Thermal imager, DuoVision

**ITc 150D** Thermal imager, DuoVision

**ITc 60HD** Thermal imager, DuoVision

**ITc 150HD** Thermal imager, DuoVision

Each ITc camera is supplied with standard optic optics, LCD display and laser, lens protection, battery charger 110/230V, Li-Ion rechargeable battery, USB and video cable, software package, SD card, calibration certificate, user manual and robust transport case.

## Accessories

In-car charger

Lens wide angle 28° x 21°

Lens telescope 6.4° x 4.8°

Tripod



These fully radiometric thermal imager provide precise temperature measurement up to 1500 °C. In addition, these cameras offer an excellent geometric resolution and high sensitivity making thermal ideal tool for spotting even the smallest temperature differences. Those cameras feature:

- DuoVision technology for early problems detections
- Easy to use friendly menu
- On-board analysis tool for field image interpretation
- Integrated visible camera
- Laser pointer for target identification
- Voice annotation- no need for carrying pen, comments are saved with the image
- Designed to operate in harsh environments
- Image storage on SD card

## ITc 60D/150D

The DuoVision entry level model for trouble shooting and general maintenance. Features:

- 160 x 240 pixel resolution
- 2.2 mrad spatial resolution
- 0.1 °C NETD thermal sensitivity

## ITc 60HD/150HD

High definition model, the professionals choice identify even smaller temperature difference thanks to its excellent NEDT and extremely high detector resolution. Features:

- 280 x 244 pixel resolution
- 1.2 mrad spatial resolution
- 0.08 °C thermal sensitivity

## TECHNICAL SPECIFICATION

	ITc 60D	ITc 150D	ITc 60HD	ITc 150HD
<b>Imaging Performance</b>				
Resolution	120 x 160 pixels		384 x 288 pixels	
Detector type	(UFPFA) uncooled microbolometer			
Sensitivity	0.1 °C at 30 °C		0.08 °C at 30 °C	
Field of view (FOV)	20 °C x 15 °C		24 °C x 21 °C	
Minimum focus distance	0.1 m			
Spatial Resolution	2.2 mrad		1.3 mrad	
Focus	manual			
Spectral band	8-14 um		7.5-14 um	
<b>Image Presentation</b>				
Full IR/Full VIS, PIP (4 modes), Blended	•	•	•	•
<b>Measurement</b>				
Temperature Range (Calibrated)	-20 °C to 600 °C	-20 °C to 1500 °C	-20 °C to 600 °C	-20 °C to 1500 °C
Accuracy	±2 % reading or ±2°C which ever is greater			
<b>Measurement modes</b>				
Points (movable)	3 movable, 1 fix	3 movable, 1 fix	3 movable, 1 fix	3 movable, 1 fix
Isotherm hot/cold point detection	automatic	automatic	automatic	automatic
Visible colour alarm	•	•	•	•
<b>Measurement correction</b>				
Emissivity	Between 0.1 and 1.00 with 0.01 increment			
Ambient temperature, distance, relative humidity	•	•	•	•
Image controls	Level, span , auto adjustment automatic (continuous/manual			
Set up controls	Temperature scale, Min/Max, Unit (°C or °F), date/time, display contrast			
<b>Image Presentation</b>				
Display	2.5" colour LCD			
Colour palettes (6)	choice of 6 palettes			
<b>Image Storage</b>				
Internal image capacity	Removable SD card			
Voice annotation	Digital voice clip stored with each picture (require blue tooth headset)			
<b>Laser</b>				
Type	Semiconductor AlGaInP Diode Laser, 1 mw/635 nm red			
Class	Class II			
<b>Interfaces</b>				
Video output	Composite video			
Image transfer (PC)	USB 2.0			
Desktop include softwares	IR report software			
<b>Physical</b>				
<b>Operating temperature:</b> -15 °C to 50 °C				
<b>Storage temperature:</b> -40 °C to 70 °C				
<b>Humidity:</b> 10% to 90 % non condensing				
<b>Protection:</b> IP54 IEC 529				
<b>Shock:</b> 25G IEC 68-2-29				
<b>Vibration:</b> EG IEC 68-2-6				
<b>Weight:</b> 750 g				
<b>Dimension:</b> 211 x 80 x 195 mm				
<b>Tripod mounting:</b> 1/4"				
<b>Warranty:</b> one year				
<b>Battery Type:</b> Li-Ion rechargeable, field replaceable				
<b>Battery run time:</b> 2.5 Hrs continuous				



Thank you for reading this data sheet.

For pricing or for further information, please contact us at our UK Office, using the details below.



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Please note - Product designs and specifications are subject to change without notice. The user is responsible for determining the suitability of this product.