**FLUKE**®

# TiS10, TiS20, TiS40, TiS45, TiS50, TiS55, TiS60, TiS65, TiS75 Thermal Imagers

**Fluke Connect® compatible**

## The Fluke Performance Series

Built for performance with features that help you easily and quickly identify problems before they become expensive failures.

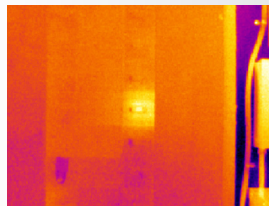Get improved resolution that delivers the right image quality you need to make the proper diagnosis:

- Up to 320 x 240 resolution
- Reduce the amount of time it takes to get an in-focus image with manual or fixed focus options
- Securely store and manage your images from anywhere
  - WiFi upload to Fluke Cloud™
  - Free storage with Fluke Cloud™
  - Share images in real-time with Fluke Connect
  - Removable 4GB micro SD card
  - Voice annotation*
- Edit and analyze images then create and send reports from your smartphone directly from the field with Fluke Connect
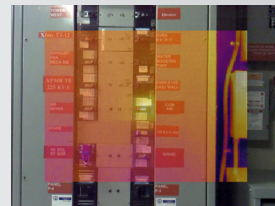
## 9 NEW CAMERAS. UP TO 320 X 240 RESOLUTION.

**RESOLUTION**

**TiS75**
320 x 240
D:S 504:1

**TiS65/60**
260x195
D:S 409:1

**TiS55/50**
220x165
D:S 346:1

**TiS45/40**
160x120
D:S 252:1

**TiS20**
120x90
D:S 189:1

**TiS10**
80x60
D:S 128:1

**FIELD OF VIEW**
35.7 ° x 26.8 °

## IR-Fusion® Technology

The instant blending of visible light and infrared, along with picture-in-picture mode, easily reveal both problem and location.

