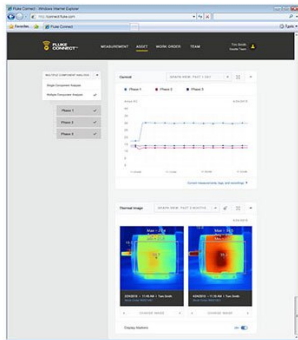




TECHNICAL DATA

Fluke Ti105 a3001 FC iFlex® Kit





Key features

- Fluke Connect™ compatible – the largest network for wirelessly enabled tools. Take advantage of the benefits of Fluke Connect® by sharing inspection results instantly, with any team member, at any time.
- Rugged, lightweight, point-and-shoot focus free thermal camera
- One-handed, easy-to-use user interface
- Included SmartView® and SmartView Mobile App Analysis and Reporting Software

The 3000 FC Wireless Multimeter offers:

- AC and DC voltage measurements to 1000 V
- 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 iFlex™ Wireless Current Module allows you to measure around awkward sized conductors or get into tight spaces and makes wire access easier. The a3001 FC 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

Product overview: Fluke Ti105 a3001 FC iFlex® Kit

Industrial and commercial professionals can save time and money by identifying problems before they become costly failures with the Ti105 a3001 FC iFlex® Kit. Connect the a3001 FC iFlex® AC Wireless Current Module to your test point and view the results up to 20 meters away on your 3000 FC DMM. The a3001 FC iFlex® module allows you to measure around tight, awkward spaces and/ or sizes and makes wire access easier. The Ti105 infrared camera comes standard with IR Fusion® Technology - the blending of digital and infrared images into a single image making precise documentation quick and easy. Upload all 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.

Simplify and streamline your reporting with our easy to use SmartView® software. Download the SmartView Mobile app and you can use your Apple® iPhone® or iPad® to generate a report and communicate your results directly to your client or colleague from the jobsite.

Specifications: Fluke Ti105 a3001 FC iFlex® Kit

Detailed Specifications	
IR resolution (FPA size)	160 x 120 FPA Uncooled Microbolometer
Spectral band	7.5 µm to 14 µm (long wave)

Capture or refresh rate	30 Hz version
NETD (thermal sensitivity)	□ 0.10°C at 30°C target temp (100 mK)
FOV (field of view)	22.5° H x 31° V
IFOV (spatial resolution)	3.39 mRad
Temperature measurement range (not calibrated below -10°C)	-20°C to + 250°C (-4°F to 482°F)
Temperature measurement accuracy	±2°C or 2% (at 25°C nominal, whichever is greater)
Focus mechanism	Focus-free 1.2 m (4 ft) and beyond
IR Fusion® technology	PIP (1.2 m (4 ft) to 4.6 m (15 ft)), full IR, full visible
Fluke Connect compatibility	Yes (where available)
Color alarms	-
Standard palees	Blue-red, ironbow, grayscale and amber
Ultra Coast™ palees	-
Hot/cold markers	-
User definable spot markers	In SmartView® only
Centerpoint	Yes
Centerbox (MIN/AVG/MAX)	-
Level and span cool	Manual and auto
Minimum span in auto mode	5°C
Minimum span in manual mode	2.5°C
Minimum IR focus distance	122 cm (48 in)
Weight	0.726 kg (1.6 lb)
Size	28.4 x 8.6 x 13.5 cm (11.2 x 3.4 x 5.3 in)
LCD display	3.5 inch diagonal (poait format)
Visible camera	2 megapixel industrial-grade
Minimum parallax	~122 cm (48 in)
IR-PhotoNotes™ annotation system	-
Laser pointer	Yes
Torch	Yes
Electronic (cardinal) compass	-
Emissivity correction	Yes
Transmission correction	-
Background (reflected) compensation	Yes
Voice annotation (audio)	-
Multi-mode video output	-

Multi-mode video recording (standard AVI with MPEG encoding)	-
Multi-mode video recording (radiometric .IS3)	-
Memory review	Thumbnail review
Battery (field-replaceable, rechargeable)	One
Battery life	4+ hours (each)*
External battery charging base	Optional (accessory)
Charging power supply	Yes
Drop test	2 meter (6.5 feet)
Ingress protection (IP) rating (IEC 60529)	IP 54
Recommended calibration cycle	Two-years
Multifunction card reader	-
Memory storage	2 GB SD memory card
Direct download capability	Mini USB download direct to PC
Operating temperature range	-10°C to +50°C (14°F to 122°F)
Storage temperature range	-20°C to +50°C (-4°F to 122°F)
Operating humidity	Operating and storage 10% to 95%, non-condensing
Vibration and shock	2G, IEC 68-2-26 and 25G, IEC 68-2-29
Safety standards	IEC 61010-1: Cat None, Pollution Degree 2
C Tick	IEC/EN 61326-1
EMI, RFI, EMC	EN61326-1; FCC Part 5
User manuals	Czech, English, Finnish, French, German, Italian, Japanese, Korean, Polish, Portuguese, Russian, Simplified Chinese, Spanish, Swedish, Traditional Chinese, Turkish, Dutch, and Hungarian
Standard warranty period	Two-years
Extended warranty and service plans	Yes
*Assumes 50% brightness of LCD	

* 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]).

