

**TECHNICAL DATA** 

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



#### **8 NEW CAMERAS. UP TO** 2.5 TIMES<sup>1</sup> MORE PIXELS.

RESOLUTION TiS65/60 260x195 D:S 417:1

TiS55/50 220x165 D:S 353:1

TiS45/40 160x120 D:S 257:1

TiS20 120x90 D:S 193:1

**TiS10** 80x60 D:S 128:1

**FIELD OF VIEW** 35.7 ° x 26.8 °



## Compatible with Fluke Connect<sup>®</sup> Mobile App

### **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 2.5<sup>1</sup> times more pixels and 70%<sup>1</sup> better D:S
- 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<sup>3</sup>
  - WiFi upload to Fluke Cloud™
  - Free storage<sup>2</sup> with Fluke Cloud<sup>™</sup>
  - Share images in real-time with Fluke Connect®
  - Removable 4GB micro SD card
  - Voice annotation
- Create and email reports from the jobsite with Fluke Connect®, eliminating the need to go back to the office to process reports

### **IR-Fusion**<sup>®</sup> Technology

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

75 % blending

com



<sup>1</sup>Compared to the Fluke Ti125 infrared camera.





Full infrared picture-in-picture

sales@GlobalTestSupply.com

1.888.610.7664

### **Detailed specifications**



	TiS65 TiS60	TIS65 TIS60 TIS55 TIS50		TiS45 <sup> </sup> TiS40		TiS20	TiS10		
Key features									
IFOV (spatial resolution)	2.4 mRad	-	nRad	3.9 mRad		5.2 mRad	7.8 mRad		
Detector resolution	260 x 195	220	x 165	160 x120		120 x 90	80 x 60		
Field of view	417.1		35.7 ° x	1		100.1	100.1		
Distance-to-Spot	417:1	35	3:1		7:1	193:1	128:1		
Wireless connectivity			Yes						
Fluke Connect® app compatible			Yes (where a	available)					
IR-Fusion® technology						2 progota			
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 mFixed focus, Minimum focu distance 0.45 m(6 in)(1.5 ft)		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 f				
Ruggedized display			3.5 inch (landscape	e) 320 x 240 LCD					
Rugged, ergonomic design for			Yes	,					
one-handed use						1			
Thermal sensitivity (NETD)	≤ 0.08 °C at 30	'C target temp (80 mK	K) ≤ 0.09 °C at 30 °C target temp (90 mK)			≤ 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 °		9 + 450 °C 9 842 °F)	-20 °C to +350 °C (-4 °F to 662		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 °(	0					
Built-in digital camera (visible light)			5M1	P					
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 separat								
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 Memory review	Upload captured images to Fluke Connect server with the use of a Wifi connection								
Software	Thumbnail review								
Export file formats with SmartView® software	SmartView® software -full analysis and reporting software and Fluke Connect® (where available)   BMP, DIB, GIF, JPE, JFIF, JPEG, JPG, PNG, TIF, and TIFF								
Voice annotation		Yes, Bluetooth Head	set (sold separately	7)		-	-		
Voice annotation IR-PhotoNotes™	Yes (3 images)	1	set (sold separately image)	r)			-		
	Yes (3 images) Yes	1		r) 			-		
IR-PhotoNotes™		1			-		-		
IR-PhotoNotes™ Standard video recording Radiometric video recording Video file formats	Yes	Yes (1			-				
IR-PhotoNotes™ Standard video recording Radiometric video recording	Yes Yes Non-radiometric (MPEG - encode	Yes (1			-		-		
IR-PhotoNotes™ Standard video recording Radiometric video recording Video file formats Battery Batteries (field-replaceable, rechargeable)	Yes Yes Non-radiometric (MPEG - encode	Yes (1	image) One lithiu	– – m ion smart batter LED display to sho		1	-		
IR-PhotoNotes™ Standard video recording Radiometric video recording Video file formats Battery Batteries (field-replaceable, rechargeable) Battery life	Yes Yes Non-radiometric (MPEG - encode .AVI) and fully radiometric (.IS3) Two lithium ion smart battery packs with five-segment	Yes (1	image) One lithiu Four+ F	– – m ion smart batter LED display to sho iours		1			
IR-PhotoNotes™ Standard video recording Radiometric video recording Video file formats Battery Batteries (field-replaceable, rechargeable)	Yes Yes Non-radiometric (MPEG - encode .AVI) and fully radiometric (.IS3) Two lithium ion smart battery packs with five-segment LED display to show charge leve	Yes (1	image) One lithiu	– – m ion smart batter LED display to sho iours		1			
IR-PhotoNotes™ Standard video recording Radiometric video recording Video file formats Battery Batteries (field-replaceable, rechargeable) Battery life	Yes Yes Non-radiometric (MPEG - encode .AVI) and fully radiometric (.IS3) Two lithium ion smart battery packs with five-segment LED display to show charge leve Two-bay battery charger or	Yes (1	image) One lithiu Four+ F 2.5 hours to f	– – m ion smart batter LED display to sho iours	w charge level	egment	-		
IR-PhotoNotes™ Standard video recording Radiometric video recording Video file formats Battery Batteries (field-replaceable, rechargeable) Battery life Battery charge time	Yes Yes Non-radiometric (MPEG - encode .AVI) and fully radiometric (.IS3) Two lithium ion smart battery packs with five-segment LED display to show charge leve	Yes (1	image) One lithiu Four+ t 2.5 hours to t In-imager cha	m ion smart battery LED display to sho iours iull charge arging (optional ext	w charge level	egment	-		
IR-PhotoNotes™ Standard video recording Radiometric video recording Video file formats Battery Battery Battery (field-replaceable, rechargeable) Battery life Battery charge time Battery charging system AC operation	Yes Yes Non-radiometric (MPEG - encode .AVI) and fully radiometric (.IS3) Two lithium ion smart battery packs with five-segment LED display to show charge leve Two-bay battery charger or	Yes (1	image) One lithiu Four+ t 2.5 hours to t In-imager cha	m ion smart battery LED display to sho iours iull charge arging (optional ext	w charge level	egment			
IR-PhotoNotes <sup>™</sup> Standard video recording Radiometric video recording Video file formats Battery Battery Battery (field-replaceable, rechargeable) Battery life Battery charge time Battery charging system	Yes Yes Non-radiometric (MPEG - encode .AVI) and fully radiometric (.IS3) Two lithium ion smart battery packs with five-segment LED display to show charge leve Two-bay battery charger or	Yes (1	image) One lithiu Four+ t 2.5 hours to 1 In-imager cha ncluded power supp	m ion smart battery LED display to sho iours tull charge arging (optional ext	ernal charger sold	egment			
IR-PhotoNotes™ Standard video recording Radiometric video recording Video file formats Battery Batteries (field-replaceable, rechargeable) Battery life Battery charge time Battery charging system AC operation Temperature measurement	Yes Yes Non-radiometric (MPEG - encode .AVI) and fully radiometric (.IS3) Two lithium ion smart battery packs with five-segment LED display to show charge leve Two-bay battery charger or	Yes (1	image) One lithiu Four+ t 2.5 hours to t In-imager cha	m ion smart battery LED display to sho iours tull charge arging (optional ext oly (100 V AC to 240 nal, whichever is gr	ernal charger sold	egment			
IR-PhotoNotes <sup>™</sup> Standard video recording Radiometric video recording Video file formats Battery Battery Battery (field-replaceable, rechargeable) Battery life Battery charge time Battery charging system AC operation Temperature measurement Accuracy	Yes Yes Non-radiometric (MPEG - encode .AVI) and fully radiometric (.IS3) Two lithium ion smart battery packs with five-segment LED display to show charge leve Two-bay battery charger or	Yes (1	image) One lithiu Four+ t 2.5 hours to 1 In-imager cha ncluded power supp 2% (at 25 °C nomin	m ion smart batter LED display to sho rours iull charge arging (optional ext oly (100 V AC to 240 nal, whichever is gr e and table)	ernal charger sold	egment			

