

Ti400, Ti300 and Ti200 Advanced Performance Infrared Cameras

Technical Data

A new generation of tools with next generation performance.

This trio of new Fluke infrared cameras is equipped with LaserSharp[™] Auto Focus. Yes, there are other auto focus systems on the market but Fluke took it one step further so you get in-focused images, Every. Single. Time. Every infrared camera user knows that focus is the single most important thing to ensure when conducting an infrared inspection. Without an in-focus image temperature measurements may not be accurate and it's much easier to miss a problem. LaserSharp auto focus tells you exactly where you are focusing. It uses a laser to calculate the distance to your target before it focuses. Place the red laser dot on the object you are inspecting, then pull and release the trigger for a perfect in-focus image.

- Capture up to five additional measurements with CNX™ Wireless System for more complete analysis and reporting*
- Detect and communicate issues faster with patented Fluke IR-Fusion[™] technology with AutoBlend[™] mode
- Faster communication with wireless image transfer directly to your PC, Apple* iPhone* or iPad*
- · One-handed, easy-to-use user interface
- Ruggedized high resolution 640x480 capacitive touch screen for quick menu navigation
- Capture additional digital images to show location or additional site details with IR-PhotoNotes™ Annotation System
- Standard and radiometric video recording*
- Streaming video (USB and HDMI)
- Text* and voice recording and annotation gets additional details saved with the image file
- Optional interchangeable lenses for greater flexibility in additional applications
- \bullet High-temperature measurement (up to 1200 $^{\circ}\mathrm{C}$ on the Ti400)
- Included SmartView^{*} and SmartView Mobile App Analysis and Reporting Software

* Coming soon via firmware update. Users notified via SmartView software when available.



iomi

Wi Fi





Announcing the new SmartView[®] Mobile App

Bring your office to your inspection site with the SmartView Mobile App. Create an inspection report on site and communicate directly to your client or manager via your Apple[®] iPhone[®] or iPad[®].

Optimize: Adjust the image to present problems in the most effective way.

Analyze: Use markers and other tools to quantify the severity of problems.

Communicate: Share inspection results by emailing images or reports to:

- Plan next steps or gain approval for work done before you even leave the job site
- If needed, get assistance analyzing the problem

Fluke SmartView Mobile will increase the return on your infrared camera investment.

