

TECHNICAL DATA

TiS10, TiS20, TiS40, TiS45, TiS50, TiS55, TiS60, TiS65 Thermal Imagers



8 NEW CAMERAS. UP TO 2.5 TIMES¹ 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® 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 2.5¹ times more pixels and 70%¹ 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 anywhere³
 - WiFi upload to Fluke Cloud™
 - Free storage² with Fluke Cloud™
 - Share images in real-time with Fluke Connect®
 - Removable 4GB micro SD card
 - Voice annotation⁴
- Create and email reports from the jobsite with Fluke Connect®, eliminating the need to go back to the office to process reports

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



75 % blending



Picture-in-Picture

¹Compared to the Fluke Ti125 thermal imager.

²5GB of free storage.

³Within your provider's wireless service area; Fluke Connect® is not available in all countries.

⁴Varies by model

	TiS65/TiS60		TiS55/TiS50		TiS45/TiS40		TiS20	TiS10	
Key features									
IFOV (spatial resolution)	2.4 mRad		2.8 mRad		3.9 mRad		5.2 mRad	7.8 mRad	
Detector resolution	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	417:1		353:1		257:1		193:1	128:1	
Wireless connectivity	Yes								
Fluke Connect® app 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)	≤ 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 °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	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								

	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-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

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.

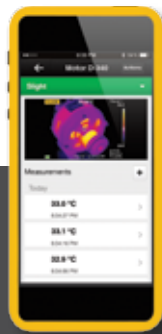
Optional accessories

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® with ShareLive™ 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® mobile app is available for Android™ (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.

Download the app at:



Smart phone wireless service and data plan not included with purchase.



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.

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 06/2015 Pub_ID: 13414-eng