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### Detailed specifications



	TiS65 TiS60	TiS55 TiS50	TiS45 <sup> </sup> 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, Gray- scale	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 %, no	n-condensing					
Center-point temperature measurement		-						
Spot temperature		Yes						
User-definable spot markers	3	2	1					
Center box	Ex	-						
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-TiS6530HZ Industrial Commercial Thermal ImagerFLK-TiS659HZ Industrial Commercial Thermal ImagerFLK-TiS569HZ Industrial Commercial Thermal ImagerFLK-TiS559HZ Industrial Commercial Thermal ImagerFLK-TiS569HZ Industrial Commercial Thermal ImagerFLK-TiS579HZ Industrial Commercial Thermal ImagerFLK-TiS589HZ Industrial Commercial Thermal ImagerFLK-TiS4530HZ Industrial Commercial Thermal ImagerFLK-TiS459HZ Industrial Commercial Thermal ImagerFLK-TiS409HZ Industrial Commercial Thermal ImagerFLK-TiS209HZ Industrial Commercial Thermal ImagerFLK-TiS109HZ Industrial Commercial Thermal Imager

#### Included

Thermal imagers are shipped with a universal AC power adapter, lithium ion smart battery (TiS65/60 includes 2 each—other models 1 each), USB cable, Micro SD card (TiS65/60, TiS55, TiS45), hard carrying case (TiS65/60, TiS55/50, TiS45/40), soft transport bag, adjustable hand strap (TiS65/60, TiS55/50, TiS45/40), and quick reference guide and safety sheet. Software is available via download at www.fluke. com/smartviewdownload. 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.



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

Fluke Connect<sup>®</sup> with ShareLive<sup>TM</sup> video call is the only wireless measurement system that lets you stay in contact with your entire team without leaving the field. The Fluke Connect<sup>®</sup> mobile app is available for Android<sup>TM</sup> (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.

FLUKE CONNECT<sup>®</sup>

#### **Download the app at:**





For a high performance, feature rich infrared camera that produces consistently in-focus images with a touch of a button EVERY, SINGLE, TIME, consider the Professional Series with LaserSharp<sup>®</sup> Auto Focus.

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