Full infrared

50% blending, picture-in-picture mode

50% blending

*Varies by model

# Detailed specifications

| | TiS75 | TiS65\|TiS60 | TiS55\|TiS50 | TiS45\|TiS40 | TiS20 | TiS10 |
|---|---|---|---|---|---|---|
| **Key features** | | | | | | |
| **IFOV (spatial resolution)** | 2.0 mRad | 2.4 mRad | 2.8 mRad | 3.9 mRad | 5.2 mRad | 7.8 mRad |
| Detector resolution | 320 x 240 | 260 x 195 | 220 x 165 | 160 x120 | 120 x 90 | 80 x 60 |
| Field of view | 35.7 ° x 26.8 ° | | | | | |
| Distance-to-Spot | 504:1 | 409:1 | 346:1 | 252:1 | 189:1 | 128:1 |
| **Wireless connectivity** | Yes | | | | | |
| Fluke Connect compatible | Yes (where available) | | | | | |
| **IR-Fusion® technology** | | | | | | |
| AutoBlend™ mode | 5 presets (0%, 25%, 50%, 75%, 100%) | | | | 3 presets (0%, 50%, 100%) | — |
| Picture-In-Picture (PIP) | 5 presets (0%, 25%, 50%, 75%, 100%) | | | | — | |
| Focus system | Manual focus, Minimum focus distance, 0.15 m (6 in) | Fixed focus, Minimum focus distance 0.45 m (1.5 ft) | Manual focus, Minimum focus distance, 0.15 m (6 in) | Fixed focus, Minimum focus distance 0.45 m (1.5 ft) / Manual focus, Minimum focus distance, 0.15 m (6 in) | Fixed focus, Minimum focus distance 0.45 m (1.5 ft) | |
| Ruggedized display | 3.5 inch (landscape) 320 x 240 LCD | | | | | |
| Rugged, ergonomic design for one-handed use | Yes | | | | | |
| Thermal sensitivity (NETD) | ≤ 0.08 °C at 30 °C target temp (80 mK) | | | ≤ 0.09 °C at 30 °C target temp (90 mK) | ≤ 0.10 °C at 30 °C target temp (100 mK) | ≤ 0.15 °C at 30 °C target temp (150 mK) |
| Temperature measurement range (not calibrated below –10 °C) | –20 °C to +550 °C (–4 °F to 1022 °F) | | –20 °C to +450 °C (–4 °F to 842 °F) | –20 °C to +350 °C (–4 °F to 662 °F) | | –20 °C to +250 °C (–4 °F to 482 °F) |
| Level and span | Smooth auto and manual scaling | | | | | |
| Fast auto toggle between manual and automodes | Yes | | | | | |
| Fast auto-rescale in manual mode | Yes | | | | | |
| Minimum span (in manual mode) | 2.5 °C | | | | | |
| Minimum span (in auto mode) | 5 °C | | | | | |
| Built-in digital camera (visible light) | 5MP | | | | | |
| Frame rate | 9 Hz or 30 Hz | 9 Hz | 9 Hz or 30 Hz | 9 Hz | 9 Hz or 30 Hz | 9 Hz |
| Laser pointer | Yes | | | | — | |
| **Data storage and image capture** | | | | | | |
| Extensive SD memory system | Internal 4GB memory and 4GB micro SD card | | | | Internal 4GB memory (optional 4GB micro SD card sold separately) | |
| 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); No analysis software required for non-radiometric (.bmp, .jpg) files | | | | | |
| Instant Upload | Upload captured images to Fluke Connect server with the use of a Wifi connection | | | | | |
| Memory review | Thumbnail review | | | | | |
| Software | SmartView® software –full analysis and reporting software and Fluke Connect® (where available) | | | | | |
| Export file formats with SmartView® software | BMP, DIB, GIF, JPE, JFIF, JPEG, JPG, PNG, TIF, and TIFF | | | | | |
| Voice annotation | Yes, Bluetooth Headset (sold separately) | | | | — | |
| IR-PhotoNotes™ | Yes (3 images) | | Yes (1 image) | — | | |
| Standard video recording | Yes | | — | | | |
| Radiometric video recording | Yes | | — | | | |
| Video file formats | Non-radiometric (MPEG - encoded .AVI) and fully radiometric (.IS3) | | — | | | |
| **Battery** | | | | | | |
| Batteries (field-replaceable, rechargeable) | Two lithium ion smart battery packs with five- segmentLED display to show charge level | | One lithium ion smart battery packs with five-segment LED display to show charge level | | | |
| Battery life | Four+ hours | | | | | |
| Battery charge time | 2.5 hours to full charge | | | | | |
| Battery charging system | Two-bay battery charger or in- imager charging | | In-imager charging (optional external charger sold separately) | | | |
| AC operation | AC operation with included power supply (100 V AC to 240 V AC, 50/60 Hz) | | | | | |
| **Temperature measurement** | | | | | | |
| 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 | Yes | – | Yes | – | Yes | – |

| | TiS75 | TiS65\|TiS60 | TiS55\|TiS50 | TiS45\|TiS40 | TiS20 | TiS10 |
|---|---|---|---|---|---|---|
| **Color palettes** | | | | | | |
| Standard palettes | 8: Ironbow, Blue-Red, High-Contrast, Amber, Amber Inverted, Hot Metal, Grayscale, Grayscale Inverted | | | 7: Ironbow, Blue-Red, High-Contrast, Amber, Amber Inverted, Hot Metal, Grayscale, Grayscale Inverted | 6: Ironbow, Blue-Red, High-Contrast, Amber, Hot Metal, Grayscale | 3: Ironbow, Blue-Red, Grayscale |
| Ultra Contrast™ palettes | 8: Ironbow Ultra, Blue-Red Ultra, High-Contrast Ultra, Amber Ultra, Amber Inverted Ultra, Hot Metal Ultra, Grayscale Ultra, Grayscale Inverted Ultra | – | | | | |
| **General specifications** | | | | | | |
| Color alarms (temperature alarms | High temperature, low temperature, Isotherms | | | High temperature, low temperature | – | |
| 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) | | | | | |
| Relative humidity | 10 % to 95 %, non-condensing | | | | | |
| Center-point temperature measurement | Yes | | | | | |
| Spot temperature | Yes | | | | | |
| User-definable spot markers | 3 | | 2 | 1 | – | |
| Center box | Expandable-contractible measurement box with  MIN-MAX-AVG temp | | | | – | |
| Safety standards | EN 61010-1: CAT none, pollution degree 2, EN 60825-1: Class 2, EN 60529, EN 62133 (lithium battery) | | | | | |
| Electromagnetic compatibility | EN 61326-1:2006, EN 55011: Class A, EN 61000-4-2, EN 61000-4-3 | | | | | |
| C Tick | IEC/EN 61326-1 | | | | | |
| US FCC | EN61326-1; FCC Part 5, EN 55011: Class A, EN 61000-4-2 | | | | | |
| Vibration and Shock | 2G, IEC 68-2-6 and 25G, IEC 68-2-29 | | | | | |
| Drop | Engineered to withstand 2 meter (6.5 feet) drop | | | | | |
| Size (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) | Fixed Focus .72 kg (1.6 lb), Manual focus .77 kg (1.7 lb) | | | | | |
| Enclosure rating | IP54 (protected against dust, limited ingress; protection against water spray from all directions) | | | | | |
| Warranty | Two-years (standard), extended warranties are available | | | | | |
| 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 | | | | | |

