

Fluke 15B+/17B+ Digital Multimeters

Fluke quality is always within your reach

Technical Data

The Fluke 15B+ and 17B+ digital multimeters are compact, easy to use tools that deliver safe, reliable measurements.

The right tools for the job

Your job requires that you have a rugged, reliable and accurate digital multimeter. The new Fluke 15B⁺ and 17B⁺ offer everything you need.

Product highlights

- NEW CAT III 600 V safety rating
- NEW 50 % bigger display with bright white backlight
- **NEW** Over-voltage indicator (17B+)
- Frequency and temperature measurement (17B+)
- Voltage, resistance, continuity, capacitance
- Input terminal for ac and dc current measurements to 10 A current
- Diode test, data hold



Specifications

Accuracy is specified for 1 year after calibration, at operating temperatures of 18 °C to 28 °C, relative humidity at 0 % to 75 %. Accuracy specifications take the form of: \pm ([% of Reading] + [Number of Least Significant Digits]).

				Accuracy
Function	Range	Resolution	15B+	17B+
AC volts (40 Hz to 500 Hz) ¹	4.000 V 40.00 V 400.0 V 1000 V	0.001 V 0.01 V 0.1 V 1 V	1.0 % + 3	1.0 % + 3
DC volts	4.000 V 40.00 V 400.0 V 1000 V	0.001 V 0.01 V 0.1 V 1 V	0.5 % + 3	0.5 % + 3
AC millivolts	400.0 mV	0.1 mV	3.0 % + 3	3.0 % + 3
DC millivolts	400.0 mV	0.1 mV	1.0 % + 10	1.0 % + 10
Diode test ²	2.000 V	0.001 V	10 %	10 %
Resistance (Ohms)	400.0 Ω 4.000 kΩ 40.00 kΩ 400.0 kΩ 4.000 MΩ 40.00 MΩ	0.1 Ω 0.001 kΩ 0.01 kΩ 0.1 kΩ 0.001 MΩ 0.01 MΩ	0.5 % + 3 0.5 % + 2 0.5 % + 2 0.5 % + 2 0.5 % + 2 1.5 % + 3	0.5 % + 3 0.5 % + 2 0.5 % + 2 0.5 % + 2 0.5 % + 2 1.5 % + 3



				Accuracy
Function	Range	Resolution	15B+	17B+
Capacitance ³	40.00 nF 400.0 nF 4.000 µF 40.00 µF 400.0 µF 1000 µF	0.01 nF 0.1 nF 0.001 µF 0.01 µF 0.1 µF 1 µF	2 % + 5 2 % + 5 5 % + 5 5 % + 5 5 % + 5 5 % + 5	2 % + 5 2 % + 5 5 % + 5 5 % + 5 5 % + 5 5 % + 5
Frequency ¹ Hz (10 Hz to 100 kHz)	50.00 Hz 500.0 Hz 5.000 kHz 50.00 kHz 100.0 kHz	0.01 Hz 0.1 Hz 0.001 kHz 0.01 kHz 0.1 kHz	NA	0.1 % + 3
Duty cycle ¹	1 % to 99 %	0.1 %	NA	1 % typical ⁴
AC current μA (40 Hz to 400 Hz)	400.0 μΑ 4000 μΑ	0.1 μA 1 μA	1.5 % + 3	1.5 % + 3
AC current mA (40 Hz to 400 Hz)	40.00 mA 400.0 mA	0.01 mA 0.1 mA	1.5 % + 3	1.5 % + 3
AC current A (40 Hz to 400 Hz)	4.000 A 10.00 A	0.001 A 0.01 A	1.5 % + 3	1.5 % + 3
DC current μA	400.0 μA 4000 μA	0.1 μA 1 μA	1.5 % + 3	1.5 % + 3
DC current mA	40.00 mA 400.0 mA	0.01 mA 0.1 mA	1.5 % + 3	1.5 % + 3
DC current A	4.000 A 10.00 A	0.001 A 0.01 A	1.5 % + 3	1.5 % + 3
Temperature	50 °C to 400 °C 0 °C to 50 °C -55 °C to 0 °C	0.1 °C	NA	2 % ± 1 °C ± 2 °C 9 % ± 2 °C
Backlight	_	_	Yes	Yes

Function	Overload Protection	Input Impedance (Nominal)	Common Mode Rejection Ratio	Normal Mode Rejection Ratio
AC volts	1000 V ¹	>10 MΩ, <100 pF	>60 dB at dc, 50 Hz or 60 Hz	_
AC millivolts	400 mV	>1 MΩ, <100 pF	>80 dB at 50 Hz or 60 Hz	-
DC volts	1000 V ¹	>10 MΩ, <100 pF	>100 dB at dc, 50 Hz or 60 Hz	>60 dB at 50 Hz or 60 Hz
DC millivolts	400 mV	>1 MΩ, <100 pF	>80 dB at 50 Hz or 60 Hz	_

¹10⁶ V Hz max.

General specifications

Maximum voltage between any terminal and earth ground	1000 V
Display (LCD)	4000 counts, updates 3/sec
Battery type	2 AA, NEDA 15 A, IEC LR6
Battery life	500 hours minimum (50 hours in LED Test mode without load. The hours with load depends on the type of LED under test.)
Temperature	Operating: 0 °C to 40 °C; Storage: -30 °C to 60 °C
Relative humidity	Operating humidity: \le 90 % RH at 10 °C to 30 °C; \le 75 % RH at 30 °C to 40 °C; non-condensing (<10 °C)
Operating humidity, 40 MΩ range	≤ 80 % RH at 10 °C to 30 °C; ≤ 70 % RH at 30 °C to 40 °C
Altitude	Operating: 2000 m; Storage: 12,000 m
Temperature coefficient	0.1 X (specified accuracy) /°C (<18 °C or >28 °C)
Fuse protection for current inputs	440 mA, 1000 V fast fuse, Fluke specified part only. 11 A, 1000 V fast fuse, Fluke specified part only
Size (HxWxL)	183 mm x 91 mm x 49.5 mm
Weight	455 g
IP rating	IP40
Safety	IEC 61010-1, IEC61010-2-030 CAT III 600 V, CAT II 1000 V, Pollution Degree 2
Electromagnetic environment	IEC 61326-1: Portable
Electromagnetic compatibility	Applies to use in Korea only

¹All ac, Hz, and duty cycle are specified from 1 % to 100 % of range. Inputs below 1 % of range are not specified.

²Typically, open circuit test voltage is 2.0 V and short circuit current is <0.6 mA.

³Specifications do not include errors due to test lead capacitance and capacitance floor (may be up to 1.5 nF in the 40 nF range).

⁴Typical means when the frequency is at 50 Hz or 60 Hz and the duty cycle is between 10 % and 90 %.

