

MSX® THERMAL CAMERA

FLIR TG165-X™

The FLIR TG165-X dramatically reduces inspection and diagnostic time by helping you visually pinpoint the source of electrical, mechanical, and HVAC/R system faults. Instead of searching for temperature anomalies with a single-spot IR thermometer, this non-contact temperature measurement and imaging tool displays a thermal picture of your target including any hot spots or cold zones that could indicate a problem. See wires or components clearly and even read labels thanks to FLIR patented MSX image enhancement, which adds visual details to full thermal images. The bullseye laser helps ensure you're always targeting the right component for measurement while the drop-tested, portable design with easy-to-use buttons and settings help you complete the job quickly and stress-free. With internal storage for up to 50,000 images and rechargeable Li-ion battery, the FLIR TG165-X is ready to go right out of the box.

www.flir.com/TG165-X



PINPOINT THE SOURCE OF SYSTEM FAILURES

Troubleshoot electrical, mechanical, and building issues with this handheld thermal imager

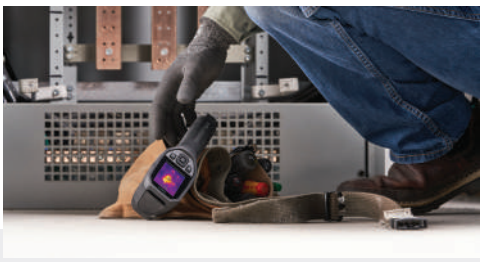
- See temperature anomalies immediately in the thermal image instead of searching for them with a single-spot IR thermometer
- Speed inspections with a thermal view that tells you instantly whether a target has overheating components or hidden air leaks
- Measure a wide range of temperatures, from -25°C to 300°C (-13°F to 572°F), with an accuracy of up to ±1.5°C (±3°F)



COMPLETE INSPECTIONS QUICKLY & EASILY

See the detail needed to troubleshoot faults and gauge their severity

- Interpret images faster and easier with MSX® two-camera technology, which enhances thermal images with crisp visual details
- Identify the exact area that you're measuring using the bullseye laser pointer
- Capture thermal MSX or visual images plus temperature readings with a simple trigger-pull
- Demonstrate the problem was found and corrected with recorded before-and-after images



WORK WITH CONFIDENCE

Take the TG165-X anywhere thanks to its portable design and protective IP54 enclosure

- Work safely and worry-free knowing that the thermal imager can withstand a 2-meter drop
- See into dark or hard-to-reach areas with the bright LED worklight
- Easily view live thermal or recorded images on 2.4-in. display
- Rely on the security of the world-class FLIR 2-10 warranty

SPECIFICATIONS

Imaging and optical data	
IR resolution	80 × 60 pixels
Digital image enhancement	No
Thermal sensitivity/NETD	<70 mK
Field of view (FOV)	51° × 66°
Minimum focus distance	0.3 m (0.98 ft)
Distance to spot ratio	24:1
Pseudo dual range	No
Image frequency	8.7 Hz
Focus	Fixed
Detector data	
Focal plane array/spectral range	Uncooled microbolometer/7.5–14 µm
Detector pitch	17 µm
Image presentation	
Display resolution	320 × 240 pixels
Screen	2.4 in. portrait, 80° viewing angle
Image adjustment	Automatic
Image modes	• MSX® (Multi Spectral Dynamic Imaging) • Visual (with temperature reading)
Gallery	Yes
Measurement and analysis	
Object temperature range	-25°C to 300°C (-13°F to 572°F)
Accuracy	• 50°C to 100°C (122°F to 212°F) - acc. of ±1.5°C (±3°F) • 0°C to 50°C/100°C to 300°C (32°F to 122°F/212°F to 572°F) - acc. of ±2.5°C (±5°F) • -25°C to 0°C (-13°F to 32°F) - acc. of ±3°C (±7°F)
Minimum measurement distance	0.26 m (0.85 ft.)
Spotmeter	Center spot on/off
Color palettes	Iron, Rainbow, Whitehot, Blackhot, Arctic, Lava
Set-up	
Set-up commands	• Local adaptation of units, language, date, and time formats • Screen brightness (high, medium, low) • Gallery, deletion of images
Emissivity correction	Yes: 4 pre-set levels with custom adjustment of 0.1–0.99

Storage of images	
Storage media	4 GB
Image storage capacity	50,000 images
Image file format	JPEG with spot temp in meta tag
Digital camera	
Resolution	2 MP (1600 × 1200 pixels)
Focus	Fixed
Field of view	71° × 56°, adapts to the IR lens
Worklight and Laser	
Worklight	LED on/off
Light output	100 lumens
Bullseye laser pointer	Indicating the size of the measurement area
Laser type	Class 1
Data communication interfaces	
Interfaces	USB 2.0
USB standard	USB Type-C High Speed; data transfer/power
Power system	
Battery type	Rechargeable Li-ion, 3.7 V battery
Battery operating time	5 hours of scanning (LCM medium brightness) 4.5 hours with laser on (LCM medium brightness)
Battery charge life	30 days minimum
Charging system	Battery is charged inside the camera; 4 hrs to 90%, 6 hrs. to 100%
Power management	Adjustable: off, 5 minutes, 15 minutes, 30 minutes
General	
Operating temperature range	-10°C to 45°C (14°F to 113°F)
Encapsulation	IP54 (IEC60529)
Shock	25 g (IEC 60068-2-27)
Vibration	2 g (IEC 60068-2-6)
Drop test	Designed for 2 m (6.56 ft.)
Safety	CE/CB/EN61010/UL
Weight	0.394 kg (13.9 oz)
Size (L × W × H)	210 × 64 × 81 mm (8.3 × 2.5 × 3.2 in)
Tripod mounting	UNC ¼"-20
Country of origin	Taiwan

Specifications are subject to change without notice. For the most up-to-date specs, go to www.flir.com

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