

### P/N: TG165

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#### **Document identity**

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### Website

http://www.flir.com

#### **Customer support**

http://support.flir.com

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Part number	TG165
Part name	Imaging IR Thermometer
Description	FLIR's new TG165 imaging infrared (IR) thermometer bridges the gap between single-spot IR thermometers and FLIR's legendary thermal cameras. Equipped with FLIR's exclusive Lepton micro thermal camera, the FLIR TG165 shows you where potential problems are brewing and where to aim your spot.
	The FLIR TG165 lets you see heat patterns, reliably measure temperature, and store images and data. Its menu uses intuitive icons, making it simple to operate. The FLIR TG165 also makes documentation easy by saving images you can download from the micro-SD card or over a USB connection and use for reports.
	With a spot ratio of 24:1, dual laser pointers, and a wide temperature range from 13–716°F (–25 to 380°C), the FLIR TG165 helps you to capture reliable readings from safer distances.
	<ul> <li>See the heat and speed up troubleshooting.</li> <li>Know where to measure temperature.</li> <li>Grab and go simplicity—no special training required.</li> <li>Pocket portable to fit a crowded tool bag.</li> <li>Rugged and reliable.</li> </ul>
IR temperature measurement	
Basic accuracy	±1.5% or 1.5°C
Basic range	-25 to 380°C (14-716°F)
Detailed ranges and accuracy	-25 to -10°C ± 3°C (-13 to 14°F ± 5°F)
	-10 to 0°C ± 2.0°C (-14-32°F ± 4°F)
	0–380°C $\pm$ 1.5°C or 1.5%, whichever is greater (32–716°F $\pm$ 3% or 3°F, whichever is greater)

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IR temperature measurement	
Emissivity	4 pre-set levels with custom adjustment of 0.1–0.99
Distance to spot ratio (D:S)	24:1
Measurement resolution	0.1°C/°F
Response time	150 ms
Spectral response	8–14 μm
Lasers	Dual diverging lasers indicate the temperature measurement area, activated by pulling the trigger
Calibration	Soft button multi-point by authorized FLIR service center
IR temperature resolution	0.1°C
IR temperature response time	<150 ms
IR thermometer measurement acquisition	Continuous scanning
Emissivity	4 presets, adjustable from 0.1 to 0.99
IR thermometer spectral range	8–14 μm
Minimum measurement distance	26 cm (10")
Thermal imaging	
Imaging detector	FLIR Lepton, microbolometer focal plane array
Shuttter	Integrated automatic shutter for auto flat field correction
Image resolution (H × W)	4800 pixels (80 × 60)
Spectral response	8–14 μm
Field of view (H × W)	50° × 38.6°
Upper scene range	127°C, 260°F (400K)
Sensitivity	<150mK
Image update speed frequency	9 Hz
Thermal image palettes	2: hot-iron and gray-scale
Thermal image minimum focus distance	10 cm (4")
Power system	
Battery	3.7 V, 2600 mA h lithium ion battery, rechargeable via micro USB
Auto power off	Adjustable with disable
Battery charge life	30 days minimum
Battery life	8 hours continuous scanning with lasers
Charging time	90% at 4 hours, 100% at 6 hours
Image storage	
Memory type	Micro SD card accessible via top flap
Saved image format	Bitmap (BMP) image with temperature and emissivity
Image storage capacity	75 000 pictures with included 8 GB SD card



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Image storage	
Memory expansion	32 GB SD card maximum
File format	BMP with temperature values overlaid
General information	
Display type	2.0" TFT LCD
Display resolution (W × H)	38 720 pixels (176 × 220)
Tripod mount	1/4"-20 on handle bottom
Warranty	2 years product, 10 years thermal imaging detector
Calibration	Multi-point by authorized FLIR service center
Certifications	CE, FDA
Environmental specifications	
Drop test	Designed for 2 m (6.5')
Operating temperature	-10 to 45°C (14-113°F)
Storage temperature and relative humidity (RH)	-22 to 131°F (-30 to 55°C)
	0–90% RH (32– 98.6°F (0–37°C)), 0–65% RH (98.6–113°F (37–45°C)), 0–45% RH (113–131°F (45–55°C))
Meter physical data	
Weight:	11 oz. (312 g)
Unit size (H × W × D)	7.3" × 2.2" × 3.7" (186 mm × 55 mm × 94 mm)
Material	PC-ABS, TPE
Color	Black, white, and silver
Shipping information	
Packaging type	Color box with view of product in clamshell
Packaging contents	TG165 imaging IR thermometer, 8 GB micro SD Card (installed in unit), quick-start guide (printed), translated user manual (on SD card, accessible via USB data and power micro USB cord), wrist strap lanyard, switching USB power supply with multiple plugs (US, UK, EU, AU, CN, KR (pending certification)), warranty registration notice FLIR T&M and camera card, quality management system card
Packaging dimensions (H × W × L)	34 cm $\times$ 15 cm $\times$ 12 cm (13.5" $\times$ 6" $\times$ 4.5")
Packaging weight	0.85 kg (1.8 lb.)
Carton dimensions	74 cm × 32 cm × 38 cm (30" × 13" × 15")
Carton weight	11.8 kg (26 lb.)
Carton quantity	12
EAN-13	0793950401651
UPC-12	793950401651
Country of origin	China
Tariff code	9025198080



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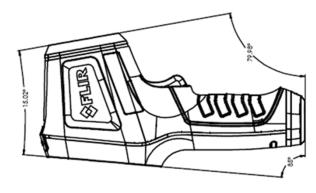
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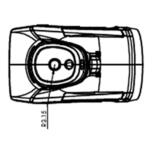
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Accessories		
TA13. EVA Protective Case for TG16X	Instock 11/1/14	
TA14. Belt Holster for TG16X	Instock 11/114	

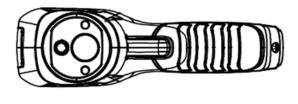
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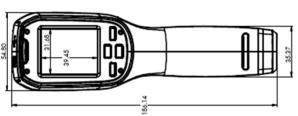




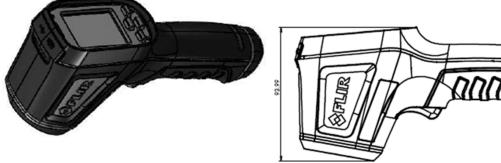












T&M Engineering **Modified By** FLIR TG165, Units in mm Monday, August 18, 2014 **Modified Date** Description

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