Class A Equipment (Industrial Broadcasting & Communication Equipment)¹

This product meets requirements for industrial (Class A) electromagnetic wave equipment and seller or user should take notice of it. This equipment is intended for use in business environments and is not to be used in homes.



Ordering information FLUKE-15B+ Digital Multimeter FLUKE-17B+ Digital Multimeter

Included

Test leads with caps, thermocouple temperature probe (17B+), 2 AA batteries, users manual.

Optional accessories

TPAK Meter Hanging Kit TL175 TwistGuard™ Test Leads



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Fluke 59

Mini Infrared Thermometer

Reliable temperature measurements. Wherever you need to go

The Fluke 59 Mini digital thermometer is the perfect product for electricians to do daily electrical installation and maintenance jobs. The Fluke 59 Mini Infrared Thermometer offers quick and reliable surface temperature readings. This compact and portable design enables technicians to easily carry, hold and operate the meter under industrial environment.



Technical Data

Product highlights

- Easy-to-use for everyday temperature measurements
- Single point laser sighting for accurate and repeatable measurements
- Large, easy-to- read backlit
 LCD display for easy viewing
- Small and lightweight design fits easily fits into your tool box
- One year warranty



Specifications		
Measurement Range	– 18°C to 275°C (0°F to 525°F)	
Accuracy	100°C - 275°C (212°F to 515°F): ±2% of reading 0°C - 100°C (32°F to 212°F): ±2°C(3.5°F) of reading Below 0°F (32°F): ±3°C(5.5°F) of reading	
Repeatability	±1% of reading or ±1°C whichever is greater	
Emissivity	Pre-set 0.95	
Distance-to-Spot size	8:1 calculated @ 90% energy	
Response time	< 500ms	
Display resolution	0.2°C (0.5°F)	
Spectral range	6.5 – 18 um Thermopile detector	
Display hold 7 seconds	Yes	
LCD backlight	Yes	
Temperature display	°C or °F selectable	
Low battery indicator	Yes	
Ambient operating range	0°C - 50°C (32°F to 120°F)	
Relative humidity	10% - 90% RH non-condensing @ up to 30°C(86°F)	
Storage temperature	-20°C - 65°C(-4°F to 150°F) without battery	
Power	9V battery included	
Battery life	4 hours	
Weight	200g, with battery	
Dimensions (H x L x W)	152mm x 102mm x 38mm	
Standards	Conforms to EN 61326-1 Electromagnetic Emissions and Susceptibility EN 61010-1 General Safety EN 60825-1 Laser Safety	
Certification	CE, CMC	
Warranty	1 year	

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Authorised Retailer

SGM Lab Solutions



TECHNICAL DATA

64 MAX, 62 MAX+ and 62 MAX IR Thermometers



TEMPERATURE RANGE

64 MAX

-30 °C to 600 °C (-22 °F to 1112 °F)

62 MAX+

-30 °C to 650 °C (-22 °F to 1202 °F)

62 MAX

-30 °C to 500 °C (-22 °F to 932 °F)

TEMPERATURE ACCURACY

64 MAX

 \pm 1.0 °C or \pm 1.0 % of reading, whichever is greater \pm 2.0 °C at -10 °C to 0 °C \pm 3.0 °C at -30 °C to -10 °C

62 MAX+

± 1.0 °C or ± 1.0 % of reading, whichever is greater ± 2.0 °C at -10 °C to 0 °C ± 3.0 °C at -30 °C to -10 °C

62 MAX

± 1.5 °C or ± 1.5 % of reading, whichever is greater ± 2.0 °C at -10 °C to 0 °C ± 3.0 °C at -30 °C to -10 °C

DISTANCE:SPOT

64 MAX

20:1

62 MAX+

12:1

62 MAX

10:1

INTERNAL MEMORY

64 MAX

99 data point logging

AUTO CAPTURE



Takes the heat, the dust and water and a 3 meter drop. And now, internal memory and unattended monitoring.

The Fluke 64 MAX, 62 MAX+ and 62 MAX IR Thermometers have the precision you need to do your job accurately and will not break the budget. Designed and tested to survive a 3 meter drop, you can count on these lightweight, compact infrared thermometers to work when you need them to work—even in the harshest environments and when you're not able to be there (64 MAX).

- Precise laser technology for more accurate and repeatable measurements
- Temperature accuracy of up to ≥ 0 °C: ± 1 °C or ± 1 % of reading whichever is greater with 20:1 distance to spot ratio (64 MAX)
- Flashlight (64 MAX) and large, easy-to-read backlit LCD display for easy viewing even in dark environment
- IP54 rated for extra protection against airborne contaminants
- Get your tool to work when you can't-set time and desired interval between measurements and Auto Capture will capture spot temperatures unattended (64 MAX)
- 99 data point logging (64 MAX)
- Displays the minimum, maximum or average temperature, or the difference between two measurements
- Hi and Lo alarms for rapid display of measurements outside set limits
- The 62 MAX+ has dual rotating lasers to help you identify area to be measured. The measurement area is the spot between the dots (62 MAX and 64 MAX have 1).
- Small and lightweight, fits easily into your tool box



Specifications

	64 MAX	62 MAX+	62 MAX
Key features			
Temperature range	- 30 °C to 600 °C (-22 °F to 1112 °F)	- 30 °C to 650 °C (-22 °F to 1202 °F)	- 30 °C to 500 °C (-22 °F to 932 °F)
Accuracy (Calibration geometry with ambient temperature 23 °C +/- 2 °C)	± 2.0 °C at -	ding, whichever is greater 10 °C to 0 °C 10 °C to -10 °C	± 1.5 °C or ± 1.5 % of reading, whichever is greater ± 2.0 °C at -10 °C to 0 °C ± 3.0 °C at -30 °C to -10 °C
Optical resolution	20:1 (calculated at 90 % energy)	12:1 (calculated at 90 % energy)	10:1 (calculated at 90 % energy)
Response time (95 %)	< 500 ms (95 % of reading)	< 300 ms (95 % of reading)	< 500 ms (95 % of reading)
Spectral response		8 to 14 microns	
Emissivity		0.10 to 1.00	
Display resolution		0.1 °C (0.2 °F)	
Repeatability (% of reading)	\pm 0.5 % of reading or \pm 0.	5 °C (whichever is greater)	± 0.8 % of reading or ± 1 °C (whichever is greater)
Auto Capture	Set time and interval to capture up to 99 measurements		-
Internal memory	99 data point logging capability	-	-
Flashlight	Yes		
Power		1 AA alkaline battery	
Battery life	30 hours with laser and backlight on	8 hours with laser and backlight on	10 hours with laser and backlight on
Weight		255 g (8.99 oz)	
Size	(175 x 85	x 75) mm (6.88 x 3.34 x 2.9	95) inches
Operating temperature		0 °C to 50 °C (32 °F to 122°F)
Storage temperature	-20 °C to 6	0 °C (-4 °F to 140 °F) (without	out battery)
Operating humidity	Non- condensing @ ≤ 10 °C (50 °F) ≤ 90 % RH @ 10 °C (50 °F) to 30 °C (86 °F) ≤ 75 % RH @ 30 °C (86 °F) to 40 °C (104 °F) ≤ 45 % RH @ 40 °C (104 °F) to 50 °C (122 °F)		(86 °F) (104 °F)
Operating altitude	200	00 meters above mean sea le	evel
Storage altitude	12,000 meters above mean sea level		level
Drop test	3 meters		
Implement standard		Q/ASF01	
Standards and agency approval			
Compliance	IE	C 61010-1: Pollution Degree	2
Laser safety	IEC 60825-1 Class 2, 650 nm, < 1 mW		1 mW ∠**
Ingress protection rating	IP 54 per IEC 60529		
Warranty	3 years		

