

## Ti400, Ti300 and Ti200 Thermal Imagers with LaserSharp® Auto Focus

Get accurate readings and consistently in-focus images

### Technical Data



Now compatible with Fluke Connect™ Mobile App

#### Fluke Thermal Imagers Experience. Performance. Confidence.

Quickly capture an in-focus image with the pull of a trigger and wirelessly share measurements with your team anytime, anywhere with the **Fluke Connect™ ShareLive™ video call**.

- Quickly **get accurate readings and in-focus images** with **LaserSharp® Auto Focus**
- **Save Reporting Time.** Make better decisions faster than before. Organize your measurements by asset in one location with **EquipmentLog™** history.
- **Brilliantly detailed quality images.** Pixel for pixel the best spatial resolution available.
- **Precisely blended visual and infrared images** with crucial details to assist in identifying potential problems—**IR-Fusion®** technology with **AutoBlend™** mode
- **Standard and radiometric video recording and video streaming\***
- **Text and voice recording/annotation** allows you to save additional details to image files
- **Extensive memory options**—Removable micro SD memory card, on-board flash memory, save-to-USB capability, direct download via USB-to-PC connection

\* Firmware updates for these features are not available yet in all countries. Users notified via SmartView

### SUPERIOR IMAGE QUALITY

#### SPATIAL RESOLUTION

Ti400  
1.31 mRad

Ti300  
1.75 mRad

Ti200  
2.09 mRad

#### RESOLUTION

Ti400  
320x240 (76,800 pixels)

Ti300  
240x180 (43,200 pixels)

Ti200  
200x150 (30,000 pixels)

#### FIELD OF VIEW

Ti400, Ti300, Ti200  
24 °H x 17 °V

#### IR-Fusion® Technology with AutoBlend™ Mode



Precisely blended visual and infrared images with crucial details to assist in identifying potential problems.



