

TECHNICAL DATA

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



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:

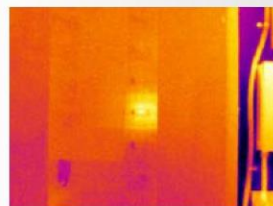
- Up to 320 x 240 resolution
- Reduce the amount of time it takes to get an in-focus image with manual or fixed focus options
- Securely store and manage your images from anywhere
 - WiFi upload to Fluke Cloud™
 - Free storage with Fluke Cloud™
 - Share images in real-time with Fluke Connect
 - Removable 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	FIELD OF VIEW
TiS75 320 x 240 D:S 504:1	35.7° x 26.8°
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	

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 x 120	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)
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)	
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-segment LED 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	–

Detailed specifications

	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

Infrared cameras 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.

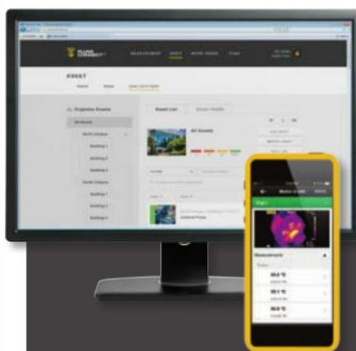
Optional accessories

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: flukeconnect.com



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Fluke Connect is not available in all countries. Check with your local Fluke representative for information.

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

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: www.fluke.com

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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.