

ข้อมูลด้านเทคนิค

Ti95 Fluke Connect FCA Kit



คุณลักษณะสำคัญ

The Fluke Ti95 Infrared Camera offers:

- The only wireless industrial infrared camera in its price class¹ – take advantage of the benefits of Fluke Connect® by seamlessly gathering and sharing inspection results instantly
- Superior image quality, up to 23% better spatial resolution than other competitive models in this price class¹
- 80x80 resolution
- Removable 8 GB SD Memory Card
- 8 GB Fluke Connect® wireless SD Card
- Find potential problems faster and easier with IR-Fusion® picture-in-picture mode
- 2 megapixel built-in digital camera
- Large 3.5 inch LCD - 32% larger screen than other competitive models lets you clearly see what you are measuring
- Smart Battery System - Lithium ion smart battery pack with five-segment LED display to show charge level
- Rugged, lightweight, point-and-shoot infrared camera

The Fluke 3000 FC Series Wireless Multimeter offers:

- AC and DC voltage measurements to 1000V
- AC and DC current with 0.01 mA resolution
- Continuity, resistance, diode test, capacitance and frequency measurements
- MIN/MAX recording
- CAT III 1000 V, Cat IV 600 V; IP54

The Fluke a3001 FC Wireless iFlex™ AC Current Module offers:

- One (1) true-RMS flexible current meter
- One (1) iFlex i2500-10 flexible current probe
- Measure up to 2500 A AC
- Use as a standalone meter or as part of the system
- Logging function for recording and saving up to 65,000 readings
- Inrush function
- Magnetic hanging strap

¹ Class is defined as an industrial handheld infrared camera in the same price range based on MSRP as of May 1, 2014.

ภาพรวมผลิตภัณฑ์: Ti95 Fluke Connect FCA Kit



[See How It Works](#)
[Fluke Connect FAQs](#)

Troubleshooting just got easier with the Ti95 Fluke Connect FCA Kit with Ti95 Infrared Camera, 3000 FC DMM, and a3001 FC iFlex® Module. This kit features the only wireless industrial infrared camera in its price class¹, the Ti95. Safely capture AC current measurements with your a3001 FC iFlex Module from up to 20 meters away on the 3000 FC DMM, while simultaneously conducting an infrared inspection with your Ti95 infrared camera. Upload your measurement data to the Cloud via your smart phone and you can analyze and share your inspection results for each piece of equipment from anywhere, with any team member, at any time - only with Fluke Connect™.

¹ Class is defined as an industrial handheld infrared camera in the same price range based on MSRP as of May 1, 2014.

ข้อมูลจำเพาะ: Ti95 Fluke Connect FCA Kit

Fluke Ti95 Infrared Camera

Key Features	
IFOV (spatial resolution)	5.6 mRad
Resolution	80 x 80 (6,400 pixels)
Field of view	26° H x 26° V
Wireless connectivity	Yes
Fluke Connect™ app compatible	Yes, with included wireless SD card (where available)
IR-Fusion® technology	PIP (46 cm (18 in) and beyond)
Focus system	Fixed focus 46 cm (18 in) and beyond
Ruggedized display	3.5 inch diagonal (portrait format)
Rugged, ergonomic design for one-handed use	Yes
Thermal sensitivity (NETD)	≤ 0.10°C at 30°C target temp (100 mK)