Ordering information

Fluke-64 MAX IR Thermometer Fluke-62 MAX+ IR Thermometer Fluke-62 MAX IR Thermometer

Included with product

IR Thermometer
Printed instruction sheet
Carabiner (62 MAX+ only)
Product manuals available for download from fluke.com

Kits

Fluke T5-600/62 MAX+/1AC II
IR Thermometer, Electrical Tester
and Voltage Detector Kit
Fluke 62 MAX+/323/1AC
IR Thermometer, Clamp Meter and
Voltage Detector Kit





Fluke 101 Digital Multimeter

The FIRST-CHOICE multimeter for electrical professionals



Technical Data

Designed for basic electrical tests, the Fluke 101 digital multimeter offers reliable measurements for residential/ commercial electricians and heating and air conditioning technicians. This small, lightweight multimeter fits comfortably in your hand but is rugged enough to withstand daily use for years to come. When it comes to professional-grade affordable multimeters, the Fluke 101 digital multimeter is your best choice.

Fluke 101 Product Highlights

- Basic dc accuracy 0.5 %
- CAT III 600 V safety rated
- Diode and continuity test with buzzer
- Small lightweight design for one-handed use
- Rugged, durable design
- Automatic shutdown
- Battery is easy to replace



Specifications

Electrical specifications

Function	Range	Resolution	Accuracy
AC volts (40 Hz to 500 Hz)	600.0 mV 6.000 V 60.00 V 600.0 V	0.1 mV 0.001 V 0.01 V 0.1 V	3.0 % ± 3 digit 1.0 % ± 3 digit
DC volts	6.000 V 60.00 V 600.0 V	0.001 V 0.01 V 0.1 V	0.5% ± 3 digit
Resistance ohms	400.0 Ω 4.000 kΩ 40.00 kΩ 400.0 kΩ 4.000 MΩ 40.00 MΩ	0.1 Ω 0.001 k Ω 0.01 k Ω 0.1 k Ω 0.001 M Ω 0.01 M Ω	$0.5\% \pm 3$ digit $0.5\% \pm 2$ digit $1.5\% \pm 3$ digit
Capacitance	50.00 nF 500.0 nF 5.000 μF 50.00 μF 100.0 μF	0.01 nF 0.1 nF 0.001 µF 0.01 µF 0.1 µF	NA
Frequency (10 Hz to 100 kHz)	50.00 Hz 500.0 Hz 5.000 kHz 50.00 kHz 100.0 kHz	0.01 Hz 0.1 Hz 0.001 kHz 0.01 kHz 0.1 kHz	NA
Duty cycle	0.1 % to 99.9 %	0.1 %	NA

General specifications

Continuity (audible)	Yes
CAT rating	CAT III 600 V
Auto shutoff	Yes
Size (HxWxL)	130 mm x 65 mm x 27mm
Weight	160 g
Battery	Two AAA
Warranty	1 year
IP rating	IP 40 per IEC 60529
Drop test	1 meter to surface
Temperature	Operating: 0 °C to 40 °C Storage: -30 °C to 60 °C

Ordering information

FLUKE-101 Digital Multimeter

Included equipment

- TL75 Test leads
- 2 AAA Batteries (installed)
- User's manual



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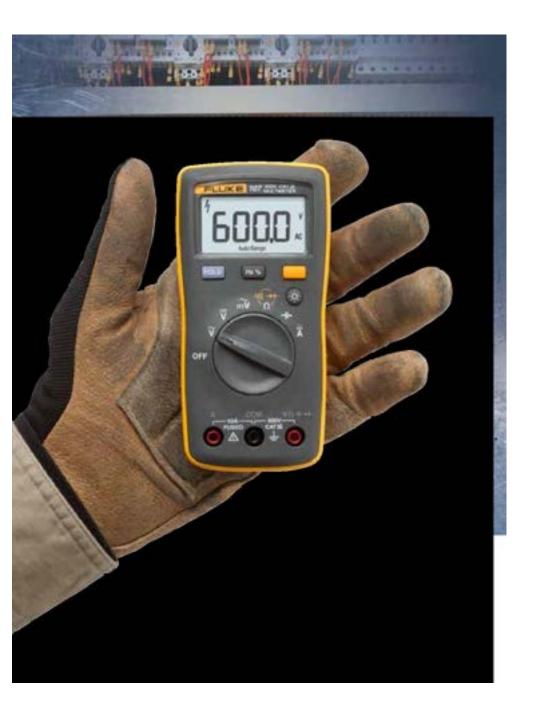
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Fluke 106/107 Palmsized Digital Multimeters

Fluke 106 and 107 put measurements in the palm of your hand



Technical Data

The Fluke 106 and 107 are compact, easy to use tools. These are palm-sized digital multimeters deliver safe, reliable measurements time after time.

The Fluke 106 and 107 are great products made to fit the way you work! These are the only Fluke digital multimeters designed to fit in the palm of your hand and go with you no matter where your job takes you.