Detailed specifications

Temperature -20 °C to + 1200 °C (-4 °T to + 1202 °C (-4 °T to + 1202 °C fond albrards below -10 °C) (-4 °T to + 1202 °C (-4 °T to + 1202 °C (-4 °T to + 1202 °C accuracy is 2 °C or 2 % (at 25 °C nominal, whichever is greated) is 2 °C or 2 % (at 25 °C nominal, whichever is greated) or-accore missivity correction Yes Yes Yes imaging performance Yes Yes Yes intransitivity (PETD) S 0.05 °C at 30 °C target temp (FD owl) 43 20 °C 30.020 intransi assessitivity (PETD) S 0.65 °C at 30 °C target temp (FD awl) 43 20 °C 30.020 intransi assessitivity (PETD) S 0.65 °C at 30 °C target temp (FD awl) 42 °C 30.020 intat pixets <		Ti400	Ti300	Ti200	
hard alinead below -10 °C there alinead below -10 °C 1 2 °C or 2 % pt 42 °C contain, which even is greater accuracy accuracy methods outset accuracy is provided to the provided in the align of t	Temperature				
Temperature measurement operature requires measurement operature requests of the second study correction of a correct substrictly correction of a correct substrictly correction of a correct substrictly correction of a correct substrictly correction of the second study correction of the second study correction of the second study correction of the second study correction of the second study correction of the second study correction of the second study correction of the second study correction of the second study correction of the second study correction of the second study correction of the second study correction of the second study correction of the second study correction of the second study correction of the	•	-20 °C to +1200 °C	–20 °C to	+650 °C	
aoulinzy aoulinzy analysis and a set of a 5 c bankal, winterwer and table and a set of a 5 c bankal, winterwer and table actiground of a set of a 5 c bankal, winterwer and table actiground background backgrou	,				
On-server entension background mean entension or verse server of the entension of the entension or verse server of the entension of the enten		\pm 2 °C or 2 % (at 25 °C nominal, whichever is greater)			
On-scene subsector background On-scene transmission corrector Inagio gentromace					
temperature compensation ocurrenter indegra equite frequency intercontent intercont					
Imaging performance Imaging performance Imaging performance Imaging performance Detector type Pool Plane Array, uncooled microbiometer 30 voi 2 referent rate depending upon model variation microbiometer 30 voi 1 s0 performation voi 1 s0 performance 3 magnetical voi 1 s0 performance 3 magnet magnetical voi 1 s0 performance 3 magnetical voi 1		Yes			
Inage equipue foquency of Por Pir Arrive introbal cate opending upon nodel visation of Por Pir Arrive introbal microbolometer, 240 x 240 pixels and incrobolometer, 240 x 240 pixels and 24 pixels and 25 p	On-screen transmission correction		Yes		
Detector type Total Plane Array uncooled microbiometry 200 X 100 yrs Total Plane Array Urce Total Plane Array Urce<					
microbolometer, 200 x 100 pitels microbolometer, 200 x 100 pitels microbolometer, 200 x 100 pitels Total presidu (NTD) 5 0.05 °C at 20 carget temp (0 mK) \$ 0.075 °C at 20 °C target temp (0 mK) \$ 0.075 °C at 20 °C target temp (0 mK) Total presidu and 75, min 0 H µm (0eng yees) \$ 0.075 °C at 20 °C target temp (0 mK) \$ 0.075 °C at 20 °C target temp (0 mK) Winal (Visible light) camera 0 H µm (0eng yees) \$ 0.075 °C at 20 °C \$ 0.075 °C at 20 °C Pred of the my perside and the target on the papers. If an isoparation to the papers. If an isoparation temp (0 mC) \$ 0.075 °C at 20 °C Settal resolution (UTV) 0.66 mEad 0.67 mEad 0.07 mEad Optional words-angle infrared lens type, available scon \$ 0.87 °C at 30 °C \$ 0.87 °C Prel of the word 6 ° x 34 ° \$ 0.81 mEad \$ 0.81 mEad Optional words-angle infrared lens type, available scon Yees \$ 0.81 mEad \$ 0.81 mEad Optional words-angle infrared lens type, available scon Yees \$ 0.81 mEad \$ 0.81 mEad Optional words-angle infrared lens type, available scon Yees \$ 0.81 mEad \$ 0.81 mEad Deta fard					
Thermal sensitivity (INTT)S 0.05° Cat 30° CE target tamp [50 mK]S 0.05° Cat 30° CE target tamp [50 mK]Unali probe7.5 gm to 14 gm (0 ngo yave)0.03000Unali ordina [10] consertT.5 gm to 14 gm (0 ngo yave)VStandari (Intrarel Jene type)Industria Jene type, available con2.4 ° x 17 °Spatial resolution [FOV)1.31 mRad1.75 mRad2.09 mRadMinimum focus distance0.65 mRad0.67 mRad1.06 mRadOptional lielphoto infrarel hear type, available con46 ° cn (0 pprox. 18 in)1.06 mRadPeled of teve0.67 mRad1.06 mRad1.06 mRadMinimum focus distance1.5 cm (npprox. 6 in)4.19 mRadOptional lielphoto informal hear type, available anon46 ° x 34 °4.19 mRadMinimum focus distance1.5 cm (npprox. 6 in)4.19 mRadStandardYesYes1.5 cm (npprox. 6 in)Minimum focus distance1.5 cm (npprox. 6 in)4.19 mRadMinimum focus distance1.5 cm (npprox. 6 in)4.19 mRadMinimum focus distance1.5 cm (npprox. 6 in)4.19 mRadStandardYesYes1.5 cm (npprox. 6 in)Minimum focus distance1.5 cm (npprox. 6 in)1.5	Detector type				
Total profels 76.800 4.3.200 30,000 Indrarde spectal band 7.5.000 7.5.000 30,000 Visual (visuble light) camera Industrial performance 5.0 megapizel 30.000 Spatial resolution (IFOV) 1.31 mRad 1.75 mRad 2.09 mRad Optical telephote infrared lens type, available soon 12 * x 8 * 30.000 Field of view 0.65 mRad 0.67 mRad 1.05 mRad 1.05 mRad Optical telephote infrared lens type, available soon 12 * x 8 * 3.45 mt performance 3.45 mt performance 3.40 mt ndt Pield of view 0.65 mRad 0.87 mRad 4.10 mRad 4.10 mRad Optical vietopical pictura vieto in the type, available soon 4.10 mRad 4.10 mRad Mmman focus distance Pield of view 2.62 mRad 3.49 mt ndt and 4.10 mRad Mmman focus distance Spatial resolution (IFOV) 2.62 mRad 3.49 mt ndt and 4.10 mRad Mmman focus distance Spatial resolution (IFOV) 2.62 mRad 3.49 mt ndt and 4.10 mRad Mmman focus distance Mmman focus distance Mmman focus distance Mmman foc	Thermal sensitivity (NETD)				
Infrared spectral band 7.5 µm to 14 µm fong wave) Infrared spectral band 7.5 µm to 14 µm fong wave) Industrial pectra and the set of megapized Standard Infrared lens type Field of view 24* x 17* Special resolution (BTOV) I.31 mRtad 1.76 mRtad 2.09 mRtad Minium fong undustrial pectra and the set of the set o					
