

TECHNICAL DATA

TiS60+ Thermal Camera



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

Get the job done right the first time

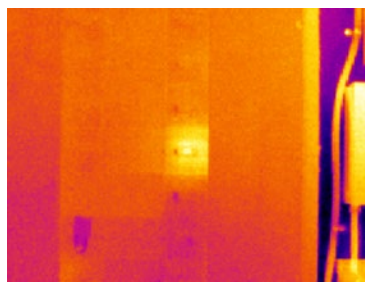
Boost your team's performance with 320 x 240 resolution. Infrared images taken with the TiS60+ capture smaller temperature differences from further away. If you are new to thermal imaging or if your camera is being used by a team with varying levels of thermal imaging experience, the TiS60+ offers easy-to-use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

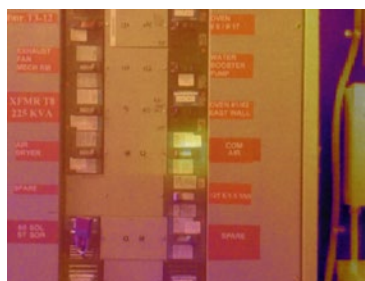
The location of an infrared target can be precisely identified even if the infrared contrast is low and there is very little structure in the infrared image.



Full infrared



50 % blending, picture-in-picture mode



50 % blending

Specifications

| Key Features | TiS60+ |
|---|--|
| Infrared resolution | 320 x 240 (76,800 pixels) |
| I FOV 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 compatibility | 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



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.



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.



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