Product highlights

- Voltage, resistance, continuity, capacitance
- Input terminal for ac and dc current measurements to 10 A and current
- Data hold
- Backlit display (107 only)
- Diode test, plus frequency and duty cycle measurements (107 only)



Speci_cations

Electrical specifications

Accuracy is specified for 1 year after calibration, at operating tem-peratures of 18 °C to 28 °C, relative humidity at 0 % to 75 %. Accuracy specifications take the form of: ±([% of Reading] + [Number of Least Significant Digits])

Function	Range	Resolution	Accı	ıracy
	i l		106	107
AC volts (40 Hz to 500 Hz) ¹	6.000 V 60.00 V 600.0 V	0.001 V 0.01 V 0.1 V	1.0 % + 3	1.0 % + 3
DC volts	6.000 V 60.00 V 600.0 V	0.001 V 0.01 V 0.1 V	0.5 % + 3	0.5 % + 3
AC millivolts	600.0 mV	0.1 mV	3.0 % + 3	3.0 % + 3
Diode test 2	2.000 V	0.001 V	10	%
Resistance (ohms)	400.0 Ω 4.000 kΩ 40.00 kΩ 400.0 kΩ 4.000 MΩ 40.00 MΩ	0.1 Ω 0.001 kΩ 0.01 kΩ 0.1 kΩ 0.001 MΩ 0.01 MΩ	0.5 % + 3 0.5 % + 2 0.5 % + 2 0.5 % + 2 0.5 % + 2 1.5 % + 3	0.5 % + 3 0.5 % + 2 0.5 % + 2 0.5 % + 2 1.5 % + 3
Capacitance ³	50.00 nF 500.0 nF 5.000 µF 50.00 µF 500.0 µF 1000 µF	0.01 nF 0.1 nF 0.001 µF 0.01 µF 0.1 µF 1 µF	2 % + 5 2 % + 5 5 % + 5 5 % + 5 5 % + 5	2 % % % % % % % % % % % % % % % % % % %
Frequency ⁴ (10 Hz to 100 kHz)	50.00 Hz 500.0 Hz 5.000 kHz 50.00 kHz 100.0 kHz	0.01 Hz 0.1 Hz 0.001 kHz 0.01 kHz 0.1 kHz	NA	0.1 % + 3
Duty cycle ³	0.1 % to 99.9 %	0.1 %	NA	1 % typical ⁴
AC current (40 Hz to 200 Hz)	4.000 A 10.00 A	0.001 A 0.01 A	1.5 % + 3	1.5 % + 3
DC current	4.000 A 10.00 A	0.001 A 0.01 A	1.5 % + 3	1.5 % + 3
Backlight	_	_	No	Yes

 $^{^1}$ All AC, Hz, and duty cycle are specified from 1 % to 100 % of range. Inputs below 1 % of range are not specified. 2 Typically, open circuit test voltage is 2.0 V and short circuit current is < 0.6 mA.

Typical means when the frequency is at 50 Hz or 60 Hz and the duty cycle is between 10 % and 90 %.

Function		<pre>Input imped- ance (nominal)</pre>	Common mode rejection ratio	Normal mode rejection ratio
AC volts	600 V ¹	$> 10 M\Omega$ < 100 pF2	> 60 dB at dc, 50 Hz or 60 Hz	1
AC millivolts	600 mV	>1M <100 pF	> 80 dB at 50 Hz or 60 Hz	ı
DC volts	600 V ¹	$>$ 10 M Ω $<$ 100 pF	> 100 dB at dc, 50 Hz or 60 Hz	> 45 dB at 50 Hz or 60 Hz

 $^{^{1}}$ 6 x 105 V Hz Max.

 $^{^2}$ For mV (AC), input impedance is approximately 1 MQ.





General specifications

Maximum voltage	600 V
between any terminal	
and earth ground	
Display (LCD)	6000 counts, updates 3/sec
Battery type	2 AAA, NEDA 24A, IEC LR03
Battery life	200 hours minimum
Temperature	Operating: 0 °C to 40 °C
	Storage: -30 °C to 60 °C
Relative humidity	Operating Humidity: Non-condensing
	when < 10°C
	≤ 90 % at 10 °C to 30 °C;
	≤ 75 % at 30 °C to 40 °C
	Operating Humidity, 40 MΩ Range:
	<pre> ≤ 80 % at 10 °C to 30 °C; </pre>
۸ ایدند ، ما م	≤ 70 % at 30 °C to 40 °C
Altitude	Operating: 2000 m
Temperature	Storage: 12,000 m
coefficient	0.1 X (specified accuracy)/°C (< 18 °C or > 28 °C)
Fuse protection for	11 A, 1000 V Fast Fuse, Fluke
·	specified part only
current inputs	
Size (HxWxL)	142 mm x 69 mm x 28mm
Weight	200 g IEC 60529: IP 40
IP rating	
Safety	IEC 61010-1: 600 V CAT III,
	Pollution Degree 2
Electromagnetic environment	IEC 61326-1: portable
Electromagnetic	Applies to use the Korea only.
compatibility	Class A Equipment
Compatibility	(Industrial broadcasting and
	communication equipment) 1
Warranty	One year
	<u> </u>

¹ This product meets requirements for industrial (Class A) electromagnetic wave equipment and seller or user should take notice of it. This equipment is intended for use in business environments and is not to be used in homes.

Ordering information

FLUKE-106 Digital Multimeter FLUKE-107 Digital Multimeter

Included equipment

- TL75 Test leads
- 2 AAA Batteries (installed)
- •User's manual

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Specifications do not include errors due to test lead capacitance and capacitance floor (may be up to 1.5 nF in the 50 nF range). All AC, Hz, and duty cycle are specified from 1 % to 100 % of range. Inputs below 1 % of range are not specified.



Fluke 115 Multimeter

Technical Data



Actual size















Compact true-rms meter for field service technicians

The Fluke 115 is the solution for a wide variety of electrical and electronic testing applications. This true-rms meter provides easy one-handed operation in a compact package.

Features include:

- Resistance, continuity, frequency, capacitance, and diode test
- Measures 10 A (20 A overload for 30 seconds)
- Large white LED backlight to work in poorly lit areas
- Compact ergonomic design for one-handed operation
- Compatible with optional magnetic hanger (ToolPak™)
- True-rms for accurate measurements on non-linear loads
- Min/Max/Average with elapsed time to record signal fluctuations
- CAT III 600 V safety rated

General specifications

Accuracy is specified for 1 year after calibration, at operating temperatures of 18 °C to 28 °C, with relative humidity at 0 % to 90 %.

The accuracy specifications take the form of:

 \pm ([% of reading] + [counts])

Maximum voltage between any terminal and earth ground	600 V
Surge protection	6 kV peak per IEC 61010-1 600 V CAT III, Pollution Degree 2
Fuse for A input	11 A, 1000 V FAST Fuse (Fluke PN 803293)
Display	Digital: 6,000 counts, updates 4/sec
Bar graph	33 segments, updates 32/sec
Operating temperature	-10 °C to + 50 °C
Storage temperature	-40 °C to + 60 °C
Battery	9 volt Alkaline, NEDA 1604A/ IEC 6LR61
Battery life	400 hours typical, without backlight