Vaual (visible light) cancer Industrial performance 5.0 megapized Standard Indrard lens type 2.4* x1 7* Spatial resolution (IFOV) 1.31 mRad 1.75 mRad 2.00 mRad Minimum focus distance 1.67 mRad 2.00 mRad 2.00 mRad Minimum focus distance 0.65 mRad 0.87 mRad 1.05 mRad 2.00 mRad Spatial resolution (IFOV) 0.65 mRad 0.87 mRad 1.05 mRad 1.05 mRad Optional Weighpoint (IFOV) 0.65 mRad 0.87 mRad 1.05 mRad 1.05 mRad Optional Weighpoint (IFOV) 0.65 mRad 0.87 mRad 4.19 mRad 1.05 mRad Optional Weighpoint (IFOV) 0.62 mRad 3.49 mRad 4.19 mRad 1.05 mRad Minimum forus distance Yes Advanced Mannal Posts Yes Yes<					
Pield of view 24 * x17 * Spatial resolution (PCV) 1.31 mRad 1.75 mRad 2.02 mRad Minimum focia distance 16 cm (approz. 6 in) Pield Pield of view 0.65 mRad 0.87 mRad 1.05 mRad Spatial resolution (PCV) 0.65 mRad 0.87 mRad 1.05 mRad Optional vielephone 45 cm (approz. 18 in) Pield of view 2.62 mRad 3.49 mRad 4.19 mRad Pield of view 2.62 mRad 3.49 mRad 4.19 mRad 4.19 mRad Minimum focia distance 16 cm (approz. 6 in) Pield of view Pield of view Spatial resolution (PCV) 2.62 mRad 3.49 mRad 4.19 mRad Minimum focia distance 16 cm (approz. 6 in) Pield of view Pield of view Spatial resolution (PCV) 2.62 mRad 3.49 mRad A.19 mRad LaserSharp* Auto Pous System Yes Yes Hage presentation Yes Yes Pieldtes Torobow, Blue-Red, High Contrast, Amber, Amber Inverted, Hot Metal, Grayscale, Inverted Utra, Carayceale Inverte	*				
Spatial resolution (IFOV) 1.31 mRad 1.75 mRad 2.08 mRad Minium Cost distance 12 * x 9 * Spatial resolution (IFOV) 0.65 mRad 0.87 mRad 1.05 mRad Spatial resolution (IFOV) 0.65 mRad 0.87 mRad 1.05 mRad 0.87 mRad Minium Cost distance 45 * x 34 * Spatial resolution (IFOV) 2.62 mRad 3.49 mRad 4.19 mRad Minium Cost distance 15 cm (approx.6 in) Minium Cost distance 1.62 mRad 4.64 * x 34 * Spatial resolution (IFOV) 2.62 mRad 3.49 mRad 4.19 mRad 4.19 mRad Minium Cost distance 15 cm (approx.6 in) 1.62 mRad 1.62 mRad 1.62 mRad Minium Cost distance 15 cm (approx.6 in) 1.62 mRad 1.62 mRad 1.62 mRad Minium Cost distance 15 cm (approx.6 in) 1.62 mRad 1.62 mRad 1.62 mRad Minium Cost distance 15 cm (approx.6 in) 1.62 mRad 1.62 mRad 1.62 mRad Minium Cost distance 16 mArad 1.62 mRad 1.62 mRad 1.62 mRad Mator togit distance 16 mArad 1.6	Standard infrared lens type				
Minimum food distance 16 cm (approx.6 in) Pield of view 1.2 * x 9 * Spatial resolution (IFOV) 0.65 mRad 0.87 mRad 1.05 mRad Optional telephotion (IFOV) 0.65 mRad 0.87 mRad 1.05 mRad Optional view 45 cm (approx.18 in)					
Optional telephonic Infrared Iens type, available soon 12 * 5 * 9 * Spatial resolution (IFOV) 0.65 mBad 0.87 mRad 1.05 mBad Minimum Sous distance 45 cm (approx. 18 m) 0 Optional wide-angle infrared Iens type, available soon 46 * x 54 * 349 mRad 4.19 mBad Minimum Sous distance 15 cm (approx. 6 in) 10 mSad 10 mSad Minimum Sous distance Yes 40 * x 54 * 10 mSad Advanced Mamual Procus Yes 40 * x 54 * 10 mSad Marge presention Yes 40 * x 54 * 10 mSad 10 * x 54 * Standard Ironbow, Blue-Red, High Contrast, Amber, Amer Inverted, Hot Metal, Grayscale Inverted Uitra, 10 * x 54 * 10 * x 54 * x 54 * 10 * x 54 * x 54 * Standard Ironbow, Blue-Red, High Contrast, Amber, Amer Inverted, Hot Metal, Grayscale Inverted Uitra, 10 * x 54 * x 54 * 10 * x 54 * x 54 * x 54 * 10 * x 54					
Pield of view 12 * 9 ° Spatial resolution (FPOV) 0.65 mRad 0.87 mRad 1.05 mRad Minimum focus distance 45 * x 34 ° Pield of view 46 * x 34 ° Spatial resolution (FPOV) 2.62 mRad 3.40 mRad 4.19 mRad Minimum focus distance 15 cm (approx. 6 in) Reus mechanism Yes LaserSharp* Auto Focus System Yes Margane Manna Focus Yes Margane Manna Focus Yes Standard of units Yes Advanced Manna Focus Yes Standard Manna Focus Yes Standard Manna Focus Yes Patetes Standard Manna Focus Standard Manna Focus Yes Patet auto rescale in manual mode Yes Ansta auto toggle between manual mode Yes Minimum span (in nanual mode) 2.0 °C (5.6 °T)					
Spatial resolution (FOV) 0.65 mBad 0.87 mRad 1.05 mBad Optional wide-angle infrared lens type, available scon 45 cm (approx. 18 im) 9 Paid of view 46 * 2.4 * 5 Spatial resolution (FOV) 2.62 mRad 3.44 mRad 4.19 mRad Minimum focus distance 15 cm (approx. 6 in) 7 Reus mechanics Yes 7 Advanced Manual Focus Yes 7 Varanced Manual Focus Yes 7 Patetes Tornbow Utra, Bue-Fed Utra, High Contrast Utra, Grayscale, Grayscale Inverted Utra, Grayscale, Grayscale, Grayscale Inverted Utra, Grayscale, Grayscale, Grayscale, Grayscale, Grayscale Inverted Utra, Grayscale,		e, avallable sooli	12 ° v Q °		
Minimum focus distance 45 cm (approx. 18 in) Optional wide-angle infrared lens type, available soon 46 * x 34 * Spatial resolution (IFOV) 2.62 mRad 3.49 mRad 4.19 mRad Minimum focus distance 15 cm (approx. 6 in) Forum mechanism LaserSharp* Autor Social Stance Yes Advanced Manual Focus Yes Marge presentation Yes The social Stance Yes Paletes Standard Ironbow, Blue-Red, High Contrast, Amber, Amber Inverted, Hot Metal, Grayscale, Grayscale, Inverted Utra, Grayscale Inverted Utra, Carayscale Inverted Utra, Grayscale Inverted Utra, Farta Utra, Grayscale Inverted Utra, G		0.65 mRad	-	1.05 mRad	
Optional wide-angle infrared lens type, available soon 46 * x 34 * Pheld of view 46 * x 34 * Spatial resolution (IPOV) 2.62 mRad 3.49 mRad 4.19 mRad Minimum focus distance 15 cm (approx.6 in) Pees Rocks mechanism Yes Advanced Manual Pocus Yes Image presentation Yes Yes Yes Palettes Image presentation Yes Yes View and span Stondard Tornbow, Blue-Red Ultra, High Contrast Ultra, Amber Ultra, Amber Iltra, Amber I	1 , ,				
Pield of view 46.° x.34° Spatial resolution (IPCV) 2.62 mRad 3.49 mRad 4.19 mRad Minimum focus distance 15 cm (approx. 6 in) 4.19 mRad Sease Yes Advanced Yes Advanced Manual Pocus Yes Yes Yes Margo presentation Yes Yes Yes Palettes Tonbow, Blue-Red, High Contrast, Amber, Amber Inverted, Hot Metal, Grayscale Inverted Utra, Contrast ¹⁴ Ironbow Utra, Blue-Red, Utra, frigh Contrast Utra, Amber Inverted Utra, Amber Inverted Utra, Torsycale Inverted Palettes Smooth auto-scaling and manual scaling of level and span Fast auto toggle between manual Fast auto toggle between manual model Yes Yes Minimum span (in manual mode) Yes Yes Minimum span (in auto mode) 3.0 °C (5.4 °T) Minimum span (in auto mode) Yes AutoBiend** mode Yes AutoBiend** mode Yes Color alarms (temperature alarns) Yes Minimum span (in manual mode) Yes Minimum span (in manual mode) Yes Refusions information Yes Refusions information Yes </td <td></td> <td colspan="4"></td>					