Three-phase Full Visible



Three-phase Full Infrared



Three-phase AutoBlend Mode

|   | Ti400   | Ti300                                 | Ti200                                   |
|---|---|---------------------------------------|---|
| <b>Key features</b>   |   |                                       |   |
| <b>IFOV with standard lens (spatial resolution)</b>         | 1.31 mRad   | 1.75 mRad                             | 2.09 mRad                               |
| Resolution  | 320x240 (76,800 pixels)   | 240X180 (43,200 pixels)               | 200X150 (30,000 pixels)                 |
| Field of view   | 24 °H x 17 °V   |                                       |   |
| Minimum focus distance                                      | 15 cm (approx. 6 in)  |                                       |   |
| <b>IFOV with optional telephoto lens</b>                    | 0.65 mRad   | 0.87 mRad                             | 1.05 mRad                               |
| Field of view   | 12 °H x 9 °V  |                                       |   |
| Minimum focus distance                                      | 45 cm (approx. 18 in)   |                                       |   |
| <b>IFOV with optional wide-angle lens</b>                   | 2.62 mRad   | 3.49 mRad                             | 4.19 mRad                               |
| Field of view   | 46 °H x 34 °V   |                                       |   |
| Minimum focus distance                                      | 15 cm (approx. 6 in)  |                                       |   |
| LaserSharp® Auto Focus                                      | Yes, for consistently in-focus images. Every. Single. Time.   |                                       |   |
| Advanced manual focus                                       | Yes   |                                       |   |
| <b>Wireless connectivity</b>                                | Yes, to PC, iPhone® and iPad® (iOS 4s and later), Android™ 4.3 and up, and WiFi to LAN*   |                                       |   |
| Fluke Connect™ App compatible*                              | Yes* (where available)  |                                       |   |
| CNX™ Wireless System*                                       | Yes* (where available)  |                                       |   |
| <b>IR-Fusion® technology</b>                                | Yes   |                                       |   |
| AutoBlend™ mode   | Yes   |                                       |   |
| Picture-In-Picture (PIP)                                    | Yes   |                                       |   |
| Ruggedized touchscreen display (Capacitive)                 | 8.9 cm (3.5 in) diagonal landscape color VGA (640 x 480) LCD with backlight   |                                       |   |
| Rugged, ergonomic design for one-handed use                 | Yes   |                                       |   |
| Thermal sensitivity (NETD)                                  | ≤ 0.05 °C at 30 °C target temp (50 mK)  |                                       | ≤ 0.075 °C at 30 °C target temp (75 mK) |
| Temperature measurement range (not calibrated below -10 °C) | -20 °C to +1200 °C<br>(-4 °F to +2192 °F)   | -20 °C to +650 °C (-4 °F to +1202 °F) |   |
| <b>Level and span</b>                                       | Smooth auto and manual scaling  |                                       |   |
| Fast auto toggle between manual and auto modes              | Yes   |                                       |   |
| Fast auto-rescale in manual mode                            | Yes   |                                       |   |
| Minimum span (in manual mode)                               | 2.0 °C (3.6 °F)   |                                       |   |
| Minimum span (in auto mode)                                 | 3.0 °C (5.4 °F)   |                                       |   |
| Built-in digital camera (visible light)                     | 5 megapixel industrial performance  |                                       |   |
| Frame rate  | 9 Hz  |                                       |   |
| Laser pointer   | Yes   |                                       |   |
| Torch   | Yes   |                                       |   |
| <b>Data storage and image capture</b>                       |   |                                       |   |
| Extensive memory options                                    | Removable micro SD memory card, on-board flash memory, save-to-USB capability, direct download via USB-to-PC connection                       |                                       |   |
| Image capture, review, save mechanism                       | One-handed image capture, review, and save capability   |                                       |   |
| File formats  | Non-radiometric (.bmp) or (.jpeg) or fully-radiometric (.is2); No analysis software required for non-radiometric (.bmp, .jpg and .avi*) files |                                       |   |
| Memory review   | Thumbnail view navigation and review selection  |                                       |   |
| Software  | SmartView® software, Fluke Connect™, and SmartView® Mobile App—full analysis and reporting software   |                                       |   |
| Export file formats with SmartView® software                | BMP, DIB, GIF, JPE, JFIF, JPEG, JPG, PNG, TIF, and TIFF   |                                       |   |
| Voice annotation  | 60 seconds maximum recording time per image; reviewable playback on camera  |                                       |   |
| IR-PhotoNotes™  | Yes   |                                       |   |
| Text annotation*  | Yes   |                                       |   |
| Video recording*  | Standard and Radiometric  |                                       |   |
| Streaming video   | Via USB to PC and HDMI to HDMI compatible screen  |                                       |   |
| File formats video*   | Non-radiometric (MPEG - encoded .AVI) and fully-radiometric (.IS3)*   |                                       |   |
| Auto capture (temperature and interval)*                    | Yes*  |                                       |   |

