Test & Measurement

- sales
- rentals
- calibration
- repair
- disposal

Complimentary Reference Material

This PDF has been made available as a complimentary service for you to assist in evaluating this model for your testing requirements.

TMG offers a wide range of test equipment solutions, from renting short to long term, buying refurbished and purchasing new. Financing options, such as Financial Rental, and Leasing are also available on application.

TMG will assist if you are unsure whether this model will suit your requirements.

Call TMG if you need to organise repair and/or calibrate your unit.

If you click on the "Click-to-Call" logo below, you can all us for FREE!

TMG Corporate Website   **TMG Products Website**

Click-to-Call
TMG Now

Level 4
Disposal

Disposal

Level 3
Repair

Repair

Review &
Renew

Level 5
Review & Renew

Level 2
Calibration

Calibration

Recycled

Level 1
Acquisition

Acquisition

Purchase
Lease
Rent

Solution Centre

Product Lifecycle Management System

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NATA CERTIFIED MANAGEMENT SYSTEM AIDN

Imaging Performance	
Field of view/min focus distance	25°x18.8° / 0.4 m (1.31 ft.)
Thermal sensitivity (N.E.T.D)	< 0.07°C (< 0.14°F) @ +30°C (+86°F)
Detector type	Focal Plane Array (FPA), uncooled microbolometer
Spectral range	7.5 to 13 μm
Digital zoom	1-8X continuous
Spot size ratio (with 15° lens)	1.4 mRad

Image Presentation	
Image modes	Thermal/Visual, Simultaneous, Video, Fusion
Display	Built-in display, 3.5 in. (320 x 240 pixels)
Image Controls	Touch screen LCD

Measurement	
Temperature range	–20°C to +120°C (–4°F to +248°F), 0°C to 350°C (32°F to 662°F), Optional up to +1200°C (+2192°F)
Accuracy	±2˚C (±3.6˚F) or ±2% of reading
Measurement modes	5 Spotmeters, Box areas, Isotherm, Difference temperature function, Reference temperature
Set-up controls	Mode selector, color palettes, configure info to be shown in image, local adaptation of units, language, date, and time formats, image gallery, image markers
Measurement corrections	Reflected ambient temperature correction

Image Storage	
Digital storage functions	Removable SD Memory Card
Image storage capacity	1000+ JPEG images
Image annotation	Digital photo, Text (from list or Touch Screen), Voice and Sketch

Laser LocatIR™	
Classification	Class 2
Type	Semiconductor AlGaInP Diode Laser: 1mW/635 nm (red)

Power Source	
Battery type	Rechargeable Lithium-Ion battery
Battery operating time	4 hours
Battery charging	2 bay charging system, 10-16 V input. Charging status indicated by LED's
AC operation	AC adapter, 90-260 VAC input. 12 V output to camera
Voltage	11-16 VDC
Power saving	Power management, automatic shut down and sleep mode after settable time

Environmental	
Operating temperature range	-15°C to +50°C (5°F to 122°F)
Storage temperature range	-40°C to +70°C (-40°F to +158°F)
Humidity	10% to 95%, IEC 359
Water and dust resistant (encapsulation)	IP 54, IEC 529
Shock	25G, IEC 68-2-29
Vibration	2G, IEC 68-2-6

Physical Characteristics	
Weight	0.88 kg (1.94 lb.)
Size (L x W x H)	106 x 201 x 125 mm (4.2 x 7.9 x 4.9 in.), with built-in lens pointing forward
Color	Titanium Grey
Tripod mounting	1/4" - 20

Interfaces	
USB (cable included)	Image transfer to PC
Video output	NTSC Video

Software	
QuickReport™	Included
Reporter™ 8.2	Optional

Camera includes:
Transport case
Camera Lens Cap
Battery
2-bay battery charger, incl. power supply with local plug
Headset, 3.5 mm plug
Video Cable
USB cable Std A <-> Mini B, 2 m/6.6 ft.
SD Memory Card
Sun Shield
Stylus Pen
CD-ROM documentation
Power supply
Operators Manual, Quick reference guide

Interchangeable lenses/options
Optional Add-on optics, Telephoto lens, 15°
Optional Add-on optics, Wide angle lens, 45°
12 volt auto adapter
Hip/Belt mounted camera holster

From Left to right: USB mini for PC image download, 4 pole audio for voice annotation, NTSC video, USB-A for memory stick image transfer

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The Global Leader in Infrared Cameras

ThermaCAM® T400
INFRARED CAMERA

ThermaCAM® **T400**

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The most affordable, feature rich infrared camera available!