Minimum focus distance 15 cm (approx. 6 in) Bess mechanism Yes LaserSharp" Auto Focus System Yes Advanced Manual Focus Yes Image presentation Yes Palettes Standard Standard Ironbow, Blue-Red, High Contrast, Amber, Amber Inverted, Hot Metal, Grayscale, Grayscale Inverted Utra Contrast" Ironbow Utra, Blue-Red, Utra, Alpher, Amber Inverted, Utra, Amber Inverted Utra, High Contrast Utra, Carayscale Inverted Fest auto toggle between manual auto mode Yes Past auto Tesceale In manual mode Yes Minimum span (in auto mode) 3.0 °C (3.4 °T) Minimum span (in auto mode) 3.0 °C (3.4 °T) Best auto-Tesceale In fared Yes Auto Biona" indicate at storage Yes One-handed image capture and data storage One-handed inage capture, review, and save capability Storage medium Micro SD Memory Card, on-band flash memory, save-to-USB capability, direct download via USB-to-PC connection File formatis Non-radiometric (Ibmp) or (peg) or fully-radiometric (IsS) Yes' Memory review Thumbnall view navigation and review selection Orber tinse-saving and productivity feature Ye	Field of view		46 ° x 34 °		
Reck mechanism Ves LaserSharp** Auto Focus System Yes Advanced Manual Focus Yes Image presentation Yes Palettes Standard Standard Ironbow, Blue-Red, High Contrast, Amber, Amber Inverted, Hot Metal, Grayscale, Grayscale Inverted Ultra, Amber Ultra, Amber Ultra, Carayscale Ultra, Grayscale Ultra, Matura, Grayscale		2.62 mRad		4.19 mRad	
LaserShap** Auto Focus System Yes Advanced Manual Focus Yes Image presentation Yes Palettes Standard Inonbow, Blue-Red, High Contrast, Amber, Amber Inverted, Hot Metal, Grayscale,			15 cm (approx. 6 in)		
Advanced Manual Focus Yes Image presentation Plattes Standard Ironbow, Blue-Red, High Contrast, Amber, Amber, Inverted, Hot Metal, Grayscale, Grayscale, Inverted Uitra Contrast** Ironbow Uitra, Blue-Red, High Contrast, Uitra, Amber Inverted, Uitra, Amber Inverted Uitra, Hot Metal Uitra, Grayscale Inverted Uitra, Grayscale, Inverted, Uitra, Grayscale, Grayscale Inverted, Uitra, Grayscale, Grayscale, Uitra, Blue, Gray, Gray			17		
Image presentation Palettes Standard Ironbow, Blue-Red, High Contrast, Amber, Amber Inverted, Hot Metal, Grayscale, Gra					
Platetes Standard Ironbow, Blue-Red, High Contrast, Amber, Amber, Namber Inverted, Hot Metal, Grayscale, Grayscale, Inverted Ultra Contrast." Ironbow Ultra, Blue-Red, Ultra, Figh Contrast, Ultra, Amber Ultra, Amber Ultra, Amber Ultra, Amber Ultra, Mather Ultra, Grayscale Ultra, Grayscal			ies		
Standard Ironbow, Blue-Red, High Contrast, Amber, Amber, Amber, Markal, Grayscale, Grayscale Inverted Ultra Contrast ^M Ironbow, Blue-Red, High Contrast, Minber, Murra, Minber Ultra, Amber Inverted, Ultra, Amber Inverted, Ultra, Amber Inverted, Ultra, Amber Inverted, Ultra, Caryscale Inverted Ultra, Caryscale, Inverted, Inverted, U	· · ·				
Ultra Contrast [™] Ironbow Ultra, Riue-Red Ultra, Amber Altra, Amber Altra, Amber Altra, Amber Altra, Amber Altra, Amber Ultra, Amber Altra, Altra, Amber Altra, Alt		d Ironbow, Blue-Red, High Contrast, Amber, Amber Inverted, Hot Metal, Grayscale, Grayscale Inverted			
Level and span Smooth auto-scaling and manual scaling of level and span Fast auto toggle between manual and auto modes Yes Fast auto-rescale in manual mode Ves Minimum span (in manual mode) 2.0°C (3.6°F) Minimum span (in auto mode) 3.0°C (5.4°F) R-fuscion. information Yes Picture-In-Picture (PIP) Yes Pull screen infrared Yes Auto Blend ^{aw} mode Yes Color alarms (Istmeyrature alarms) High-temperature , low-temperature, and isotherm (user-selectable) Image capture and data storage Yes Image capture, review, assee mechanism Micro SD Memory Card, on-board flash memory, assee-to-USB capability, direct download via USB-to-PC connection File formats Micro SD Memory Card, on-board flash memory, assee-to-USB capability, direct download via USB-to-PC connection File formats Non-radiometric (Jup) or (jpeg) or fully-radiometric (JSC) Video*: non-radiometric (JMPE – encoded AVI) and fully-radiometric (JSC) No analysis software required for non-radiometric (JMP, jpeg and avit) fles Export file formats w/SmartView* Software required for non-radiometric (JMP, jpeg and avit) fles Voice annotation 60 seconds maximum recording time per image; reviewable playback on imager Ri-PhotNoteres* Yes	Ultra Contrast™	Ironbow Ultra, Blue-Red Ultra, High Contrast Ultra, Amber Ultra, Amber Inverted Ultra,			
Fast auto toggle between manual and auto modes Yes Fast auto-rescale in manual mode Yes Minimum span (in manual mode) 2.0 °C (3.6 °F) Minimum span (in manual mode) 3.0 °C (5.4 °F) Minimum span (in manual mode) 3.0 °C (5.4 °F) Minimum span (in manual mode) 3.0 °C (5.4 °F) Minimum span (in manual mode) 3.0 °C (5.4 °F) Minimum span (in manual mode) Yes Picture-In-Picture (PIP) Yes Full screen infrared Yes AutoBlend*** mode Yes Color alarms (temperature alarms) High-temperature, low-temperature, and isotherm (user-selectable) Image capture and data storage Image capture, review, and save capability Storage medium Micro SD Memory Card, on-board flash memory, save-to-USB capability, direct download via USB-to-PC connection File formats Non-radiometric (Lmp) or (jpeg) or fully-radiometric (Lis2) Video*. Ion-radiometric (MPEG - encoded AVI) and fully-radiometric (LS3) Storage medium No analysis software required for non-radiometric (Dmp, jpg and avi*) files Export file formats w/SmartView* software BMP, DIB, GIP, JPE, JFIP, JPEG, JPG, PNG, TIF, and TIF Weither annotation 60 seconds maximum recording time per image; reviewable playback on imager <td></td> <td colspan="3">Hot Metal Ultra, Grayscale Ultra, Grayscale Inverted Ultra</td>		Hot Metal Ultra, Grayscale Ultra, Grayscale Inverted Ultra			