Temperature measurement range (not calibrated below -10°C)	-20°C to +250°C (-4°F to +482°F)
Level and span	Smooth auto and manual scaling
Fast auto toggle between manual and auto modes	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)	2 megapixel industrial performance
Frame rate	9 Hz only
Data Storage and Image Capture	
Extensive SD memory system	Removable 8 GB SD memory card and 8 GB wireless SD card (where available)
	Direct download via USB-to-PC connection
Image capture, review, save mechanism	One-handed image capture, review, and save capability
File formats image	Non-radiometric (.bmp) or (.jpeg) or fully-radiometric (.is2)
	No analysis software required for non-radiometric (.bmp, .jpg) files
Memory review	Thumbnail view navigation and review selection
Software	SmartView® software, Fluke Connect™, and SmartView® Mobile app - full analysis and reporting software
Export file formats with SmartView® software	BMP, DIB, GIF, JPE, JFIF, JPEG, JPG, PNG, TIF, and TIFF
Battery	
Batteries (field-replaceable, rechargeable)	One lithium ion smart battery pack with five-segment LED display to show charge level
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 system	In-imager charging. AC mains adapters included in 9 Hz versions. Optional two-bay AC battery charger (110 VAC to 220 VAC, 50/60 Hz) or optional 12 V automotive charging adapter.
AC operation	AC operation with included power supply (110 VAC to 220 VAC, 50/60 Hz). AC mains adapters included.
Power saving	User selectable sleep and power off modes
Temperature Measurement	
Accuracy	±2°C or 2% (at 25°C nominal, whichever is greater)
On-screen emissivity correction	Yes (both number and table)
On-screen reflected background temperature compensation	Yes
Color Palettes	
Standard palettes	6: Ironbow, blue-red, high-contrast, amber, hot metal, grayscale

General Specifications	
Infrared spectral band	9 µm to 15 µm (long wave)
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 markers	Hot and cold spot markers
Center box (MIN-MAX-AVG)	Fixed-size measurement box with MIN-MAX-AVG temp
Safety standards	CSA (US and CAN): C22.2 No. 61010-1-04, UL: UL STD 61010-1 (2nd Edition), ISA: 82.02.01
Electromagnetic compatibility	EN 61326-1:2006 IEC 61326-1:2005
C Tick	IEC/EN 61326-1
US FCC	EN61326-1; FCC Part 5
Vibration	2G, IEC 68-2-6
Shock	25G, IEC 68-2-29
Drop	Engineered to withstand 2 meter (6.5 feet) drop
Size (H x W x L)	28.4 x 8.6 x 13.5 cm (11.2 x 3.4 x 5.3 in)
Weight (battery included)	0.726 kg (1.6 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

Fluke 3000 FC Wireless Multimeter

* For all specifications: accuracy is specified for one year after calibration, at operating temperatures of 18°C to 28°C, with relative humidity at 0 % to 90 %. Accuracy specifications take the form of \pm [% of Reading] + [Number of least significant digits]).

Detailed Specifications		
AC Voltage		
Range ¹ / Resolution	600.0 mV / 0.1 mV 6.000 V / 0.001 V 60.00 V / 0.01 V 600.0 V / 0.1 V 1000 V / 1 V	
Accuracy ^{2 3 4}	45 Hz to 500 Hz	1.0 % + 3
	500 Hz to 1 kHz	2.0% + 3

1. All AC voltage ranges are specified from 1 % of range to 100 % of range.
2. Crest factor of ≤ 3 at full scale up to 500 V, decreasing linearly to crest factor < 1.5 at 1000 V.
3. For non-sinusoidal waveforms, add $\pm(2\%$ of reading + 2% full scale) typical, for crest factor up to 3.
4. Do not exceed 107 V-Hz.

DC Voltage, Continuity, Resistance, Diode Test and Capacitance

Function

mV	Range / Resolution	600.0 mV / 0.1 mV
	Accuracy	0.09% + 2
V	Range / Resolution	6.000 V / 0.001 V 60.00 V / 0.01 V 600.0 V / 0.1 V 1000 V / 1 V
	Accuracy	0.09% + 2 0.15% + 2
)))	Range / Resolution	600 Ω / 1 Ω
	Accuracy	Meter beeps at $< 25 \Omega$, beeper detects opens or shorts of 250 μs or longer.
\square	Range / Resolution	600.0 Ω / 0.1 Ω 6.000 k Ω / 0.001 k Ω 60.00 k Ω / 0.01 k Ω 600.0 k Ω / 0.1 k Ω 600.0 k Ω / 0.001 M Ω 50.00 M Ω / 0.01 M Ω
	Accuracy	0.5% + 2 0.5% + 1 1.5% + 3
Diode test	Range / Resolution	2.000 V / 0.001 V
	Accuracy	1% + 2
μF	Range / Resolution	1000 nF / 1 nF 10.00 μF / 0.01 μF 100.0 μF / 0.1 μF 9999 $\mu\text{F}^{1/}$ 1 μF
	Accuracy	1.2% + 2 10% typical

