

**TECHNICAL DATA** 

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



## 9 NEW CAMERAS. UP TO 320 X 240 RESOLUTION.

### RESOLUTION

TiS75

320 x 240 D:S 504:1

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 **FIELD OF VIEW** 35.7 ° x 26.8 °



### **The Fluke Performance Series**

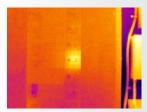
Built for performance with features that help you easily and quickly identify problems before they become expensive failures.

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

### IR-Fusion® Technology

The instant blending of visible light and infrared, along with picture-in-picture mode, easily reveal both problem and location.







50% blending, picture-inpicture mode



50% blending

<sup>\*</sup>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	320 x 240 260 x 195		220	k 165	160	k120	120 x 90	80 x 60			
Field of view		·		35.7° x 26.8°		·						
Distance-to-Spot	504:1	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	3 presets 5 presets (0%, 25%, 50%, 75%, 100%) (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)  Minimum focus distance 0.45 m (1.5 ft)			Manual focus, Minimum fo- cus distance, 0.15 m (6 in)	Fixed focus, Minimum focus distance 0.45 m (1.5 ft)	Manual focus, Minimum fo- cus distance, 0.15 m (6 in)  Fixed focus, Minimum focus distanc (1.5 ft)		stance 0.45 m				
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 te	mp (80 mK)		≤ 0.09 °C at 30 (90)		≤ 0.10 °C at 30 °C target temp (100 mK)	≤ 0.15 °C at 30 °C target temp (150 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		-20 °C to +350 °C (-4 °F to 662 °F)		-20 °C to +250 °C (-4 °F to 482 °F)			
Level and span	Smooth auto and manual scaling								,			
Fast auto toggle between manual and automodes	·											
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 01	30 Hz	9 Hz	9 Hz or 30 Hz	9 Hz	9 Hz or 30 Hz		9 Hz				
Laser pointer			Y	es				_				
Data storage and image capture	:											
Extensive SD memory system	Internal 4GB memory and 4GB micro SD card (optional 4GB micro SD card sold sep											
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		SmartV	iew® software -	full analysis and	reporting softwa	re and Fluke Con	nect® (where a	vailable)				
Export file formats with SmartView® software	BMP, DIB, GIF, JPE, JFIF, JPEG, JPG, PNG, TIF, and TIFF											
Voice annotation			Yes, Blueto	oth Headset (sold				_	_			
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- segmentLED display to show charge level Cne 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  Two-bay battery charger or											
Battery charging system	in-imager charging (optional external charger sold separately)											
AC operation			AC operation	with included p	ower supply (100	O V AC to 240 V A	.C, 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	Ye	es	-	Yes	-	Yes		-				



### **Detailed specifications**

	TiS75	TiS65 TiS60	TiS55 TiS50	TiS45 TiS40	TiS20	TiS10				
Color palettes										
Standard palettes	8: Iron	nbow, Blue-Red, High-Contrast, Hot Metal, Grayscale, Gray		7: Ironbow, Blue-Red, High- Contrast, Amber, Amber Inverted, Hot Metal, Grayscale, Grayscale Inverted	6: Ironbow, Blue-Red, High-Con- trast, Amber, Hot Metal, Grayscale	3: Ironbow, Blue-Red, Grayscale				
Ultra Contrast™ palettes	Ultra, Ambe	a, Blue-Red Ultra, High-Contras r Ultra, Amber Inverted Ultra, tra, Grayscale Ultra, Grayscale Inverted Ultra	st	-						
General specifications										
Color alarms (temperature alarms		High temperature, low tempe	rature, 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									
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, Du	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 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.

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.







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:

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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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