

TECHNICAL DATA

TiS75, TiS65, TiS60, TiS55, TiS50, TiS45, TiS40, TiS20 and TiS10 Infrared Cameras

The Fluke Performance Series



GOOD IMAGE QUALITY WITH UP TO 320 X 240 RESOLUTION

RESOLUTION

TiS75

320 x 240 D:S 504:1

TiS65/60

260 x 195 D:S 409:1

TiS55/50 220 x 165 D:S 346:1

TiS45/40 160 x 120 D:S 252:1

TiS20120 x 90
D:S 189:1

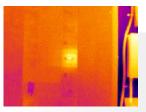
TiS10 80 x 60 D:S 126:1 **FIELD OF VIEW** 35.7 °H x 26.8 °V



Rugged. Accurate. Built to perform.

- Save time wirelessly sync images directly from your camera to
 the Fluke Connect* system, and attach to an asset record or work
 order. Having access to maintenance records simultaneously at the
 inspection site and from the office or an off-site location enables
 faster decision making and real time collaboration between team
 members
- Get the context of the visual and infrared details all in one precisely blended or picture-in-picture image with IR-Fusion* technology
- Get precisely focused images from as close as 15 cm (6 in) with manual focus, or choose fixed focus for faster images without the need to focus from 45 cm (1.5 ft) and beyond
- Monitor your battery charge and avoid an unexpected loss of power with the smart battery with LED charge indicator
- Get easy access to saved images with a removable SD card
- Digitally document critical information such as the location of the equipment or the motor nameplate with the infrared image using IR-PhotoNotes™ or voice annotation*