1. In the 9999 μF range for measurements to 1000 μF , the measurement accuracy is 1.2% + 2.

AC and DC Current

Function

mA AC (45 Hz to 1 kHz)	Range ¹ / Resolution	60.00 mA / 0.01 mA 400.0 mA ³ / 0.1 mA
	Accuracy	1.5% + 3
mA DC ²	Range ¹ / Resolution	60.00 mA / 0.01 mA 400.0 mA ³ / 0.1 mA
	Accuracy	0.5% + 3






1. All AC current ranges are specified from 5 % of range to 100% of range.
2. Input burden voltage (typical): 400 mA input 2 mV/mA.
3. 400.0 mA accuracy specified up to 600 mA overload.

Frequency

Range / Resolution	99.99 Hz / 0.01 Hz 999.9 Hz / 0.1 Hz 9.999 kHz / 0.001 kHz 99.99 kHz / 0.01 kHz
Accuracy ¹	0.1% + 1

1. Frequency is specified up to 99.99 kHz in volts and up to 10 kHz in amps.

Input Characteristics

Function	Overload protection	Input impedance (nominal)	Common mode rejection ratio (1 k Ω unbalance)		Normal mode rejection
	1100 Vrms	> 10 M Ω < 100 pF	> 120 dB at DC, 50 Hz or 60 Hz		> 60 dB at 50 Hz or 60 Hz
	1100 Vrms	> 10 M Ω < 100 pF	> 60 dB, DC to 60 Hz		> 60 dB at 50 Hz or 60 Hz
	1100 Vrms	> 10 M Ω < 100 pF	> 120 dB at DC, 50 Hz or 60 Hz		> 60 dB at 50 Hz or 60 Hz
Open circuit test voltage			Full scale voltage		Typical short circuit current
			To 6 M Ω	50 M Ω	Typical short circuit current
	1100 Vrms	< 2.7 VDC	< 0.7 VDC	< 0.9 VDC	< 350 mA
	1100 Vrms	< 2.7 VDC	2.000 VDC		< 1.1 mA

mA Function

Overload protection	Fused, 44/100 A, 1000 V FAST Fuse
Overload	600 mA overload for 2 minutes maximum, 10 minutes rest minimum

MIN/MAX Recording Accuracy

DC functions	The specified accuracy of the measurement function ± 12 counts for changes > 350 mS in duration.
AC functions	The specified accuracy of the measurement function ± 40 counts for changes > 900 mS in duration.

General Specifications

Maximum voltage between any terminal and earth ground	1000 VDC or AC rms
Ω fuse protection from A inputs	0.44 A (44/100 A, 440 mA), 1000 V FAST Fuse, Fluke specified part only

