

TECHNICAL DATA

## Fluke TiS20+/TiS20+ MAX Thermal Imagers



### Save time with the right level of infrared and analysis

- Continuous touchscreen IR-Fusion™, slide your finger across the screen to adjust the setting.
- 120 x 90 infrared resolution (10,800 pixels)
- 3.5" LCD touchscreen display for easy troubleshooting
- Automatically sort images with Fluke Connect Asset Tagging

### Rugged

Whether you are finding an uneven load on a switchgear or inspecting a ventilation system, the Fluke TiS20+ and TiS20+ MAX helps you detect issues quickly.

- Can withstand drop up to 2 meter
- Water and dust resistant—IP54 enclosure rating

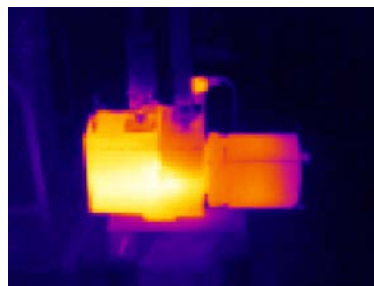
### IR-Fusion™

Fluke IR-Fusion technology combines visible and infrared images for faster inspections and better reporting. With a single touch, you can scan from full infrared to full visible images to pinpoint the location of an issue.

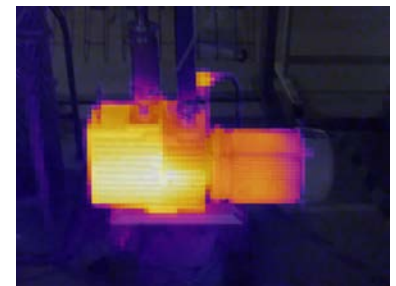


### FLUKE CONNECT™ ASSET TAGGING

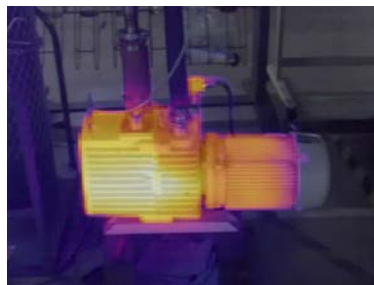
Eliminate hours at the computer organizing your thermal images, let Asset Tagging do all that work for you. No more dragging and dropping or renaming files in the office, just scan a QR code on your asset, capture your thermal images and they automatically are sorted by asset. Start spending your time analyzing your images and creating reports instead of sorting your files one at a time.