and auto models Yes Past auto-rescale in manual model Yes Minimum span (in manual model) 2.0 °C (5.6 °F) Minimum span (in mato model) 3.0 °C (5.4 °F) Minimum span (in auto model) 3.0 °C (5.4 °F) R-Yusion information Yes Picture-In-Picture (PIP) Yes Color alarms (temperature alarms) High-temperature, not verse AutoBlend™ mode Yes Color alarms (temperature alarms) Micro SD Memory Card, on-board flash memory, save-to-USB capability, direct download via USB-to-PC connection Storage medium Micro SD Memory Card, on-board flash memory, save-to-USB capability, direct download via USB-to-PC connection Storage medium Micro SD Memory Card, on-board flash memory, save-to-USB capability, direct download via USB-to-PC connection Pile formats Micro SD Memory Card, on-board flash memory, save-to-USB capability, direct download via USB-to-PC connection Storage medium Micro SD Memory Card, on-board flash memory, save-to-USB capability, direct download via USB-to-PC connection Storage medium Micro SD Memory Card, on-board flash memory, save-to-USB capability, direct download via USB-to-PC connection Storage medium Micro SD Memory Card, on-board flash memory, save-to-USB capability, direct download via USB-to-PC connection Storage		Smooth auto-scaling and manual scaling of level and span			
Past auto-rescale in manual model Yes Minimum span (in manual mode) .2.0 °C (3.6 °P) Minimum span (in manual mode) .3.0 °C (5.4 °F) R-Fusion information Yes Picture-In-Picture (PIP) Yes Put screen infrared Yes AutoBlend™ mode Yes Color alarms (temperature alarms) High-temperature , low-temperature, and isotherm (user-selectable) Image capture and data storage Image capture, review, and save capability, direct download via USB-to-PC connection File formats Micro SD Memory Card, on-board flash memory, save-to-USB capability, direct download via USB-to-PC connection File formats Non-radiometric (is2) Video*: non-radiometric (IS2) Video*: non-radiometric (IS3) No analysis software required for non-radiometric (ISP, jog and .avi*) files Export file formats w/SmartView* BMP, DIB, GIF, JPE, JFIF, JPEG, JPG, PNG, TIF, and TIFF Memory review Thumbnal view navigation and review selection Other time-saving and productivity features Yes Video annotation 60 seconds maximum recording time per image; reviewable playback on imager Ri-PhotNotes** Yes Video recording* Yes Video recording* Yes* Vide		Yes			
Minimum span (in manual mode) 2.0 °C (3.6 °F) Minimum span (in auto mode) 3.0 °C (5.4 °F) Minimum span (in auto mode) 3.0 °C (5.4 °F) Minimum span (in matue mode) 3.0 °C (5.4 °F) Minimum span (in matue mode) 3.0 °C (5.4 °F) Minimum span (in matue mode) Yes Picture-In-Picture (PIP) Yes AutoBlend™ mode Yes Color alarms (temperature alarms) High-temperature , low-temperature, and isotherm (user-selectable) Image capture and data storage Mineradia isotherm (user-selectable) Image capture, review, save mechanism One-handed image capture, review, and save capability Storage medium Micro SD Memory Card, on-board flash memory, save-to-USB capability, direct download via USB-to-PC connection Fle formats Non-radiometric (LMP) or (jpeg) or fully-radiometric (IS) Video*: non-radiometric (MPEG - encoded .AVI) and fully-radiometric (IS) Video*: non-radiometric (MPEG - encoded .AVI) and fully-radiometric (IS) Video*: non-radiometric (MPEG - encoded .AVI) and fully-radiometric (IS) Video *: non-radiometric (ISP) (jpeg) or fully-radiometric (IS) Video *: non-radiometric (IMPEG - encoded .AVI) and fully-radiometric (ISP) (jees in notation Kenort review More radiometric for DME and TFF Memory review Thumbnall view navigation and review selecton Other time-saving and productiviv					
Minimum span (in auto mode) 3.0 °C (6.4 °F) R-Pusion* information Picture-In-PIP) Yes Pall screen infrared Yes AutoBlend** mode Yes Color alarms (temperature alarms) High-temperature, and isotherm (user-selectable) Image capture, review, save mechanism One-handed image capture, review, and save capability Storage medium Micro SD Memory Card, on-board flash memory, save-to-USB capability, direct download via USB-to-PC connection File formats Non-radiometric (bmp) or (jpeg] or fully-radiometric (is2) Video*: non-radiometric (bMPEG - encoded. AVI) and fully-radiometric (IS3) Kemory review Mon-analysis software required for non-radiometric (bmp). jpg and avi*) files Export file formats w/SmartView* software BMP, DIB, GIF, JPE, JFIF, JPEG, JPG, PNG, TIF, and TIFF Memory review Thumbnail view navigation and review selection Other time-saving and productivity features Yes Woi-Fi connectivity Yes, to PC, iPhone*, iPad* and WiFi to LAN* Text annotation* Yes Wi-Fi connectivity Yes, to PC, iPhone*, iPad* and Radiometric Streaming Video Via USB to PC and HDM to HDM tompAtto exem CNX [™] Wireless System* Yes* Cardinal Compass* Ye					
Picture-In-Picture (PIP) Yes Full screen infrared Yes AutoBlend™ mode Yes Color alarms (temperature alarms) High-temperature , now-temperature, and isotherm (user-selectable) Image capture and data storage Image capture, review, and save capability. Storage medium Micro SD Memory Card, on-board flash memory, save-to-USB capability, direct download via USB-to-PC connection Storage medium Non-radiometric (bmp) or (jpeg) or fully-radiometric (is2) Video*: non-radiometric (Lmp, jpg and .avi*) files Export file formats Non-radiometric (bmp) or (jpeg) or fully-radiometric (is2) Video*: non-radiometric (Lmp, jpg and .avi*) files Storage medium Non-radiometric (bmp) or (jpeg) or fully-radiometric (is2) Video*: non-radiometric (Lmp, jpg and .avi*) files Export file formats Non-radiometric (bmp) or (jpeg) or fully-radiometric (is2) Video*: non-radiometric (Lmp, jpg and .avi*) files Storage medium Thumbnail view navigation and review selector Other time-saving and productive* BMP, DIB, GIF, JPE, JPEG, JPG, PNG, TIF, and TIF Woice annotation 60 seconds maximum recording time per image; reviewable playback on imager R-PhotoNotes™ Yes Wi-Fi connectivity Yes, to PC, iPhone*, iPad* and WiFi to LAN* Text annotation* Yes Video r					
Pull screen infrared Yes AutoElend™ mode Yes Color alarms (temperature alarms) High-temperature , low-temperature, and isotherm (user-selectable) Image capture and data storage Image capture, review, and save capability. save mechanism One-handed image capture, review, and save capability. direct download via USE-to-PC connection Storage medium Micro SD Memory Card, on-board flash memory, save-to-USE capability. direct download via USE-to-PC connection Non-radiometric (Lmp) or (jpeg) or fully-radiometric (is2) Video": non-radiometric (IMPEG - encoded .AVI) and fully-radiometric (IS3) No analysis software required for non-radiometric (Lmp, jpg and .avi*) files Export file formats w/SmartView* SMemory review of Thumbnail view navigation and review selection Otice annotation 60 seconds maximum recording time per image; reviewable playback on imager Ri-PhotoNotes™ Yes Wi-Fi connectivity Yes, to PC, iPhone*, iPad* and WiFi to LAN* Yes Yes, to PC, iPhone*, iPad* and WiFi to LAN* Straaming Video Via USB to PC and HDMI to HDMI compatible screen CNX** Wireless System* Yes* Cardinal Compass* Yes* Remote control and operation (for Yes	IR-Fusion® information				