Fluke 3000 FC Series Wireless Multimeter

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
<p>1. All AC voltage ranges are specified from 1% of range to 100% of range. 2. Crest factor of \square 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.</p>		
DC Voltage, Continuity, Resistance, Diode Test and Capacitance		
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 Ω , beeper detects opens or shorts of 250 μ s or longer.
Ω	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
μ F	Range / resolution	1000 nF / 1 nF 10.00 μ F / 0.01 μ F 100.0 μ F / 0.1 μ F 9999 μ F ¹ / 1 μ F
	Accuracy	1.2% + 2 10% typical
1. In the 9999 μ F range for measurements to 1000 μ F, the measurement accuracy is 1.2% + 2.		
AC and DC Current		
mA AC (45 Hz to 1 kHz)	Range¹ / resolution	60.00 mA / 0.01 mA 400.0 mA ³ / 0.1 mA
	Accuracy	1.5% + 3
mA DC ²	Range¹ / 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

✘	Overload protection	1100 Vrms
	Input impedance (nominal)	> 10 MΩ < 100 pF
	Common mode rejection ratio (1 kΩ unbalance)	> 120 dB at DC, 50 Hz or 60 Hz
	Normal mode rejection	> 60 dB at 50 Hz or 60 Hz
✘	Overload protection	1100 Vrms
	Input impedance (nominal)	> 10 MΩ < 100 pF
	Common mode rejection ratio (1 kΩ unbalance)	> 60 dB, DC to 60 Hz
	Normal mode rejection	> 60 dB at 50 Hz or 60 Hz
✘	Overload protection	1100 Vrms
	Input impedance (nominal)	> 10 MΩ < 100 pF
	Common mode rejection ratio (1 kΩ unbalance)	> 120 dB at DC, 50 Hz or 60 Hz
	Normal mode rejection	> 60 dB at 50 Hz or 60 Hz

Open Circuit Test Voltage

✘	Overload protection	1100 Vrms
	Input impedance (nominal)	< 2.7 VDC
	Full scale voltage to 6 MΩ Full scale voltage 50 MΩ	< 0.7 VDC < 0.9 VDC
	Typical short circuit current	< 350 mA
✘	Overload protection	1100 Vrms
	Input impedance (nominal)	< 2.7 VDC
	Full scale voltage to 6 MΩ Full scale voltage 50 MΩ	2.000 VDC
	Typical short circuit current	< 1.1 mA

mA Function

Overload protection	Fused, 44/100 A, 1000 V FAST Fuse
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Overload	600 mA overload for 2 minutes maximum, 10 minutes rest minimum	
MIN/MAX Recording Accuracy		
DC functions	±12 counts for changes > 350 mS in duration.	
AC functions	±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	
Baery type	Three AA Alkaline baeries, NEDA 15A IEC LR6	
Baery life	250 hours minimum	
RF communications	2.4 GHZ ISM Band	
RF communication range	Open air, unobstructed	Up to 20m
	Obstructed, sheetrock wall	Up to 6.5m
Obstructed, concrete wall, or steel electrical enclosure	Up to 3.5m	
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	

Ordering information



FLK-Ti105 30HZ/FCA KIT

Fluke Ti105 a3001 FC iFlex® Kit

Includes:

Fluke 105 Infrared Camera

- AC power adapter
- Lithium ion smart battery (1)
- USB cable
- SD memory card
- Fluke Connect™ WiFi SD Card
- Hard carrying case
- 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 (3) AA batteries (installed)

- One (1) a3001 FC Module with two (2) AA batteries (installed)
- One (1) iFlex 10" coil
- One (1) magnet/strap
- TL175 Test Leads (1 pair)
- AC175 Alligator Clips (1 pair)
- C3003 3-compartment soft case
- Information pack

Optional accessories

Fluke Infrared Camera Car Charger

Description

For the ultimate flexibility in the field - recharge your infrared camera wherever and whenever you need to.

Fluke Handheld Instruments CarePlans

Repairs are always unexpected, and they can be costly. Keep your test tool in top operating condition and control your cost of ownership with a Fluke Gold or Silver CarePlan.

Fluke Connect® Wireless SD Card

Wirelessly enable your Fluke thermal camera with the Fluke Connect® wireless SD card and you can instantly upload, share and analyze data from anywhere, with anyone on your team, at any time.



Preventive maintenance simplified. Rework eliminated.

Save time and improve the reliability of your maintenance data by wirelessly syncing measurements using the Fluke Connect™ system.

- Eliminate data-entry errors by saving measurements directly from the tool and associating them with the work order, report or asset record.
- Maximize uptime and make confident maintenance decisions with data you can trust and trace.
- Access baseline, historical and current measurements by asset.
- Move away from clipboards, notebooks and multiple spreadsheets with a wireless one-step measurement transfer.
- Share your measurement data using ShareLive™ video calls and emails.

Find out more at flukeconnect.com



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