Full infrared image\*



75 % blended image\*



50 % blended image\*



Full visible image

\*Simulated thermal images

## Specifications

| Key features  | TiS20+/TiS20+ MAX  |
|---|--|
| Infrared resolution                                       | 120 x 90 (10,800 pixels)   |
| IFOV (spatial resolution)                                 | 7.6 mRad, D:S 130:1  |
| Field of view   | 50° H x 38° V  |
| Minimum focus distance                                    | 50cm (20 inches)   |
| Focus system  | Fixed focus  |
| Data transfer   | Mini USB used to transfer image to PC  |
| Wireless connectivity                                     | Yes, (802.11 b/g/n (2.4 GHz))  |
| Fluke Connect instant upload                              | Yes, connect your camera to your building's WiFi network (802.11 b/g/n (2.4 GHz)), and images taken automatically upload to the Fluke Connect system or your local server for storage and viewing on your PC |
| Image quality   |  |
| Level and span  | Smooth auto and manual scaling   |
| IR-Fusion technology                                      | AutoBlend continuous 0 % to 100 %. Adds the context of the visible details to your infrared image  |
| Display   | 3.5" LCD touchscreen (landscape)   |
| Display resolution  | 320 x 240 LCD  |
| Thermal sensitivity (NETD)                                | 60 mK  |
| Frame rate  | 9 Hz   |
| Data storage and image capture                            |  |
| Memory  | Internal 4GB memory (includes slot for optional micro SD card up to 32GB)  |
| Image capture, review, save mechanism                     | One-handed image capture, review, and save capability  |
| Image file formats  | Non-radiometric (jpeg), or fully radiometric (.is2); no analysis software required for non-radiometric (jpeg) files  |
| Software  | Fluke Connect desktop software—full analysis and reporting software with access to the Fluke Connect system  |
| Export file formats with software                         | .bmp, .dib, .jpg, .tif, .tiff  |
| Battery   |  |
| Batteries (field-replaceable, rechargeable)               | Lithium ion smart battery pack with five-segment LED display to show charge level  |
| Battery life  | ≥ 5 hours continuous (without WiFi)  |
| Battery charging time                                     | 2.5 hours to full charge   |
| Battery charging system                                   | 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  | Automatic Shutdown: 5, 10, 15 and 20 minutes or never  |
| Temperature measurement                                   |  |
| Temperature measurement range (not calibrated below 0 °C) | TiS20+: -20 °C to 150 °C (-4 °F to 302 °F)<br>TiS20+ MAX: -20 °C to 400°C (-4°F to 752 °F)   |
| Accuracy  | Target temp at or over 0 °C: Accuracy: ± 2 °C or ± 2 % at 25 °C, whichever is the greater.   |
| On-screen emissivity correction                           | Yes, material table  |
| On-screen reflected background temperature compensation   | Yes  |
| Center-point temperature                                  | Yes  |
| Spot temperature  | Hot and cold spot markers  |

**Specifications** *continued*

| Key features                  | TiS20+/TiS20+ MAX   |
|-------------------------------|---|
| <b>Color palettes</b>         |   |
| Standard palettes             | 6: Ironbow, Blue-Red, High Contrast, Amber, Hot Metal, Grayscale  |
| <b>General specifications</b> |   |
| Infrared spectral band        | 8 µm to 14 µm (long wave)   |
| Operating temperature         | -10 °C to 50 °C (14 °F to 122 °F)   |
| Storage temperature           | -40 °C to 70 °C (-40 °F to 158 °F)  |
| Relative humidity             | 95 % non-condensing   |
| Safety                        | IEC 61010-1: Pollution Degree 2   |
| Electromagnetic compatibility | EN 61326-1, CISPR 11: Group 1, Class A  |
| US FCC                        | CFR, Part 15C   |
| Vibration and shock           | 10 Hz to 150 Hz, 0.15 mm, IEC 60068-2-6; 30 g, 11 ms, IEC 60068-2-27  |
| Drop                          | Engineered to withstand 2 meter 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                        | 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)  |
| 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-TiS20+ 9HZ** 120 x 90 Thermal Imager; 9 HZ  
**FLK-TiS20+ 9HZ/CN** 120 x 90 Thermal Imager; 9 HZ; China  
**FLK-TiS20+ MAX 9HZ** 120 x 90 Thermal Imager; 9 HZ  
**FLK-TiS20+ MAX 9HZ/CN** 120 x 90 Thermal Imager; 9 HZ; China

**Included**

Infrared camera; AC power supply (including universal AC adapters); rugged lithium ion smart battery, USB cable; soft transport bag. Available by free download: Fluke Connect Desktop software and user manual.

**Optional accessories**

**FLK-TIS-MSD** Mini SD card  
**FLUKE-TIX5XX HAND** Handstrap  
**FLK-TI-SBP3** Additional Smart Battery  
**FLK-TI-SBC3B** Smart Battery Charger  
**TI-CAR CHARGER** Car Charger

Visit your local Fluke website or contact your local Fluke representative for more information.



**Share images from the field. Collaborate and report immediately.**

Get the most out of your TiS20+ and TiS20+ MAX. Download Fluke Connect today. Save time by sending your images to the team while working in the field. The Fluke Infrared Cameras are part of a growing system of connected test tools and equipment maintenance software.