AutoBlend™ mode Yes Color alarms (temperature alarms) High-temperature , low-temperature, and isotherm (user-selectable) Image capture and data storage Image capture, review, and save capability Image capture, review, save mechanism One-handed image capture, review, and save capability Storage medium Micro SD Memory Card, on-board flash memory, save-to-USE capability, direct download via USE-to-PC connection File formats Non-radiometric (hmp) or (jpeg) or fully-radiometric (is2) Video*: non-radiometric (hmp. jpg and .avi*) files Export file formats w/SmartView* BMP, DIB, GIP, JPE, JFF, JPEG, JPG, PNG, TIF, and TIFF Memory review Thumbnail view navigation and review selection Other time-saving and productivity features Yes Voice annotation 60 seconds maximum recording time per image; reviewable playback on imager Wi-F1 connectivity Yes, to PC, iPhone*, iPad* and WiF1 to LAN* Text annotation* Yes Wiado Yes Video recording* Standard and Radiometric Streaming Video Via USB to PC and HDMI to HDMI compatible screen CMX** Yes* Cordinal Compass* Yes* Auto capture (temperature and interval)* Yes* Remote control and operation					
Color alarms (temperature alarms) High-temperature , low-temperature, and isotherm (user-selectable) Image capture and data storage One-handed image capture, review, and save capability Storage medians Micro SD Memory Card, on-board flash memory, save-to-USB capability, direct download via USB-to-PC connection File formats Non-radiometric (bmp) or (jpeg) or fully-radiometric (is2) Video*: non-radiometric (bmp, jpg and .avi*) files Export file formats w/SmartView* Software required for non-radiometric (bmp, jpg and .avi*) files Export file formats w/SmartView* BMP, DIB, GIF, JPE, JFIF, JPEG, JPG, PNG, TIF, and TIFF Memory review Thumbnail view navigation and review selection Other time-saving and productivity features 60 seconds maxium recording time per image; reviewable playback on imager Wi-Fi connectivity Yes Yes Video recording* Standard and Radiometric Streaming Video Via USB to PC and HDMI to HDMI compatible screen CINX** Wireless System* Yes* Cardinal Compass* Yes Auto capture (temperature and interval)* Yes* Remote control and operation (for Yes					
Image capture and data storage Image capture, review, save mechanism One-handed image capture, review, and save capability Storage medium Micro SD Memory Card, on-board flash memory, save-to-USB capability, direct download via USB-to-PC connection File formats Non-radiometric (.bmp) or (.jpeg) or fully-radiometric (.is2) Video*: non-radiometric (MPEG - encoded .AVI) and fully-radiometric (.IS3) Export file formats w/SmartView* software No analysis software required for non-radiometric (.bmp, .jpg and .avi*) files Export file formats m/SmartView* software BMP, DIB, GIF, JPE, JFIF, JPEG, JPG, PNG, TIF, and TIFF Memory review Thumbnail view navigation and review selection Other time-saving and productivity features Yes Voice annotation 60 seconds maximum recording time per image; reviewable playback on imager Wi-Fi connectivity Yes, to PC, iPhone*, iPad* and WiFi to LAN* Text annotation* Yes Video recording* Standard and Radiometric Streaming Video Via USB to PC and HDMI to HDMI compatible screen CNX ^{ma} Wireless System* Yes* Cardinal Compass* Yes* Auto capture (temperature and interval)* Yes* Remote control and operation (for Yes					
Image capture, review, save mechanism One-handed image capture, review, and save capability Storage medium Micro SD Memory Card, on-board flash memory, save-to-USB capability, direct download via USB-to-PC connection File formats Non-radiometric (Jbmp) or (jpeg) or fully-radiometric (is2) Video*: non-radiometric (MPEG - encoded .AVI) and fully-radiometric (IS3) Export file formats w/SmartView* software BMP, DIB, GIF, JPE, JFIF, JPEG, JPG, PNG, TIF, and TIFF Memory review Thumbnail view navigation and review selection Other time-saving and productivity features Yes Voice annotation 60 seconds maximum recording time per image; reviewable playback on imager IR-PhotoNotes™ Yes, to PC, iPhone*, iPad* and WiFi to LAN* Vi-Fi connectivity Yes, to PC, iPhone*, iPad* and WiFi to LAN* Text annotation* Yes Via de recording* Standard and Radiometric CMT ^M Wireless System* Yes* Cardinal Compass* Yes* Auto capture (temperature and interval)* Yes* Remote control and operation (for Yes		High-temper	rature , low-temperature, and isotherm (user	-selectable)	
save mechanism One-nanded image capture, review, and save capability Storage medium Micro SD Memory Card, on-board flash memory, save-to-USB capability, direct download via USB-to-PC connection File formats Mon-radiometric (ibmp) or (jpeg) or fully-radiometric (iS2) Video*: non-radiometric (MPEG - encoded AVI) and fully-radiometric (IS3 No analysis software required for non-radiometric (ibmp, jpg and .avi*) files Export file formats w/SmartView* software Mon-radiometric (isp, pE, JFIF, JPEG, PG, PNG, TFF, and TFF Memory review Monone treview required for non-radiometric well the selection Other time-saving and productivty Features Voice annotation 60 seconds maxim recording time per image; reviewable playback on imager Wi-Fi connectivity Yes, to PC, iPhone*, iPad* and WiFi to LAN* Video recording* Yes Video recording* Standard and Radiometric Straning Video Yes* Cardinal Compass* Yes* Auto capture (temperature and interval)* Yes* Remote control and operation (for Yes					
Storage medium Micro SD Memory Card, on-board flash memory, save-to-USB capability, direct download via USB-to-PC connection File formats Non-radiometric (Jomp) or (jpeg) or fully-radiometric (JS2) Video*: non-radiometric (MPEG - encoded .AVI) and fully-radiometric (JS3) Export file formats w/SmartView* Nonalysis software required for non-radiometric (Jomp, .jpg and .avi*) files Export file formats w/SmartView* BMP, DIB, GIF, JPE, JFIF, JPEG, JPG, PNG, TIF, and TIFF Memory review Thumbnail view navigation and review selection Other time-saving and productivity features Yes Voice annotation 60 seconds maximum recording time per image; reviewable playback on imager IR-PhotoNotes ^{TMA} Yes Wi-Fi connectivity Yes, to PC, iPhone*, iPad* and WiFi to LAN* Text annotation* Yes Vide recording* Standard and Radiometric Streaming Video Yes Yes* CMX TM Wireless System* Yes* Cardinal Compass* Yes Auto capture (temperature and interval)* Yes Remote control and operation (for Yes	0 1	One-handed image capture, review, and save capability			