Accuracy specifications

Measurement	Range	Resolution	Accuracy \pm ([% of reading] + [counts])	
DC millivolts	600.0 mV	0.1 mV	0.5 % + 2	
DC volts	6.000 V	0.001 V		
	60.00 V	0.01 V	0.5 % + 2	
	600.0 V	0.1 V		
Auto volts	600.0 V	0.1 V	2.0 % + 3 (dc, 45 Hz to 500 Hz) 4.0 % + 3 (500 Hz to 1 kHz)	
AC millivolts ¹ true-rms	600.0 mV	0.1 mV	1.0 % + 3 (dc, 45 Hz to 500 Hz) 2.0 % + 3 (500 Hz to 1 kHz)	
AC volts1 true-rms	6.000 V	0.001 V		
	60.00 V	0.01 V	1.0 % + 3 (45 Hz to 500 Hz) 2.0 % + 3 (500 Hz to 1 kHz)	
	600.0 V	0.1 V	2.0 % + 0 (000 112 to 1 1121)	
Continuity	600 Ω	1 Ω	Beeper on $<$ 20 off $>$ 250 ; detects opens or shorts of 500 μs or longer.	
Ohms	600.0 Ω	0.1 Ω	0.9 % + 2	
	6.000 kΩ	0.001 kΩ		
	60.00 kΩ	0.01 kΩ	000/	
	600.0 kΩ	0.1 kΩ	0.9 % + 1	
	6.000 MΩ	0.001 MΩ		
	40.00 MΩ	0.01 MΩ	5 % + 2	
Diode test	2.000 V	0.001 V	0.9 % + 2	
Capacitance	1000 nF	1 nF		
	10.00 μF	0.01 μF	1.9 % + 2	
	100.0 μF	0.1 μF		
	9999 μF	1 μF		
	100 μF to 1000 μF		1.9 % + 2	
	> 1000 μF		5 % + 20	
Lo-Z capacitance	1 nF to 500 μF		10 % + 2 typical	
AC amps true-rms	6.000 A	0.001 A	1.5 % + 3	
(45 Hz to 500 Hz)	10.00 A	0.01 A	1.0 % 1 0	
	20 A overload for 30	seconds max.		
DC amps	6.000 A	0.001 A	1.0 % + 3	
	10.00 A	0.01 A	1.0 70 1 0	
	20 A overload for 30	seconds max.		
Hz (V or A input) ²	99.99 Hz	0.01 Hz		
	999.9 Hz	0.1 Hz	0.1 % + 2	
	9.999 kHz	0.001 kHz	0.1 70 T Z	
	50.00 kHz	0.01 kHz		

Notes:

Ordering information

Fluke-115 Multimeter

Included

TL75 Test leads, holster, User's manual and 9 V battery (installed).



Fluke. Keeping your world up and running.™

Fluke Corporation

PO Box 9090, Everett, WA USA 98206

Fluke Europe B.V.

PO Box 1186, 5602 BD Eindhoven, The Netherlands

For more information call:

In the U.S.A. (800) 443-5853 or Fax (425) 446-5116
In Europe/M-East/Africa (31 40) 2 675 200 or Fax (31 40) 2 675 222
In Canada (800)-36-FLUKE or Fax (905) 890-6866
From other countries +1 (425) 446-5500 or Fax +1 (425) 446-5116
Web access: http://www.fluke.com

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 $^{^1}$ All ac voltage ranges are specified from 1~% to 100~% of range. Because inputs below 1~% of range are not specified, it is normal for this and other true-rms meters to display non-zero readings when the test leads are disconnected from a circuit or are shorted together. For volts, crest factor of ≤ 3 at 4000 counts, decreasing linearly to 1.5 at full scale. AC volts is ac coupled and ac mV is dc coupled.

² Frequency is ac coupled, 5 Hz to 50 kHz for ac voltage. Frequency is dc coupled, 45 Hz to 5 kHz for ac current.

Fluke 179 Digital Multimeter

For maintenance and field service



The Fluke 179 True-rms Multimeter has the features needed to find most electrical and HVAC problems. Simple to use with significant improvements over the original Fluke 70 Series.

- Wide 1000 V measurement range
- True-rms for precise measurement of non-linear
- Capacitance, resistance, continuity and frequency
- Built-in thermometer (Fluke 179 only)
- Large, easy-to-read display
- Backlight for work in dimly lit areas (Fluke 177 and 179 only)
- Min/Max/Avg to record signal fluctuations
- Display hold and auto hold
- · Manual and automatic ranging

Electrical safety

All inputs are protected to measurement CAT III 1000 V and CAT IV 600 V. This meter can withstand transient impulses in excess of 8000 V to help protect you from arc blasts resulting from surges and spikes.

Also available the 175 and 177 multimeters, see below for specifications.















Features

Features	179	177	175
Max voltage	1000	1000	1000
True-rms	•	•	•
Temperature	•	_	_
Basic dc accuracy	0.09 %	0.09 %	0.15 %
Backlight	•	•	_
Min/Max/Avg	•	•	•
ToolPak meter hanging kit with magnet	Opt	Opt	Opt
Limited lifetime warranty	•	•	•

Specifications

Functions	Range and resolution	Best accuracy
DC voltage	600.0 mV, 6.000 V, 60.00 V, 600.0 V, 1000 V	± 0.09 % (Models 177 and 179) ± 0.15 % (Model 175)
AC voltage ¹	600.0 mV, 6.000 V, 60.00 V, 600.0 V, 1000 V	± 1.0 % of reading
DC current	60.00 mA, 400.0 mA, 6.000 A, 10.00 A ²	± 1.0 % of reading
AC current ²	60.00 mA, 400.0 mA, 6.000 A, 10.00 A ²	± 1.5 % of reading
Resistance	600.0Ω , $6.000 kΩ$, $60.00 kΩ$, $600.0 kΩ$, $6.000 MΩ$, $50.00 MΩ$	± 0.9 % of reading
Capacitance	1000 nF, 10.00 μF, 100.0 μF, 9999 μF	± 1.2 % of reading
Frequency ³	99.99 Hz, 999.9 Hz, 9.999 Hz, 99.99 kHz	± 0.1 % of reading
Temperature (Model 179)	-40 °C to +400 °C (-40 °F to +752 °F)	1.0 % of reading

Ordering information

Included accessories	Models	
Test leads, 9 V battery (installed) and	FLUKE-179	Digital Multimeter
manual. The Fluke 179 comes with	FLUKE-175	Digital Multimeter
an additional temperature probe.	FLUKE-177	Digital Multimeter
	FLUKE-179/1AC-II	Electricians Combo Kit
	FLUKE-179/EDA2	Electronics Combo Kit



Recommended kits



179/EDA2 Electronics Multimeter and **Deluxe Accessory Combo Kit**

- True-rms digital multimeter
- · Electronic test probes
- SureGrip™ silicone test leads
 SureGrip™ heavy duty hook clips
- Type K temperature probe
- Meter hanging accessory
- Soft case



179/1AC-II Electrician's Multimeter and

Voltage Tester Combo Kit

- · True-rms digital multimeter Non-contact voltage detector
- · Alligator clips
- SureGrip™ test probes
- Silicone test leads, 1.5 m
- Type K temperature probe Meter hanging accessory
- Soft case

Check price and availability at www.fluke.com/wtb

Åll ac voltage and ac current ranges are specified from 5 % of range to 100 % of range.