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



Full infrared



50% blending, picture-inpicture mode



50% blending



Detailed specifications

| | TiS75 | TiS75 TiS65 TiS60 | | TiS55 | TiS50 | TiS45 TiS40 | | TiS20 | TiS10 | | | | | | | |
|--|--|---|---|--|---|--|---|--|--|--|--|--|--|--|--|--|
| Key features | | | | | | | | | | | | | | | | |
| IFOV (spatial resolution) | 2.0 mRad 320 x 240 | 10 | | 2.8 mRad | | 3.9 mRad | | 5.2 mRad 120 x 90 | 7.8 mRad 80 x 60 | | | | | | | |
| Detector resolution | (76,800 pixels) | 260 x 195 (5 | 0,700 pixels) | 220 x 165 (36 | 6,300 pixels) | 160 x 120 (19 | 9,200 pixels) | (10,800 pixels) | (4,800 pixels | | | | | | | |
| Field of view | | | | , | 35.7 °H x 26.8 °V | | | | | | | | | | | |
| Distance to spot | 504:1 | 409:1 | | 346:1 | | 252:1 | | 189:1 | 126:1 | | | | | | | |
| Focus system | Manual focus, minimum focus distance 15 cm (~6 in) Fixed focus, minimum focus distance 45 cm (~18 in) | | | Manual focus, minimum focus distance 15 cm (~6 in) | Fixed focus, minimum focus distance 45 cm (~18 in) | focus distance | | us, minimum focu 45 cm (~18 in) | s distance | | | | | | | |
| Wireless connectivity | | Yes, to PC, | iPhone= and iPac | l® (iOS 4s and lat | | | iFi to LAN (wher | e 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 | | | | | | | | | | | | | | | |
| Fluke Connect® Instant Upload | Yes*, connect your camera to your building's WiFi network, and images taken automatically upload to the Fluke Connect® system for viewing on your smartphone or PC | | | | | | | | | | | | | | | |
| Fluke Connect® tool compatible | | Yes*, connects | wirelessly to sel | ect Fluke Connec Five simultar | t® enabled tools neous connection | | easurements on | camera screen. | | | | | | | | |
| IR-Fusion® technology | | | Yes, adds the co | ntext of the visib | le details to you | r infrared image | | | - | | | | | | | |
| AutoBlend™ mode | 100 %, 75 %, 50 %, 25 % IR plus full visible on camera; continuously variable in software | | | | | | | 100 %, 50 % IR and full visible on camera; continuously variable in software | 100 % IR and full visible on camera; continuously variable in software | | | | | | | |
| Picture-In-Picture (PIP) | 100 %, 75 %, 50 %, 25 % IR; continuously variable in software | | | | | | | Not available of tinuously varia | | | | | | | | |
| Ruggedized display | | | | 3.5 inch () | andscape) 320 : | 240 LCD | | tilluously valla | Die III soliwale | | | | | | | |
| Rugged, ergonomic design for | | | | , | Yes | | | | | | | | | | | |
| one-handed use | | | | | 165 | | | | 101000 | | | | | | | |
| Thermal sensitivity (NETD) | \leq 0.08 °C at 30 °C target temp (80 mK) \leq 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) | | | | | | | |
| Level and span | | | | Smooth | auto and manua | l scaling | | | | | | | | | | |
| Fast auto toggle between manual and auto modes | | | | | Yes | | | | | | | | | | | |
| Fast auto-rescale in manual mode | Yes | | | | | | | | | | | | | | | |
| Minimum span (in manual mode) | | | | | 2.5 °C (4.5 °F) | | | | | | | | | | | |
| Minimum span (in auto mode) Built-in digital camera (visible light) | | | | | 5 °C (9.0 °F) 5MP | | | | | | | | | | | |
| Frame rate | 30 Hz or 9 l | SMP SMP | | | | | | | | | | | | | | |
| Laser pointer | | | Y | es | | | | _ | | | | | | | | |
| Data storage and image capture | | | | | | | | | | | | | | | | |
| Extensive memory options | Internal 4GB memory and 4GB micro SD card Includes slot for optional micro SI | | | | | | | | | | | | | | | |
| | One-handed image capture, review, and save capability | | | | | | | | | | | | | | | |
| Image capture, review, save mechanism | | | Oil | e-handed image | capture, review, | and save capabi | , | | Non-radiometric (.bmp) or (.jpeg) or fully-radiometric (.is2); No analysis software required for non-radiometric (.bmp, .jpg) files | | | | | | | |
| | | | Non- | radiometric (.bm | p) or (.jpeg) or fu | lly-radiometric (. | is2); | | | | | | | | | |
| mechanism Image file formats Memory review | | Dedicate | Non- No analy ed memory view | radiometric (.bm rsis software required button for quick a | p) or (.jpeg) or fu nired for non-rac access to stored | lly-radiometric (. liometric (.bmp, . images; thumbna | is2); jpg) files iil and full scree | n review | | | | | | | | |
| mechanism Image file formats Memory review Software | | Dedicate | Non- No analy ed memory view | radiometric (.bm rsis software requ | p) or (.jpeg) or fu nired for non-rac access to stored | lly-radiometric (. liometric (.bmp, . images; thumbna | is2); jpg) files iil and full scree | n review | | | | | | | | |
| mechanism Image file formats Memory review Software Export file formats with SmartView® software | | | Non- No analy ed memory view SmartView® f | radiometric (.bm sis software requibutton for quick a ull analysis and r Bitmap (.b | p) or (.jpeg) or fu nired for non-rac access to stored eporting softwa omp), GIF, JPEG, | lly-radiometric (. liometric (.bmp, . images; thumbna re and Fluke Con PNG, TIFF | is2); jpg) files iil and full scree | n review | | | | | | | | |
| mechanism Image file formats Memory review Software Export file formats with SmartView® software Voice annotation | | 60 seconds max | Non- No analy ed memory view SmartView® f | radiometric (.bm rsis software requ button for quick a ull analysis and r Bitmap (.t time per image;) dset required (so | p) or (.jpeg) or fu nired for non-rac access to stored eporting softwa omp), GIF, JPEG, reviewable playl ld separately) | lly-radiometric (. liometric (.bmp, . images; thumbna re and Fluke Con PNG, TIFF | is2); jpg) files iil and full scree | n review | - | | | | | | | |
| mechanism Image file formats Memory review Software Export file formats with SmartView® software Voice annotation IR-PhotoNotes™ | | 60 seconds max Yes (3 images) | Non- No analy ed memory view SmartView® f SmartView® f SmartView® f SmartView® f SmartView® f | rradiometric (.bm rsis software requ button for quick a ull analysis and r Bitmap (.k | p) or (.jpeg) or fu nired for non-rac access to stored eporting softwa omp), GIF, JPEG, reviewable playl ld separately) | lly-radiometric (. liometric (.bmp, . images; thumbna re and Fluke Con PNG, TIFF | is2); jpg) files iil and full scree | n review | - | | | | | | | |
| mechanism Image file formats Memory review Software Export file formats with SmartView® software Voice annotation IR-PhotoNotes™ Video recording | Non-radiomet | 60 seconds ma: Yes (3 images) dard and radiom | Non- No analy ed memory view SmartView® f ximum recording Bluetooth hea netric oded .avi) and | radiometric (.bm rsis software requ button for quick a ull analysis and r Bitmap (.t time per image;) dset required (so | p) or (.jpeg) or fu nired for non-rac access to stored eporting softwa omp), GIF, JPEG, reviewable playl ld separately) | lly-radiometric (. liometric (.bmp, . images; thumbna re and Fluke Con PNG, TIFF | is2); jpg) files iil and full scree | n review | | | | | | | | |
| mechanism Image file formats Memory review Software Export file formats with SmartView® software Voice annotation IR-PhotoNotes™ | Non-radiomet ful Yes, see the liv on your PC c hotspot, or Wif ware on a PC; | 60 seconds ma: Yes (3 images) dard and radiom | Non- No analy ed memory view SmartView® f kimum recording Bluetooth hea tetric oded .avi) and s3) camera display ia USB, WiFi artView® soft- bot to the Fluke | radiometric (.bm rsis software requ button for quick a ull analysis and r Bitmap (.t time per image;) dset required (so | p) or (.jpeg) or fu nired for non-rac access to stored eporting softwa omp), GIF, JPEG, reviewable playl ld separately) | lly-radiometric (. liometric (.bmp, . images; thumbna re and Fluke Con PNG, TIFF | is2); jpg) files iil and full scree | n review | - | | | | | | | |