File formats Non-radiometric (.bmp) or (.jpeg) or fully-radiometric (.is2) Video*: non-radiometric (.MPEG - encoded .AVI) and fully-radiometric (.IS3) Export file formats w/SmartView* No analysis software required for non-radiometric (.bmp, .jpg and .avi*) files Export file formats w/SmartView* BMP, DIB, GIF, JPE, JFIF, JPEG, JPG, PNG, TIF, and TIFF Memory review Thumbnail view navigation and review selector Other time-saving and productivity features Voice annotation Voice annotation 60 seconds maxim recording time per image; reviewable playback on imager Wi-Fi connectivity Yes, to PC, iPhone*, iPad* and WiFi to LAN* Text annotation* Yes, to PC, and HDMI to HDMI compatible screen Video recording* Standard and Radiometric CNX™ Wireless System* Yes* Cardinal Compass* Yes Auto capture (temperature and interval)* Yes Remote control and operation (for Yes		Micro SD Memory Card, on-board flash memory, save-to-USB capability, direct download via USB-to-PC connection			
No analysis software required for non-radiometric (.bmp, .jpg and .avi*) files Export file formats w/SmartView* software BMP, DIB, GIF, JPE, JFIF, JPEG, JPG, PNG, TIF, and TIFF Memory review Thumbnail view navigation and review selection Other time-saving and productivity features Thumbnail view navigation and review selection Voice annotation 60 seconds maximum recording time per image; reviewable playback on imager IR-PhotoNotes™ Yes Wi-Fi connectivity Yes, to PC, iPhone*, iPad* and WiFi to LAN* Text annotation* Yes Video recording* Standard and Radiometric Streaming Video Via USB to PC and HDMI to HDMI compatible screen CNX™ Wireless System* Yes* Auto capture (temperature and interval)* Yes* Remote control and operation (for Yes		Non-radiometric (.bmp) or (.jpeg) or fully-radiometric (.is2) Video*: non-radiometric (MPEG – encoded .AVI) and fully-radiometric (.IS3)			
software BMP, DIB, GIF, JPE, JPE, JPE, JPE, PR, PNE, IIF, and TIF Memory review Thumbnail view navigation and review selection Other time-saving and productivity Features Voice annotation 60 seconds maximum recording time per image; reviewable playback on imager Ri-PhotoNotes TM Yes Wi-Fi connectivity Yes, to PC, iPhone', iPad* and WiFi to LAN* Text annotation* Yes Video recording* Standard and Radiometric Streaming Video Via USB to PC and HDMI to HDMI compatible screent Cardinal Compass* Yes* Auto capture (temperature and interval)* Yes* Remote control and operation (for Yes					
Solurate Constrained Memory review Thumbnail view navigation and review selection Other time-saving and productivity Eetaures Voice annotation 60 seconds maximum recording time per image; reviewable playback on imager Re-PhotoNotes™ 60 seconds maximum recording time per image; reviewable playback on imager Wi-Pi connectivity Yes Text annotation* Yes Video recording* Standard and Radiometric Streaming Video Via USB to PC and HDMI to HDMI compatible scr= CNX™ Wireless System* Yes* Cardinal Compass* Auto capture (temperature and interval)* Remote control and operation (for Yes Remote control and operation (for Yes					
Other time-saving and productivity features Voice annotation 60 seconds maximum recording time per image; reviewable playback on imager IR-PhotoNotes™ Yes Wi-Fi connectivity Yes, to PC, iPhone*, iPad* and WiFi to LAN* Text annotation* Yes Video recording* Standard and Radiometric Streaming Video Via USB to PC and HDMI to HDMI compatible screen CNX™ Wireless System* Yes* Cardinal Compass* Yes* Auto capture (temperature and interval)* Yes No No					
Voice annotation 60 seconds maximum recording time per image; reviewable playback on imager IR-PhotoNotes™ Yes Wi-Fi connectivity Yes, to PC, iPhone*, iPad* and WiFi to LAN* Text annotation* Yes Video recording* Standard and Radiometric Streaming Video Via USB to PC and HDMI to HDMI compatible screen CNX™ Wireless System* Yes* Cardinal Compass* Yes* Auto capture (temperature and interval)* Yes Remote control and operation (for Yes			umphail view navigation and review selection	on	
IR-PhotoNotes™ Yes Wi-Fi connectivity Yes, to PC, iPhone*, iPad* and WiFi to LAN* Text annotation* Yes Video recording* Standard and Radiometric Streaming Video Via USB to PC and HDMI to HDMI compatible screen CNX™ Wireless System* Yes* Cardinal Compass* Yes* Auto capture (temperature and interval)* Yes Remote control and operation (for Yes			um recording time per imago: roviowable p	avback on imager	
Wi-Fi connectivity Yes, to PC, iPhone*, iPad* and WiFi to LAN* Text annotation* Yes Video recording* Standard and Radiometric Streaming Video Via USB to PC and HDMI to HDMI compatible screer CNX™ Wireless System* Yes* Cardinal Compass* Yes* Auto capture (temperature and interval)* Yes Remote control and operation (for Yes No No					
Text annotation* Yes Video recording* Standard and Radiometric Streaming Video Via USB to PC and HDMI to HDMI compatible screen CNX™ Wireless System* Yes* Cardinal Compass* Yes* Auto capture (temperature and interval)* Yes Remote control and operation (for Yes No No					
Video recording* Standard and Radiometric Streaming Video Via USB to PC and HDMI to HDMI compatible screen CNX™ Wireless System* Yes* Cardinal Compass* Yes* Auto capture (temperature and interval)* Yes Remote control and operation (for Yes No No					
Streaming Video Via USB to PC and HDMI to HDMI compatible screen CNX™ Wireless System* Yes* Cardinal Compass* Yes* Auto capture (temperature and interval)* Yes Remote control and operation (for Yes No					
CNX™ Wireless System* Yes* Cardinal Compass* Yes* Auto capture (temperature and interval)* Yes* Remote control and operation (for Yes No No	0				
Cardinal Compass* Yes* Auto capture (temperature and interval)* Yes* Remote control and operation (for Yes No No		Yes*			
Remote control and operation (for Yes No No					
	Auto capture (temperature and interval)*		Yes*		
special and advanced applications)		Yes	No	No	
	special and advanced applications)				