## Ordering information

**FLK-TiS75 30HZ** Industrial Commercial Thermal Imager
**FLK-TiS75 9HZ** Industrial Commercial Thermal Imager
**FLK-TiS65 30HZ** Industrial Commercial Thermal Imager
**FLK-TiS65 9HZ** Industrial Commercial Thermal Imager
**FLK-TiS60 9HZ** Industrial Commercial Thermal Imager
**FLK-TiS55 30HZ** Industrial Commercial Thermal Imager
**FLK-TiS55 9HZ** Industrial Commercial Thermal Imager
**FLK-TiS50 9HZ** Industrial Commercial Thermal Imager
**FLK-TiS45 30HZ** Industrial Commercial Thermal Imager
**FLK-TiS45 9HZ** Industrial Commercial Thermal Imager
**FLK-TiS40 9HZ** Industrial Commercial Thermal Imager
**FLK-TiS20 9HZ** Industrial Commercial Thermal Imager
**FLK-TiS10 9HZ** Industrial Commercial Thermal Imager

### Included

Thermal imagers are shipped with a universal AC power adapter, lithium ion smart battery (TiS75, TiS65/60 includes 2 each—other models 1 each), USB cable, Micro SD card (TiS75, TiS65/60, TiS55, TiS45), hard carrying case (TiS75, TiS65/60, TiS55/50, TiS45/40), soft transport bag, adjustable hand strap (TiS75, TiS65/60, TiS55/50, TiS45/40), and quick reference guide and safety sheet. Software is available via download at www.fluke.com/smartviewdownload. TiS75, TiS65/60 models include a two-bay battery charger.
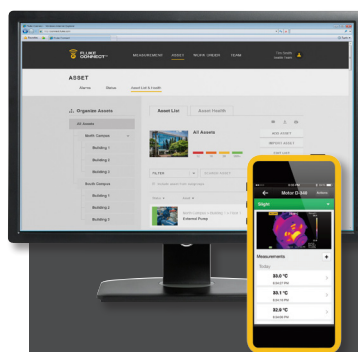
### Optional accessories

**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

### Fluke Connect modules

**FLK-a3000 FC** AC Current Clamp Module
**FLK-a3001 FC** iFlex™ AC Current Clamp Module
**FLK-a3002 FC** AC/DC Current Module
**FLK-a3003 FC** DC Wireless Clamp
**FLK-a3004 FC** DC Wireless Clamp
**FLK-v3000 FC** AC Voltage Module
**FLK-v3001 FC** DC Voltage Module
**FLK-t3000 FC** K-Type Temperature Module

RF connection time (binding time) may take up to 1 minute.



**Set up and sustain preventive maintenance practices with ease to help you oversee your complex world with the Fluke Connect® system of software and over 40 wireless test tools.**

- Maximize uptime and make confident maintenance decisions with data you can trust and trace.
- Save measurements to the Fluke Cloud™ and associate with an asset so your team can consult baseline, historical and current measurements from one location.
- Collaborate with ease by sharing your measurement data with team members with ShareLive™ video calls and emails.
- Wireless one-step measurement transfer with AutoRecord™ measurements eliminates transcription errors, clipboards, notebooks and multiple spreadsheets.
- Generate reports with multiple measurement types to provide status or next step recommendations.

Find out more and take a free trial at: www.flukeconnect.co.uk

**Fluke.** *Keeping your world up and running.*®

For a high performance, feature rich thermal imager that produces consistently in-focus images with a touch of a button EVERY, SINGLE, TIME, consider the Professional Series with LaserSharp® Auto Focus.