Display (LCD)	Update rate	4/sec
	Volts, amps, ohms	6000 counts
	Frequency	10,000 counts
	Capacitance	1,000 counts
Battery type	Three AA Alkaline batteries, NEDA 15A IEC LR6	
Battery life	250 hours minimum	
RF communications	2.4 GHZ ISM Band	
RF communication range	Open air, unobstructed	Up to 20 m
	Obstructed, sheetrock wall	Up to 6.5 m
	Obstructed, concrete wall, or steel electrical enclosure	Up to 3.5 m
Temperature	Operating	-10°C to 50°C
	Storage	-40°C to 60°C
Temperature coefficient	0.1 x (specified accuracy) / °C (< 18°C or > 28°C)	
Relative humidity	0% to 90% (0°C to 35°C) 0% to 75% (35°C to 40°C) 0% to 45% (40°C to 50°C)	
Altitude	Operating	2,000 m
	Storage	12,000 m
Electromagnetic compatibility EMI, RFI, EMC, RF	EN 61326-1:2006, EN 61326-2-2:2006 ETSI EN 300 328 V1.7.1:2006, ETSI EN 300 489 V1.8.1:2008, FCC Part 15 Subpart C Sections 15.207, 15.209, 15.249 FCCID : FCC: T68-FDMMBLE IC: 6627A-FDMMBLE	
Safety compliance	ANSI/ISA 61010-1 / (82.02.01): 3rd edition CAN/CSA-C22.2 No 61010-1-12: 3rd edition UL 61010-1: 3rd edition IEC/EN 61010-1:2010	
Certifications	CSA, FCC, CE	
Ingress Protection (IP) rating	IP54	
Pollution Degree	2	
Size (H x W x L)	4.75 x 9.3 x 20.7 cm (1.87 x 3.68 x 8.14 in)	
Weight	340 g (12 oz)	
Warranty	Three years	
Not compatible with Fluke CNX test tools		

Fluke a3001 FC Wireless iFlex® AC Current Module

Specifications	
Range	0.5 A to 2500 A AC
Resolution	0.1 A

Accuracy	3% ±5 digits (5 Hz to 500 Hz)	
Crest factor (50 Hz / 60 Hz)	3.0 at 1100 A 2.5 at 1400 A 1.42 at 2500 A add 2% for C.F. > 2	
LCD w/backlight	3½ digits	
Log rate/interval	1 sec minimum/adjustable by PC or front panel	
Battery type	2 AA, NEDA 15 A, IEC LR6	
Battery life	400 hours	
Memory	Record up to 65,000 readings	
RF communications	2.4 GHZ ISM Band	
RF communication range	Open air, unobstructed	Up to 20 m
	Obstructed, sheetrock wall	Up to 6.5 m
	Obstructed, concrete wall or steel electrical enclosure	Up to 3.5 m
Operating temperature	-10°C to +50°C	
Storage temperature	-40°C to +60°C	
Temperature coefficient	Add 0.1 x (specified accuracy) / °C (< 18°C or > 28°C)	
Operating humidity	90% at 35°C 75% at 40°C 45% at 50°C	
Altitude	Operating	2,000 m
	Storage	12,000 m
EMC	EN 61326-1:2006	
Safety compliance	IEC 61010-1, 600 V CAT IV/1000 V CAT III, 3rd edition	
Safety rating	CAT IV 600 V, CAT III 1000 V	
Certifications	CSA, CE, FCC: T68-FBLE IC: 6627A-FBLE	
Ingress Protection (IP) rating	IP42	
Pollution Degree	2	
Jaw opening	25.4 cm (10 in) coil	
Size (H x W x D)	16.5 x 6.35 x 1.4 cm (6.5 x 2.5 x 1.4 in)	
Weight	.22 kg (8 oz)	
Warranty	Three years	
Not compatible with Fluke CNX test tools		



FLK-Ti95 9HZ/FCA Infrared Camera

FLK-Ti95 9HZ/FCA

Includes:

Fluke Ti95 Thermal Imager:

- AC power adapter
- Lithium ion smart battery (1)
- USB cable
- SD memory card
- Fluke Connect™ wireless SD Card (where available, shipped separately in non-European countries)
- Soft transport bag
- Adjustable hand strap (left- or right-handed use)
- Printed users' manual in English, Spanish, French, German and Simplified Chinese, all other manuals on CD
- SmartView® software
- Warranty registration card

Fluke 3000 FC Wireless Digital Multimeter with three AA batteries - installed:

- TL175 Test Leads (1 pair)
- AC175 Alligator Clips (1 pair)
- C3003 3-compartment soft case
- Information pack

Fluke a3001 FC Wireless iFlex AC Current Module with two AA batteries - installed:

- iFlex 10^{mm} coil (1)
- Magnet/strap (1)

Fluke. ให้โลกของคุณ คงอยู่แต่ละก้าวต่อไป

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12/2021

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