



## INDUSTRIAL HIGH-TEMP THERMAL CAMERA

# FLIR TG297™

The FLIR TG297 combines accurate measurement with the ability to image temperatures as high as 1030°C (1886°F) in a one-of-a-kind diagnostic tool. Now you can both see and measure the source of common issues involving electrical and mechanical systems, diagnose breakdowns, and verify manufacturing processes. Examine anything from a furnace to a forge using thermal enhanced with FLIR MSX® (Multi-Spectral Dynamic Imaging), which improves image clarity by embossing visual scene details onto full thermal images. This can provide the perspective and context you need to accurately target potential faults, troubleshoot repairs, and monitor processes. Record images to assure team members that machinery and systems are functioning safely and at peak efficiency. With a simple user interface, Bluetooth® connectivity, storage for up to 50,000 images, and rechargeable Li-ion battery, the FLIR TG297 is ready to go out of the box.

[www.flir.com/TG297](http://www.flir.com/TG297)



### IDENTIFY PROBLEMS QUICKLY

Outfit your toolbox with this combination non-contact temperature measurement and thermal imaging camera

- Experience the difference you can make with a true 160 × 120 IR pixel imager (19,200 pixels)
- High-temperature filter allows camera to measure and image temperatures up to 1030°C (1886°F)
- Work from a safe distance while scanning high-temperature objects thanks to the 30:1 spot ratio
- Identify the exact area that you're measuring using the bullseye laser pointer

### PRODUCE CRISP IMAGES FOR EASY INTERPRETATION

See the detail needed to troubleshoot faults and gauge their severity

- Diagnose problems faster with FLIR-patented MSX image enhancement
- Display and capture thermal or visual images with temperature readings
- Compare before-and-after stored images to demonstrate the problem and the repair
- View thermal images in your preferred color palette on the bright 2.4-inch color display

### WORK WITH CONFIDENCE IN RUGGED ENVIRONMENTS

Take the TG297 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
- Peer into the darkness and hard-to-reach areas with the bright LED flashlight
- Find this compact, durable imager in a crowded tool bag easily, thanks to the ergonomic handle design
- Rely on the security of the world-class FLIR 2-10 warranty

## SPECIFICATIONS

Imaging and optical data	
IR resolution	160 × 120 pixels
Digital image enhancement	Yes
Thermal sensitivity/NETD	<70 mK
Field of view (FOV)	57° × 44°
Minimum focus distance	0.3 m (0.98 ft)
Distance to spot ratio	30:1
Image frequency	8.7 Hz
Focus	Fixed
Focal plane array/spectral range	Uncooled microbolometer/7.5–14 μm
Detector pitch	12 μm
Image presentation	
Display resolution	320 × 240 pixels
Screen size	2.4 in. portrait
Color palettes	Iron, Rainbow, White hot, Black hot, Arctic, Lava
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 1030°C (-13°F to 1886°F)
Measurement accuracy	-25°C to 50°C (-13°F to 122°F): up to ±3°C (±7°F) 50 to 100°C (122 to 212°F): ±1.5°C (±3°F) or ±1.5%, whichever is greater 100°C to 500°C (212°F to 932°F): ±2.5°C (±6°F) or ± 2.5% whichever is greater 500°C to 1030°C (932°F to 1886°F): ±3°C (±7°F) or ± 3%, whichever is greater
IR temperature resolution	0.1°C (0.2°F)
Repeatability of reading	±1% of reading or ±1°C (2°F), whichever is greater
Response time	150 ms
IR thermometer measurement	Continuous scanning
Minimum measurement distance	0.26 m (0.85 ft)
Spotmeter	Center spot on/off

Set-up and service functions	
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
Image storage and visual camera	
Storage capacity on 4 GB card	50,000 images
Image file format	JPEG w/ spot temp data
Digital camera resolution	2 MP (1600 × 1200 pixels)
Field of view (FOV)	71° × 56°, adapts to IR lens
Light and laser	
Flashlight	100 lumens LED, on/off option
Class 1 laser	Projects center spot and outlines circular measurement area to indicate size
Data communication interfaces	
Bluetooth®	BLE
USB	Type-C: data transfer, power
Additional data	
Battery type	Rechargeable 3.7 V Li-ion battery
Battery operating time	5 hrs scanning
Battery charging time	4 hrs to 90%
Power management	Adjustable: off, 5 min, 15 min, 30 min
Shock/vibration	25 g (IEC 60068-2-27); 2 g (IEC 60068-2-6)
Drop	Designed for 2 m (6.56 ft)
Weight	0.394 kg (13.9 oz)
Size (L × W × H)	210 × 64 × 81 mm (8.3 × 2.5 × 3.2 in)
Package contents	
Camera, wrist strap lanyard, USB cable, pouch, printed documentation	

Specifications are subject to change without notice. For the most up-to-date specs, go to [www.flir.com](http://www.flir.com)

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