 $^{{}^*\!}Fluke\ Connect \circledR\ system\ is\ not\ available\ in\ all\ countries.\ Please\ check\ availability\ with\ your\ authorized\ Fluke\ distributor.$



Detailed specifications

| | TiS75 | TiS65 | TiS60 | TiS55 | TiS50 | TiS45 | TiS40 | TiS20 | TiS10 | |
|---|---|---|------------------|------------------|------------------------|-------------------------------------|---|---|---|--|
| Battery | | | | | | | | | | |
| Batteries (field-replaceable, rechargeable) | Two lithium ion smart battery pack with five- segment LED display to show charge level CD display to show charge level LED display to show charge level | | | | | | | | | |
| Battery life | | Four+ hours continuous use per battery pack | | | | | | | | |
| Battery charge time | | 2.5 hours to full charge | | | | | | | | |
| Battery charging system | Two-bay battery charger or in-imager charging. Optional 12 V automotive charging adapter so charging adapter | | | | | | | | | |
| AC operation | | AC operation with included power supply (100 V AC to 240 V AC, 50/60 Hz) | | | | | | | | |
| Power saving | User selectable sleep and power off modes | | | | | | | | | |
| Temperature measurement | | | | | | | | | | |
| Temperature measurement range (not calibrated below -10 °C) | -20 °C to +550 °C (-4 °F to 1022 °F) | | | | 0 +450 °C 0 842 °F) | -20 °C to +350 °C (-4 °F to 662 °F) | | | -20 °C to +250 °C (-4 °F to 482 °F) | |
| Accuracy | | ± 2 °C or 2 % (at 25 °C nominal, whichever is greater) | | | | | | | | |
| On-screen emissivity correction | | | | Yes (| both value and t | able) | | | | |
| On-screen reflected background temperature compensation | | Yes | | | | | | | | |
| On-screen transmission correction | Y | es | _ | Yes | _ | Yes | | _ | | |
| Color palettes | | | | | | | | | | |
| Standard palettes | 8: Irondow, Blue-Red, High Contrast, Amber, Amber Inverted, Hot Metal Grayscale Grayscale Inverted Contrast, F | | | | | Contrast, Aml | lue-Red, High ber, Hot Metal, yscale 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 (within range) High temperature, low temperature | | | | | | - | - | | |
| Infrared spectral band | | 7.5 μm to 14 μm | | | | | | | | |
| Operating temperature | | | | -10 °C to | +50 °C (14 °F to | o 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 | | | 2 | | 1 | - | - | |
| Center box | Expandable-contractible measurement box with MIN-MAX-AVG temp display | | | | | | | | | |
| 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 | | | EN6 | 31326-1; FCC Par | | | -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) | | | | 6.7 cm x 10.1 cm | | | | | | |
| Weight (battery included) | | IDC4 | | xed Focus .72 kg | | | | 4:1 | | |
| Enclosure rating | | IP54 (| protected agains | | | | - | ections) | | |
| Warranty | | Two-years (standard), extended warranties are available | | | | | | | | |
| Recommended calibration cycle Supported languages | Czech, Du | Two-years (assumes normal operation and normal aging) Czech, Dutch, English, Finnish, French, German, Hungarian, Italian, Japanese, Korean, Polish, Portuguese, Russian, Simplified Chinese, Spanish, Swedish, Traditional Chinese, and Turkish | | | | | | | | |
| | | | S | panish, Swedish | i, i raditional Chi | nese, and Turkis | 311 | | | |