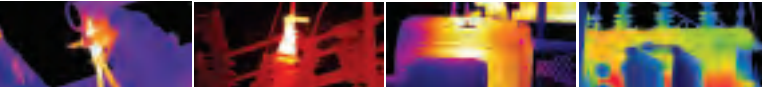1 800 464 6372
CANADA: 1 800 613 0507
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The Best in Infrared
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Holster for Portability and Easy Access to Camera

Target Illuminator and 1.3 Mega Pixel Visual Camera

Tiltable Optics Reduces Back and Arm Strain

Touch Screen Text/Sketch Functionality

- Thermal Fusion Functionality
- Interchangeable Optics
- 1.3 MegaPixel Visual Camera
- Automatically Associates the Visual and Thermal JPEG Images
- Includes FREE QuickReport Software for Analysis & Reporting
- Compatible with Optional Microsoft Word®-Based ThermaCAM Reporter Software w/Spell Check
- Removable SD/Memory Card, USB & Video Out
- Onscreen Thumbnail Image Gallery
- In camera Emissivity Tables, 5 Temperature Spots & Delta T Functionality
- Touch Screen Technology Adds Markers, Draws, Sketches
- Auto or Manual Focus with 8x Continuous Digital Zoom
- Auto Hot/Cold Spot & Audible/Visual Alarms
- Large 3.5" Color LCD Display
- High Thermal Sensitivity for Maximum Temperature Accuracy
- Voice, Text & Sketch Annotation
- Built-in LaserLocatIR™
- Long 4-hour Battery with In-Camera Charging or Car Charger
- Optics head & display screen are independently rotatable for optimum viewing

Onscreen Emissivity Tables, Up To 5 Temperature Spots & Delta T Functionality

Temperature difference is the most frequently used measurement parameter for assessing the condition of electrical components and other plant assets. Accurate temperature difference information could determine if the color variation detected with the camera represents a normal operating condition or a problem that is about to start a fire.

The T400 makes this information easy to see and communicate with the Delta Temperature mode. Just place a reference spot on a target operating at normal temperature and another on the target with elevated temperature. The Delta Temperature Function immediately displays the difference between these two targets on the image making it easy for you to diagnose the severity of the problem. The image can then be stored with these measurements and incorporated into the report. It's the easiest and fastest way to diagnose and report your IR findings.

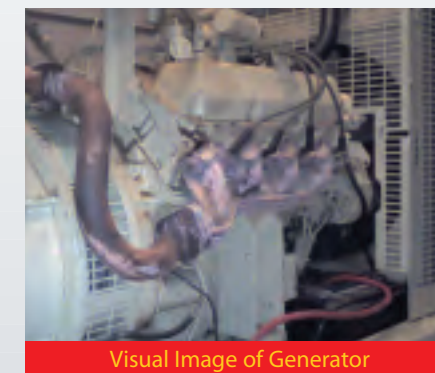## Auto Hot/Cold Spot & Audible/Visual Alarms

Seeing the hottest or coldest spot on the thermal image is often a critical requirement. FLIR's advanced in-camera algorithms make this normally time-consuming task a breeze. You can even pre-set temperature triggers to sound audible or show visible alarms, and the advanced in-camera tools can identify overheating circuits, missing insulation, mechanical failures, water intrusion leaks and literally "sound off" to alert you to a potential problem with the target you are scanning.