310 A continuous, 20 A for up to 30 seconds.

Voltage frequency is specified from 2 Hz to 100 kHz. Current frequency is specified from 2 Hz to 30 kHz.

Battery Ifie: 200 hours typical for alkaline.

Size (HxWxL): 4.3 cm x 9.0 cm x 18.5 cm (1.7 in x 3.5 in x 7.3 in).



New Fluke 305, 303 and 302+ Clamp Meters

Introducing the new compact AC Clamp Meters from Fluke

Package Contents

- Carrying case
- User's manual
- Test Leads (TL 75)
- Registration Card
- Calibration certificate
- 2 x AA Batteries



The new Fluke 305, 303 and 302+ come with all the rugged, reliable and accurate features your customers have come to trust in a small, ergonomic design. The new body design is different from the traditional Fluke clamp meters and offers a more compact design to meet the needs of your customers.

Your customers know and use the Fluke family of products every day and they understand how crucial having a rugged, reliable and accurate tool with them on the job can be. With features like 999.9 A AC Current (305), 400 A AC (302+), 600 A AC (303), large 30 mm jaw opening and a CAT IV 300V/CAT III 600V safety rating, all of the necessary features for your value conscious clamp customers are met in a small, easy to use product.

PRICE

Clamp Meters		
Fluke 302	Clamp Meter 400A AC True RMS	R 1 191
	Quantity discounts:	
	1 to 5 units	R 1 191
	6 to 10 units	R 1 072
	11 plus units	R 954
Fluke 303	Clamp Meter 600A AC True RMS	R 1 492
	Quantity discounts:	
	1 to 5 units	R 1 492
	6 to 10 units	R 1 343
	11 plus units	R 1 195
Fluke 305	Clamp Meter 1000A AC True RMS	R 1 766
	Quantity discounts:	
	1 to 5 units	R 1 766
	6 to 10 units	R 1 589
	11 plus units	R 1 414

Clamps are also used broadly in a wide variety of other applications including:

- The SIM segment electrician working in:
- Industrial Plants
- Process Industries
- Facilities and Commercial Building Maintenance
- Service Organizations

These electricians often work as:

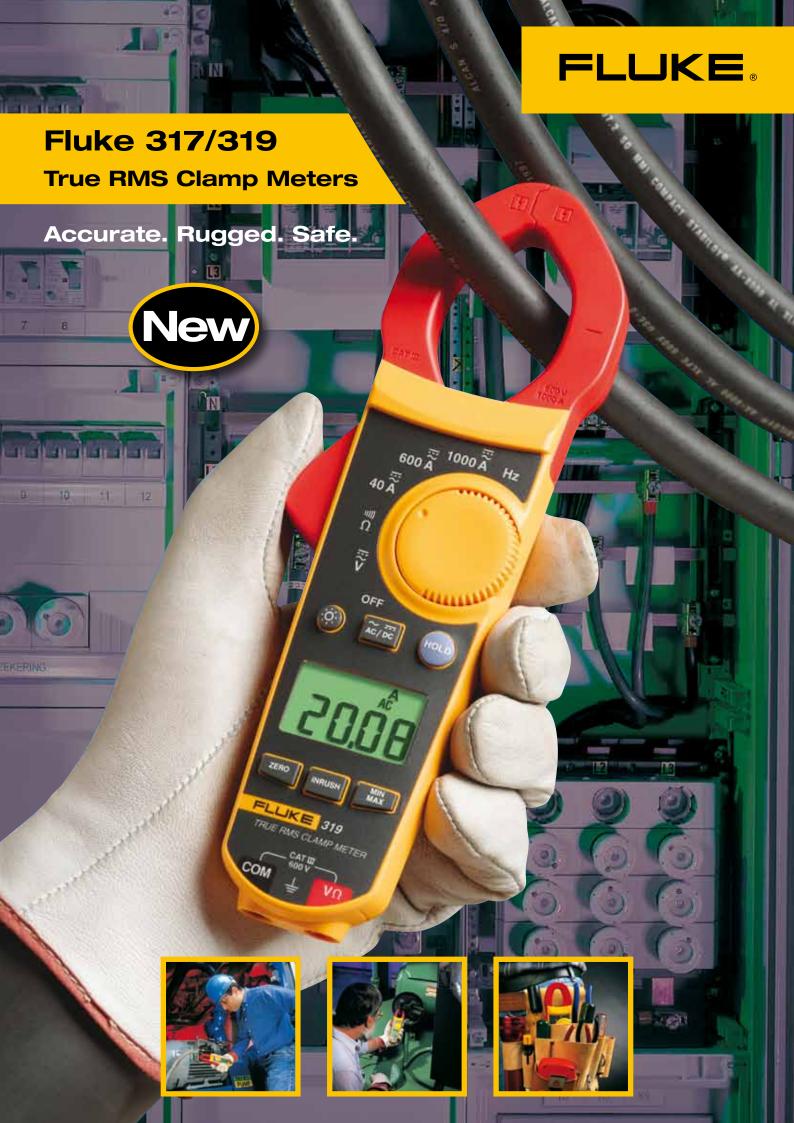
- Electrical Contractors
- Customer Service Engineers
- Utility Meter Technicians
- Engineers

Why do they buy Fluke Clamp Meters?

Fluke tools are known for their ruggedness and on-the-job reliability. The 30x clamps are the most rugged clamp meters available in an affordable package. With simple one-knob operation, large easy-to-read display and a two-year warranty, Fluke offers a product that makes your customers the go-to person on the job site.

