TECHNICAL DATA

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

8 NEW CAMERAS. UP TO 2.5 TIMES[1] 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

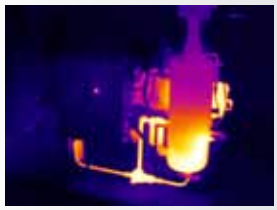
Built for performance with features that help you easily and quickly identify problems before they become expensive failures.

Get improved resolution that delivers the right image quality you need to make the proper diagnosis:

- Up to 2.5[1] 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 anywhere[3]
  - WiFi upload to Fluke Cloud™
  - Free storage[2] with Fluke Cloud™
  - Share images in real-time with Fluke Connect®
  - Removable 4GB micro SD card
  - Voice annotation[4]
- 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

[1]Compared to the Fluke Ti125 thermal imager.
[2]5GB of free storage.
[3]Within your provider's wireless service area; Fluke Connect® is not available in all countries.
[4]Varies by model

Detailed specifications

	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 x120		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							

Detailed specifications

	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, 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 %, 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.

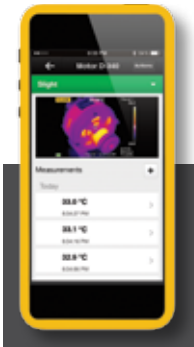
Optional accessories

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.



FLUKE CONNECT®

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

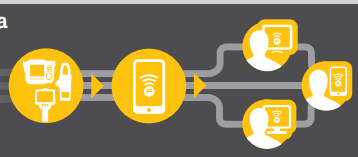
Fluke Connect® with ShareLive™ video call is the only wireless measurement system that lets you stay in contact with your entire team without leaving the field. The Fluke Connect® mobile app is available for Android™ (4.3 and up) and iOS (4s and later) and works with over 20 different Fluke products—the 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:

Download on the App Store

ANDROID APP ON Google play

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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Printed in U.S.A. 06/2015 6005299C-EN