FLUKE ®

* Coming soon via firmware update. Users notified via SmartView software when available.



General specifications

Operating temperature	10 °C to 150 °C (14 °C to 100 °C)		
Storage temperature	-10 °C to +50 °C (14 °F to 122 °F)		
	-20 °C to +50 °C (-4 °F to 122 °F) without batteries		
Relative humidity	10 % to 95 % non-condensing		
Ruggedized Touchscreen Display (Capacitive)	8.9 cm (3.5 in) diagonal landscape color VGA (640 x 480) LCD with backlight		
Controls and adjustments	User selectable temperature scale (°C/°F)		
controls and adjustments	Language selection		
	Time/Date set		
	Emissivity selection		
	Reflected background temperature compensation		
	Transmission correction		
	User selectable hot spot and cold spot, and center point on the image		
	Expandable-contractable Measurement Box with MIN-AVG-MAX temp Color alarms		
	User selectable backlight setting		
	Graphical information display preference		
Software	SmartView and SmartView Mobile App - full analysis and reporting software included		
Batteries	Two lithium ion rechargeable smart battery packs with five-segment LED display to show charge level, all models		
Battery life	Four+ hours continuous use per battery pack (assumes 50 % brightness of LCD and average usage)		
Battery charge time	2.5 hours to full charge		
AC battery charging	Two-bay ac battery charger (110 V ac to 220 V ac, 50/60 Hz) (included), or in-imager charging. AC mains adapters included. Optional 12 V automotive charging adapter. All models		
AC operation	AC operation with included power supply (110 V ac to 220 V ac, 50/60 Hz). AC mains adapters included.		
Power saving	User selectable sleep and power off modes		
Safety standards	UL 61010-1:2012 CAN/CSA-C22.2 No.61010-1-12 IEC 61010-1 3rd Edition (2010)		
Electromagnetic compatibility	EN 61326-1:2006 IEC 61326-1:2005		
C Tick	IEC/EN 61326-1		
US FCC	CFR 47, Part 15 Subpart B Class B		
Vibration	0.03 g2/Hz (3.8 grms), 2.5g IEC 68-2-6		
Shock	25 g, IEC 68-2-29		
Drop	Engineered to withstand 2 meter (6.5 feet) with standard lens		
Size (H x W x L)	27.7 cm x 12.2 cm x 16.7 cm (10.9 in x 4.8 in x 6.5 in)		
Weight (battery included)	1.04 Kg (2.3 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	, , , , , , , , , , , , , , , , , , ,		
Supported Languages	Czech, Dutch, English, Finnish, French, German, Hungarian, Italian, Japanese, Korean, Polish, Portuguese, Russian, Simplified Chi- nese, Spanish, Swedish, Traditional Chinese, and Turkish		

Ordering information

FLK-Ti400 9 HzThermal Imager, 9 HzFLK-Ti400 60 HzThermal Imager, 60 Hz, upon requestFLK-Ti300 9 HzThermal Imager, 9 HzFLK-Ti300 60 HzThermal Imager, 60 Hz, upon requestFLK-Ti200 9 HzThermal Imager, 9 HzFLK-Ti200 60 HzThermal Imager, 60 Hz, upon request

Included

Thermal imager with standard infrared lens; ac power supply and battery pack charger (including mains adapters); two, rugged lithium ion smart battery packs; Micro SD memory card with SD adapter; 3m USB cable; 3m HDMI video cable; SmartView^{*} software with free software upgrades for life; rugged, hard carrying case; soft transport bag; adjustable hand strap; printed users manual (five languages); CD user manual; warranty registration card.

Optional accessories

FLK-LENS/TELE2 Telephoto infrared lens (2X magnification) FLK-LENS/WIDE2 Wide-angle infrared lens TI-CAR-CHARGER Thermal imager vehicle charger FLK-TI-VISOR3 Thermal imager visor BOOK-ITP Introduction to Thermography Principles book TI-TRIPOD3 Tripod mounting base accessory Fluke Europe B.V. P.O. Box 1186 5602 BD Eindhoven The Netherlands Web: www.fluke.co.uk

For more information call: In Europe/M-East/Africa +31 (0) 40 2 675 200 or Fax +31 (0) 40 2 675 222

Fluke (UK) Ltd.

52 Hurricane Way Norwich, Norfolk NR6 6JB United Kingdom Tel.: +44 (0) 20 7942 0700 Fax: +44 (0) 20 7942 0701 E-mail: industrial@uk.fluke.nl Web: www.fluke.co.uk

©2013 Fluke Corporation. All rights reserved. Data subject to alteration without notice. 08/2013 Pub ID: 12098-eng

Modification of this document is not permitted without written permission from Fluke Corporation.