| Remote control and operation (for special and advanced applications)   | Yes   | –     |       |
|--|---|-------|-------|
|  | Ti400   | Ti300 | Ti200 |
| <b>Battery</b>   |   |       |       |
| Batteries (field-replaceable, rechargeable)  | Two lithium ion smart battery packs with five-segment LED display to show charge level  |       |       |
| Battery life   | Four+ hours continuous use per battery pack (assumes 50% brightness of LCD and average usage)   |       |       |
| Battery charge time  | 2.5 hours to full charge  |       |       |
| AC battery charging system   | Two-bay AC battery charger (110 V AC to 220 V AC, 50/60 Hz) (included), or in-imager charging. AC mains adapters included in 9 Hz versions. Optional 12 V automotive charging adapter.    |       |       |
| AC operation   | AC operation with included power supply (110 V AC to 220 V AC, 50/60 Hz). AC mains adapters included.   |       |       |
| Power saving   | User selectable sleep and power off modes   |       |       |
| <b>Temperature measurement</b>   |   |       |       |
| Accuracy   | ± 2 °C or 2% (at 25 °C nominal, whichever is greater)   |       |       |
| On-screen emissivity correction  | Yes (both number and table)   |       |       |
| On-screen reflected background temperature compensation  | Yes   |       |       |
| On-screen transmission correction  | Yes   |       |       |
| <b>Color Palettes</b>  |   |       |       |
| 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, Amber Inverted Ultra, Hot Metal Ultra, Grayscale Ultra, Grayscale Inverted Ultra                                      |       |       |
| <b>General specifications</b>  |   |       |       |
| Color alarms (temperature alarms)  | High-temperature, low-temperature, and isotherm   |       |       |
| Infrared spectral band   | 7.5 µm to 14 µm (long wave)   |       |       |
| 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 markers   | User selectable hot spot and cold spot markers, 3 user definable spot markers on camera and in Smartview®   |       |       |
| Center box (MIN-MAX-AVG)   | Expandable-contractable measurement box with MIN-MAX-AVG temp   |       |       |
| Safety standards   | UL 61010-1:2012 CAN/CSA-C22.2 No.61010-1-12 IEC 61010-1 3rd Edition (2010)  |       |       |
| Electromagnetic compatibility  | EN 61326-1:2006 IEC 61326-1:2005  |       |       |
| C Tick   | IEC/EN 61326-1  |       |       |
| US FCC   | CFR 47, Part 15 Subpart B Class B   |       |       |
| Vibration  | 0.03 g <sup>2</sup> /Hz (3.8 grms), 2.5g IEC 68-2-6   |       |       |
| Shock  | 25 g, IEC 68-2-29   |       |       |
| Drop   | Engineered to withstand 2 meter (6.5 feet) drop with standard lens  |       |       |
| Size (H x W x L)   | 27.7 cm x 12.2 cm x 16.7 cm (10.9 in x 4.8 in x 6.5 in)   |       |       |
| Weight (battery included)  | 1.04 Kg (2.3 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 |       |       |
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**Ordering information**

**FLK-Ti400 9Hz** Thermal Imager, 9 Hz  
**FLK-Ti300 9Hz** Thermal Imager, 9 Hz  
**FLK-Ti200 9Hz** Thermal Imager, 9 Hz

**Included**

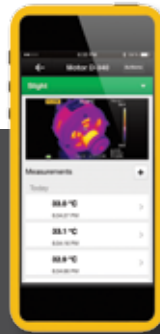
Thermal imager with standard infrared lens; ac power supply and battery pack charger (including main adapters); two, rugged lithium ion smart battery packs; USB cable; HDMI video cable; SmartView® software available via free download; rugged, hard carrying case; soft transport bag; adjustable hand strap; warranty registration card.

**Optional accessories**

**FLK-LENS/TELE2** Infrared Telephoto Lens (2X magnification)  
**FLK-LENS/WIDE2** Infrared Wide Angle Lens  
**TI-CAR-CHARGER** Car Charger  
**FLK-TI-VISOR3** Sun Visor  
**BOOK-ITP** Introduction to Thermography Principles Book  
**TI-TRIPOD3** Tripod Mounting Accessory  
**FLK-Ti-SBP3** Additional Smart Battery  
**FLK-Ti-SBC3** Additional Smart Battery Charger

Visit the Fluke website to get complete details on these products or ask your local Fluke sales representative.

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



Built with  
**FLUKE  
 CONNECT™**

**See it. Save it. Share it.  
 All the facts, right in the field.**

Fluke Connect with ShareLive™ is the only wireless measurement system that lets you stay in contact with your entire team without leaving the field. The Fluke Connect mobile app is available for Android™ (4.3 and up) and iOS (4s and later) and works with over 20 different Fluke products—the largest system of connected test tools in the world. And more are on the way. Go to the Fluke website to find out more.

**Download the app at:**



Smart phone not included with purchase.



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