TiS60+ Thermal Camera

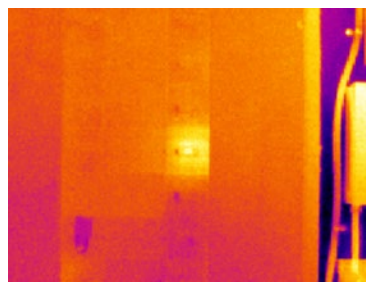## Get the job done right the first time

Boost your team's performance with 320 x 240 resolution. Infrared images taken with the TiS60+ capture smaller temperature differences from further away. If you are new to thermal imaging or if your camera is being used by a team with varying levels of thermal imaging experience, the TiS60+ offers easy-to-use fixed focus.

- 320 x 240 resolution for the clarity and image detail you need
- 3.5 inch LCD screen so you can recognize issues in the field
- Easy to use fixed focus, just point and shoot
- Measure up to 400 °C to handle all your applications
- One-handed image capture, review and save capability

See the problem and the location in one image with IR-Fusion™ technology

IR-Fusion technology, patented by the Fluke Corporation, automatically captures a digital visible light image at the same time as an infrared image. The camera blends the two images together, pixel for pixel, in a single display. You can then view the image in full infrared, full visible light or at several degrees of blending in between.
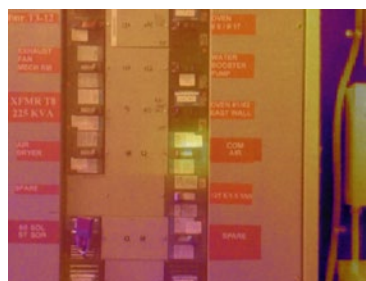
The location of an infrared target can be precisely identified even if the infrared contrast is low and there is very little structure in the infrared image.

Full infrared

50 % blending, picture-in-picture mode

50 % blending

FLUKE CONNECT®

POWERFUL, EASY-TO-USE FLUKE CONNECT™ SOFTWARE

The TiS60+ Thermal Camera is compatible with Fluke Connect.

- Modern visual design
- Intuitive navigation—easier to learn, easier and faster to work in
- Simplified work flows
- Simplified reporting work flow and better report templates

Specifications

Key Features	TiS60+
Infrared resolution	320 x 240 (76,800 pixels)
IFOV with standard lens (spatial resolution)	1.86 mRad, D:S 532:1
Field of view	34.1 °H x 25.6 °V
Minimum focus distance	46 cm (18 in)
Focus system	Fixed
Wireless connectivity	Yes, to PC, iPhone® and iPad® (iOS 4s and later), Android™ 4.3 and up, and WiFi and LAN (where available)
Fluke™ Connect app compatible	Yes*, connect your camera to your smartphone, and images taken automatically upload to the Fluke Connect app for saving and sharing
Fluke Connect Assets optional software	Yes*, assign images to assets and create work orders. Easily compare measurement types—whether mechanical, electrical or infrared images—in one location
IR Fusion™ technology	Yes
AutoBlend™ mode	Yes
Picture-In-Picture (PIP)	Yes
Ruggedized display	3.5 inch (8.9 cm landscape) 320 x 240 LCD
Ergonomic design	Designed for one-handed use
Thermal sensitivity (NETD)**	≤ 0.045 °C at 30 °C target temp (45 mK)
Level and span	Smooth auto and manual scaling
Fast auto-rescale in manual mode	Yes
Minimum span (in manual mode)	2.5 °C (4.5 °F)
Minimum span (in auto mode)	5 °C (9.0 °F)
Built-in digital camera (visible light)	5MP
Frame rate	9 Hz or 30 Hz
Laser pointer	Yes
LED light (torch)	No
Data storage and image capture	
Extensive memory options	Internal 4GB memory and 4GB micro SD card
Image capture, review, save mechanism	One-handed image capture, review, and save capability
Image file formats	Non-radiometric BMP or JPEG or fully-radiometric is2
Memory review	Yes
Software	Fluke Connect desktop software—full analysis and reporting software with access to the Fluke Connect system
Analyze and store radiometric data on a PC	Yes
Export file formats with Fluke Connect software	is2, BMP, GIF, JPEG, PNG, TIFF
Voice annotation	60 seconds maximum recording time per image; reviewable playback on camera; Bluetooth headset required (sold separately)
IR-PhotoNotes	Yes—3 images
Text annotations	No
Video recording and formats	No
Remote control operations	No
Auto capture (temperature and interval)	Yes

* Not all features of Fluke Connect are available in all countries. Please check availability with your authorized Fluke distributor.
** Best possible