Specifications of the new 303 and 302+ Clamp Meters

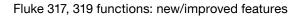
Technical Specifications				
Model		302+	303	305
AC current	Range	400.0A	600.0A	999.9
	Accuracy	1.8% ±5	1.8% ±5	2% ±5
AC voltage	Range	400/600	400/600	400/600
	Accuracy	1.5% ±5	1.5% ±5	1.5% ±5
DC voltage	Range	400/600	400/600	400/600
	Accuracy	1.0% ±5	1.0% ±5	1.5% ±5
DC mV range				
Resistance	Range	4000 Ω	4000 Ω	4000 Ω
	Accuracy	1% ±5	1% ±5	1% ±5
Continuity	Continuity		≤70 Ω	≤70 Ω
Backlight display	/	Yes	Yes	Yes
Data Hold		Yes	Yes	Yes
Size	H x W x D (mm)	208 x 58.5 x 28	208 x 58.5 x 28	208 x 58.5 x 28
	Jaw size	30 mm	30 mm	30 mm
Safety rating		CAT III 600V	CAT III 600V	CAT III 600V
Temperature		0 ~ 40 °C	0 ~ 40 °C	0 ~ 40 °C
Screen refresh rate		> 2 times / sec.	> 2 times / sec.	
Test leads	Test leads		TL75	TL75
Battery		2 AA batteries	2 AA batteries	2 AA batteries
Warranty		2 years	2 years	2 years



Fluke 317/319 True RMS Clamp Meters



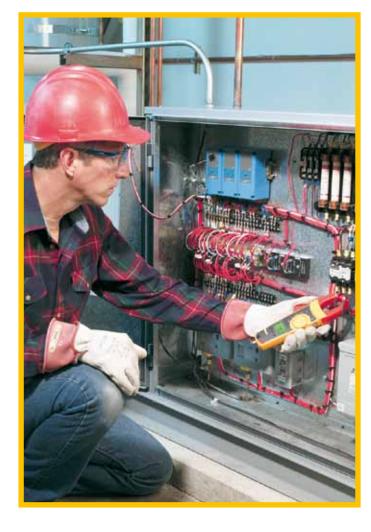




- Thin jaws and small, light body mean the meters are more suitable for use in confined spaces.
- Large 1000 A AC/DC current measurement with AC/DC voltage measurement.
- Inrush measurement technology allows measurement of starting current for devices such as motors and lightning equipment; integration time is 100 ms (Fluke 319 only).
- Frequency measurements enable accurate measurement of PWM output signal frequency (Fluke 319 only).
- True RMS AC/DC measurement
- Min/max function suitable for current and voltage
- Large easy to read, 6000 count backlit display
- 4000 Ω resistance measuring span
- Data hold function can save measurement results on the screen
- Continuity beeper \leq 30 Ω
- Auto Power Off function maximises battery life span
- Clamp opening: 37 mm (1.45 inch)
- Warranty 1 year

General specifications	
Power supply	3x AAA IEC LR03 batteries
Max. jaw opening	37 mm (1.45 in)
Jaw diameter	37 mm (1.45 in)
Dimensions (L x W x H)	234 mm x 74 mm x 34.8 mm
Weight	384 g (13.5 oz) (with battery)
Calibration	Fully manual calibration and testing, one year calibration testing period
Digital display resolution	6000 digits
Safety	CE EN/IEC 61010-1 and IEC 61010-2-032 Measurement category: 600 V CAT III (Category III)

Environmental indicators	
Working temperature	-10°C to 50°C (14°F to 122°F)
Storage temperature	-40°C to 60°C (-40°F to 140°F)
IP equivalent	IP40
Drop test requirements	Drop height tested to 1 m (3 ft), all six sides tested, oak flooring



Fluke 317/319 True RMS Clamp Meters



Technical specification	ations			
E attaca	Danamatan	Fluir 047	Flate 040	
Function	Parameter	Fluke 317	Fluke 319	
AC Current	Measurement	40.00 A	40.00 A	
		600.0 A	600.0 A	
			1000 A	
	Resolution	0.01 A	0.01 A	
		0.1 A	0.1 A	
			1 A	
	Precision	Accuracy 1.6% ± 6 digits (50-60 Hz) [40 A]		
		2.5% ± 8 digits (60-500 Hz) [40 A]	2.5% ± 8 digits (60-500 Hz) [40 A]	
		1.5% ± 5 digits (50-60 Hz) [600 A]	1.5% ± 5 digits (50-60 Hz) [600/1000 A]	
		2.5 % ± 5 digits (60-500 Hz) [600 A]	2.5% ± 5 digits (60-500 Hz) [600/1000 A]	
	When crest	For 500 A, maximum 3.0	For 500 A, maximum 3.0	
	factor CF > 2,	For 600 A, maximum 2.5	For 600 A, maximum 2.5	
	increase the specifications			
	by 2% AC response	RMS	RMS	
DC Current	Range	40.00 A	40.00 A	
DO Garront	riango	600.0 A	600.0 A	
		000.071	1000 A	
	Resolution	0.01 A	0.01 A	
	riesolution	0.1 A	0.1 A	
		0.1 A	1 A	
	Accuracy	1.6% ± 6 digits [40 A]	1.6% ± 6 digits [40 A]	
	Accuracy		1.0% ± 0 digits [40 A]	
A C lta a	Danas	1.5% ± 5 digits [600 A]	201/	
AC voltage	Range		0.0 V	
	Resolution	0.1V		
	Accuracy	1.5% ± 5 digits (20-500Hz) RMS		
DO 11	AC response			
DC voltage	Range		0.0 V	
	Resolution		1 V	
	Accuracy		4 digits	
Resistance	Measurement		00 Ω	
	Resolution		1 Ω	
	A = =	1.0 Ω		
0	Accuracy	1% ± 5 digits $≤ 30 Ω$		
Continuity	Late and C C			
Inrush current	Integration time	NA NA	100 ms	
Frequency	Measuring span	NA	5.0-500.0 Hz	
	Accuracy	NA	0.5% ± 5 digits	
	Power level	NA	10 - 100 Hz ≥ 5 A, 5 - 10 Hz, 100 - 500 Hz ≥ 10 A	



Fluke 317/319 True RMS Clamp Meters

- Frequency measurement (Fluke 319)
- Unique 40 A low frequency measurements capability with 0.01 A resolution, 1.6 % accuracy

Fluke 317/319 True RMS Clamp Meters



Also available

DIGITAL MULTI METERS







CLAMP METERS







ADDITIONAL RANGE







Look out for this sticker on every Fluke test tool Packaging



Look out for this hologram sticker on every Fluke test tool





Fluke. Keeping your world up and running.®

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Fax: +91 22 4227 0338
E-mail: info.india@fluke.com
Web: www.fluke.com/india



Your nearest representative



Fluke 362

200A AC / DC Clamp Meter

Ready to go wherever your work takes you.

Technical Data

The new Fluke 362 Clamp Meter is designed to fit easily in your pocket. The small 18 mm triangular jaw allows access into tight places where other clamp meters can't reach, while providing the accuracy you can trust from a Fluke tool. This durable clamp meter is a must-have for basic clamp measurements.

