

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

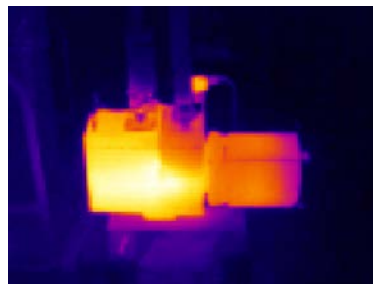
## IR-Fusion™

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.

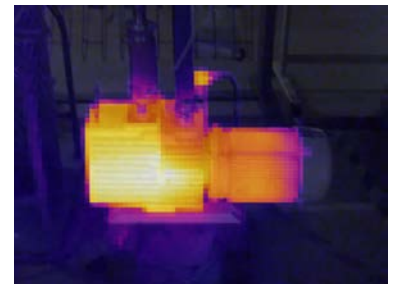


### FLUKE CONNECT™ ASSET TAGGING

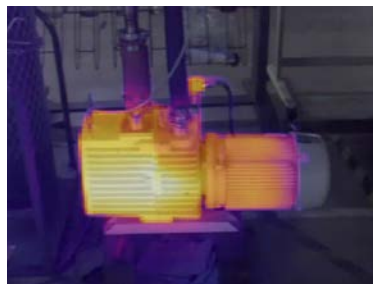
Eliminate hours at the computer organizing your thermal images, let Asset Tagging do all that work for you. No more dragging and dropping or renaming files in the office, just scan a QR code on your asset, capture your thermal images and they automatically are sorted by asset. Start spending your time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

## Specifications

Key features	TiS20+/TiS20+ MAX
Infrared resolution	120 x 90 (10,800 pixels)
I FOV (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) 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.