Specifications continued

Key Features	TiS60+
Battery	
Batteries (field-replaceable, rechargeable)	Two lithium ion smart battery pack with five-segment LED display to show charge level
Battery life	4 hours continuous use per battery pack
Battery charging time	2.5 hours to full charge
Battery charging system	Two-bay battery charger or in-imager charging. Optional 12 V automotive charging adapter
AC operation	AC operation with included power supply (100 V ac to 240 V ac, 50/60 Hz)
Power saving	User selectable
Temperature measurement	
Temperature range (not calibrated below –10 °C)	–20 °C to 400 °C (–4 °F to 752 °F)
Accuracy	± 2 °C or 2 % (at 25 °C nominal, whichever is greater)
On-screen emissivity correction	Yes (both value and table)
On-screen reflected background temperature compensation	Yes
On-screen transmission correction	No
Line temperature graph	No
Color palettes	
Standard palettes	8: Ironbow, Blue-Red, High Contrast, Amber, Amber Inverted, Hot Metal, Grayscale, Grayscale Inverted
Ultra contrast palettes	8: Ironbow Ultra, Blue-Red Ultra, High Contrast Ultra, Amber Ultra, Hot Metal Ultra, Grayscale Ultra, Grayscale Inverted Ultra
General specifications	
Color alarms	High temperature, low temperature, isotherms (within range)
Infrared spectral band	7.5 µm to 14 µm
Operating temperature	–10 °C to +50 °C (14 °F to 122 °F)
Storage temperature	–20 °C to +50 °C (–4 °F to 122 °F) without batteries
Relative humidity	10 % to 95 %, non-condensing
Center-point temperature measurement	Yes
Spot temperature	Hot and cold spot markers
User-definable spot markers	3
User defined measurement boxes	Expandable-contractible measurement box
Hard case	Rugged hard carrying case with soft transport bag, including adjustable strap
Safety standards	IEC 61010-1: Overvoltage category II, Pollution Degree 2
Electromagnetic combability	IEC 61326-1: Basic EM environment. CISPR 11: Group 1, Class A
Australian RCM	RCM IEC 61326-1
US FCC	EN61326-1; FCC Part 5, EN 55011: Class A, EN 61000-4-2, EN 61000-4-3
Vibration	2G, IEC 68-2-6
Shock	25G, IEC 68-2-29
Drop	Engineered to withstand 2 meter (6.5 feet) drop
Sized (H x W x L)	26.7 cm x 10.1 cm x 14.5 cm (10.5 in x 4.0 in x 5.7 in)
Weight (battery included)	0.72 kg (1.6 lb.)
Enclosure rating	IP54 (protected against dust, limited ingress; protection against water spray from all directions)
Warranty	Two-years (standard)
Recommended calibration cycle	Two-years (assumes normal operation and normal aging)
Supported languages	Czech, Dutch, English, Finnish, French, German, Hungarian, Italian, Japanese, Korean, Polish, Portuguese, Russian, Simplified Chinese, Spanish, Swedish, Traditional Chinese, and Turkish
RoHS compliant	Yes

Ordering information

FLK-TIS60+ 30HZ THERMAL IMAGER
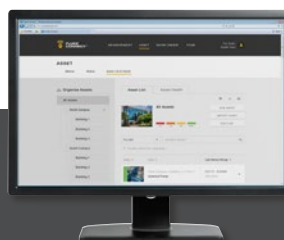**FLK-TIS60+ 9HZ THERMAL IMAGER**

Included

Infrared camera; ac power supply (including universal ac adapters); two-bay smart battery charger; 2 rugged lithium ion smart batteries; USB cable; 4 GB micro SD card; rugged, hard carrying case; soft transport bag; adjustable hand strap. Available by free download: desktop software and user manual.

Optional accessories

FLK-BLUETOOTH Bluetooth Headset
FLK-TI-TRIPOD3 Tripod Mounting Accessory
BOOK-ITP Introduction to Thermography Principles Book
FLK-TI-SBP3 Additional Smart Battery
FLK-TI-SBC3B Smart Battery Charger
TI-CAR CHARGER Car Charger

Visit www.fluke.com to get complete details on these products or ask your local Fluke sales representative.

FLUKE CONNECT™

Preventive maintenance simplified. Rework eliminated.

Save time and improve the reliability of your maintenance data by wirelessly syncing measurements using the Fluke Connect system.

- Eliminate data-entry errors by saving measurements directly from the tool and associating them with the work order, report or asset record.
- Maximize uptime and make confident maintenance decisions with data you can trust and trace.
- Move away from clipboards, notebooks and multiple spreadsheets with a wireless one-step measurement transfer.
- Access baseline, historical and current measurements by asset.
- Share your measurement data using ShareLive™ video calls and emails.
- The TiS60+ infrared camera is part of a growing system of connected test tools and equipment maintenance software. Visit the Fluke website to learn more about the Fluke Connect system.

Find out more at **fluke.com**

All trademarks are the property of their respective owners. WiFi or cellular service required to share data. Smartphone, wireless service and data plan not included with purchase. First 5GB of storage is free.

Smartphone wireless service and data plan not included with purchase. Fluke Connect is not available in all countries.