 $^{{\}rm *Fluke\ Connect @\ system\ is\ not\ available\ in\ all\ countries.\ Please\ check\ availability\ with\ your\ authorized\ Fluke\ distributor.}$

Ordering information

FLK-TiS75 30HZ Infrared Camera FLK-TiS75 9HZ Infrared Camera FLK-TiS65 30HZ Infrared Camera FLK-TiS65 9HZ Infrared Camera FLK-TiS60 9HZ Infrared Camera FLK-TiS55 30HZ Infrared Camera FLK-TiS55 9HZ Infrared Camera FLK-TiS50 9HZ Infrared Camera FLK-TiS45 30HZ Infrared Camera FLK-TiS45 9HZ Infrared Camera FLK-TiS40 9HZ Infrared Camera

FLK-TiS20 9HZ Infrared Camera FLK-TiS10 9HZ Infrared Camera

Included

Infrared camera; AC power supply (including universal AC adapters); two-bay smart battery charger (TiS75, TiS65, TiS60 only); rugged lithium ion smart battery (TiS75, TiS65/60 include 2 each-other models 1 each); USB cable; 4 GB micro SD card (TiS75, TiS65/60, TiS55/50, TiS45 only); rugged, hard carrying case (TiS75, TiS65/60, TiS55/50; TiS45/40); soft transport bag; adjustable hand strap (TiS75, TiS65/60, TiS55/50, TiS45/40). Available by free download: SmartView® 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

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.

The Professional Series

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.







Preventive maintenance simplified. Rework eliminated.

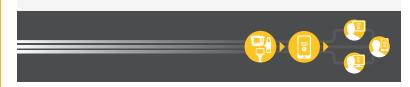
Save time and improve the reliability of your maintenance data by wirelessly syncing measurements using the Fluke Connect® system.

- 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.
- · Access baseline, historical and current measurements by asset.
- · Move away from clipboards, notebooks and multiple spreadsheets with a wireless one-step measurement transfer.
- Share your measurement data using ShareLive™ video calls and emails.
- The Fluke Performance Series is part of a growing system of connected test tools and equipment maintenance software. Visit the website to learn more about the Fluke Connect® system.

Find out more at **flukeconnect.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 5 GB of storage is free. Phone support details can be viewed at fluke.com/phones.

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

Fluke. Keeping your world up and running.®

Fluke Corporation PO Box 9090, Everett, WA 98206 U.S.A. Fluke Europe B.V.

PO Box 1186, 5602 BD Eindhoven, The Netherlands

Modification of this document is not permitted without written permission from Fluke Corporation. For more information call:

In the U.S.A. (800) 443-5853 or Fax (425) 446-5116 In Europe/M-East/Africa +31 (0)40 267 5100 or Fax +31 (0)40 267 5222 In Canada (800)-36-FLUKE or Fax (905) 890-6866 From other countries +1 (425) 446-5500 or Fax +1 (425) 446-5116 Web access: http://www.fluke.com

©2016 Fluke Corporation. Specifications subject to change without notice. 4/2016 6005299e-en

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Environmental Test Equipment category:

Click to view products by Fluke manufacturer:

Other Similar products are found below:

CW40 F150C10E3DRT F150LTC20 F150CD10E2 F150L75 F150LRS S-11 FLUKE-LDG 382153 FM100 RH210 382253 MO290-P
GEO-CABLE-REEL-50M T197914 RD300-L IR11BD IR11GM IR12GM IR21BD IR31CE IR32BC IR33BC MP7217TC NGM-1 SGX7NH3 UT381 F150-SLC50 AW-CO-1000 AW-NmHc-100 3.000.401 AX-7535 CS-9S6SS-A P 2800 A P 2801 P 2802 P 5039 P 5130 P
5055 P 5060 P 5065 P 5086 P 5090 P 5110 P 5115 P 5135 P 5140 P 5145 P 5150 P 5160