Best Image Quality Plus More Features Equals Better Value!

www.goinfrared.com/T400

Razor-Sharp Image Quality

The T400's high-resolution 320 x 240 infrared detector delivers 76,800 pixels. This, combined with FLIR's exclusive Advanced Signal Processing, reduces image "noise" and produces razor-sharp thermal images four times the resolution of competing brands that use a 160 x 120 array. Image, as they say, is everything!

Advanced Optics

The T400 offers both Auto and Manual Focus, making it easy for anyone to take razor-sharp thermal images and helping those new to infrared from taking out-of-focus images. A powerful one-touch 8x continuous digital zoom lets you zero-in to the optimal view, whereas other cameras deliver only preset zooms.

Interchangeable Lenses

The T400 comes with a built-in standard 25° lens with the option of adding on a 45° wide angle or 15° telephoto lens.

Thumbnail Image Gallery

An easy-to-access thumbnail image gallery is available to help you quickly review your saved thermal images to find the one you want – a massive convenience and time saver!

Touch Screen Technology

Touch Screen technology lets you save text, markers or even sketches right with your thermal images, directly on the camera right from the work site. It's like having a note and sketch pad with you every time you turn on the camera – increasing your productivity and the quality of your reports.

1.3 Mega Pixel Visual Camera

Capture visible images at the same time you capture your thermal image with a built-in 1.3 mega pixel digital camera. Includes a target illuminator for low light situations. You can draw markers using Touch Screen technology that works directly on the visual image.

Maximum Connectivity Options: SD/Memory Card, Audio, Video & USB

Thousands of images can be stored to a standard removable SD Memory Card. Use the Audio port to connect a headset and record voice comments while you work with the camera. Voice comments are stored with the IR image and can be played back using ThermaCAM® QuickReport or ThermaCAM® Reporter. A standard Video port lets you display your images in real-time with any number of off-the-shelf video displays – ideal when working with a team or showing thermal output to customers, clients or superiors. A standard USB port allows for automatic image download from the camera using ThermaCAM QuickReport.

In-Camera Radiometric JPEG Image Format

The infrared image is more than just a picture. All temperature data, object parameters, analysis tools, voice and text comments are stored with the infrared image, allowing for advanced post-processing and report writing using ThermaCAM QuickReport (included) or FLIR's Microsoft® Word®-Based ThermaCAM Reporter. Add voice comments in the field using a headset. Add text annotation using a Touch Screen keypad or a Text Comment File containing a list of preset values. The T400 JPEG image format combined with FLIR's versatile PC software creates a powerful and unique Thermography system that eases data collection in the field.

MicroSoft® Word®-compatible Software with Spell Check

The T400 comes with FREE QuickReport analysis and reporting software. Optional Reporter software allows you to transfer fully radiometric – or "live" – images into Word so you can go back and edit reports, adjust temperature span or change color palettes at any time – critical functionality if you intend to email reports to peers, customers or superiors or simply if you want to run Spell Check!
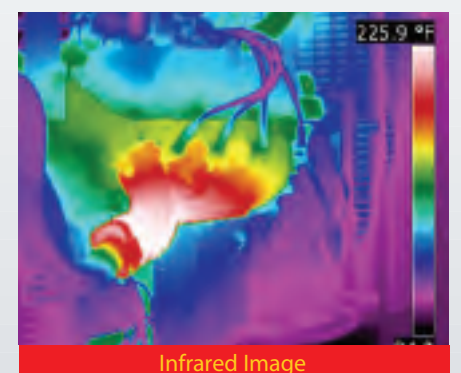
Now with **FLIR FUSION!**

FLIR's new FUSION functionality allows for easier identification and interpretation of infrared images. This advanced technology enhances the value of an infrared image by allowing you to overlay it directly over the corresponding visible image. This functionality combines the benefits of both the infrared image and visual picture at the push of a button. The T400 camera does this in real-time and the overlay function can be easily adjusted to suit any application such as electrical surveys, building diagnostics, and mechanical inspections.

Visual Image of Generator

Fusion Image

Infrared Image