Features & Benefit

- CAT III 600 V safety rating
- 200 A AC / DC current and 600 V AC / DC voltage
- 3000 Ω resistance range
- Continuity detection
- Zero function allows the display to be cleared for DC measurements
- Data hold function
- · Large, easy-to-read display for easy viewing
- 18 mm triangular jaw allows for easy measurement in tight space
- Thin, light, compact body design for one-hand operation
- 2 years warranty
- Fluke India Calibration Certificate included









Technical specifications

	Range	Resolution	Accuracy
AC current	200 A	0.1 A	2 % ± 5 digits (45-65 Hz) 2.5 % ± 5 digits (65-400 Hz)
DC current	200 A	0.1 A	2 % ± 5 digits
AC voltage	600 V	0.1 V	1.5 % ± 5 digits (45-400 Hz)
DC voltage	600 V	0.1 V	1 % ± 5 digits
Resistance	300/3000Ω	0.1/1Ω	1 % ± 5 digits
Continuity	≤ 70 Ω		
Data hold	Yes		

General specifications

Size (LxWxH)	205 mm × 60 mm × 22 mm
Jaw opening	18 mm
Weight	196 g
Safety rating	CAT III 600 V
Warranty	2 years

Typical Applications

- UPS / Inverter troubleshooting
- · Battery charger trouble shooting
- · Battery bank maintenance
- Residential / Commercial buildings
- · Industrial troubleshooting
- General electrical / electronics maintenance



Authorised Retailer

Ordering information

Fluke 362 Clamp Meter

Included:

Clamp meter, TL75 test lead set, two AAA batteries (installed) and user manual.

Fluke .The Most Trusted Tools In The World.









Fluke 374 Clamp Meter



Specifications

Jaw Opening	1.33" (34mm)
Max Wire Size	750 MCM
Current Range AC (RMS)	0 - 600 A
Accuracy AC Current (50/60Hz)	2% +/- 5 counts
AC Response	True-rms
Current Range DC	0 - 600 A
Accuracy DC current	2% +/- 5 counts
Voltage Range AC	0 - 600 V
Accuracy AC Voltage	1.5% +/- 5 counts
Voltage Range DC	0 - 600 V
Accuracy DC Voltage	1% +/- 5 counts
Resistance Range	0 - 6000 Ω
Mechanical, Environmental and	600 V CAT IV
Safety Ratings (Category Ratings)	1000 V CAT III



Additional accessory for Fluke 374 2500 Amp AC current measurement with iFlex™ flexible current probe (sold separately)



TECHNICAL DATA

Fluke TiS20+/TiS20+ MAX Thermal Imagers





FLUKE CONNECT™ ASSET TAGGING

Eliminate hours at the computer organizing your thermal images, let Asset Tagging do all that work for you. No more dragging and dropping or renaming files in the office, just scan a QR code on your asset, capture your thermal images and they automatically are sorted by asset. Start spending your time analyzing your images and creating reports instead of sorting your files one at a time.

Save time with the right level of infrared and analysis

- Continuous touchscreen IR-Fusion™, slide your finger across the screen to adjust the setting.
- 120 x 90 infrared resolution (10,800 pixels)
- 3.5" LCD touchscreen display for easy troubleshooting
- Automatically sort images with Fluke Connect Asset Tagging

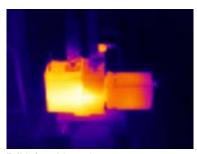
Rugged

Whether you are finding an uneven load on a switchgear or inspecting a ventilation system, the Fluke TiS2O+ and TiS2O+ MAX helps you detect issues quickly.

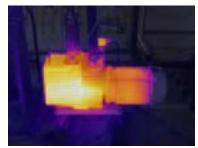
- · Can withstand drop up to 2 meter
- Water and dust resistant-IP54 enclosure rating

IR-Fusion™

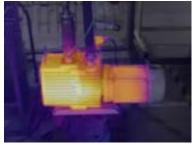
Fluke IR-Fusion technology combines visible and infrared images for faster inspections and better reporting. With a single touch, you can scan from full infrared to full visible images to pinpoint the location of an issue.



Full infrared image*



75 % blended image*



50 % blended image*



Full visible image



Specifications

Field of view 50° ft x 38° V Minimum focus distance 50cm (20 inches) Fixed focus Data transfer Fixed focus Data transfer Mini USB used to transfer image to PC Wireless connectivity Yes, connect your camer to your building's WFI network (802.11 b/g/n [2.4 GHz]) Fluke Connect instant upload Yes, connect your camer to your building's WFI network (802.11 b/g/n [2.4 GHz]) Fluke Connect instant upload Yes, connect your camer to your building's WFI network (802.11 b/g/n [2.4 GHz]) Fluke Connect instant upload Yes, connect your camer to your building's WFI network (802.11 b/g/n [2.4 GHz]) Fluke Connect instant upload Yes, connect your camer to your building's WFI network (802.11 b/g/n [2.4 GHz]) Fluke Connect instant upload Yes, connect your camer to your building's WFI network (802.11 b/g/n [2.4 GHz]) Fluke Connect system and viewing on your PC Image quality Level and span E-Fusion technology AutoBlend continuous 0 % to 100 %, Adds the context of the visible details to your infrared image 3.5° LCD touchscreen (landscape) Display resolution Thermal sensitivity (NETD) 60 mK Frame rate 9 Hz Data storage and image capture Memory Internal 4GB memory (includes slot for optional micro SD card up to 32GB) Image Gapture, review, save mechanism Image file formats Non-radiometric (legel) or fully radiometric (legel) files Software Fluke Connect desktop software-full analysis and reporting software with access to the Pluke Connect system Lithium ion smart battery pack with five-segment LED display to show charge level Battery (barry by the power saving Lithium ion smart battery pack with five-segment LED display to show charge level Battery charging system In-imager charging, Optional 12 V automotive charging adapter AC operation AC operation with included power supply (100 V AC to 240 V AC, SO(6) Hz) Power saving Temperature measurement range [Include that included power supply (100 V AC to 240 V AC, SO(6) Hz) Target temp at or over 0 °C: Accuracy: ± 2 °C or ± 2 % at 25 °C, whichever is the	Key features	TiS20+/TiS20+ MAX
Field of view S0° H x 38° V	Infrared resolution	120 x 90 (10,800 pixels)
Minimum focus distance Focus system Mini USB used to transfer image to PC Wireless connectivity Fluke Connect instant upload Wireless connectivity Fluke Connect instant upload Wes, connect your camera to your building's WiFi network (802.11 b/g/n (2.4 GHz)) Fluke Connect instant upload Wes, connect your camera to your building's WiFi network (802.11 b/g/n (2.4 GHz)) Fluke Connect instant upload Wes, connect your camera to your building's WiFi network (802.11 b/g/n (2.4 GHz)), and images staken automatically upload to the Fluke Connect system of your local server for storage and viewing on your PC Image quality Level and span Smooth auto and manual scaling Re-Pusion technology AutoBlend continuous 0 % to 100 %. Adds the context of the visible details to your infrared image 3.5° LCD touchscreen (landscape) Display resolution Re-Pusion technology Internal 4GB memory (includes slot for optional micro SD card up to 3GB) (image capture, review, and save capability image capture, review, and save capability image file formats Resport file formats Non-radiometric (jpeg), or fully radiometric (j.is/2); no analysis software required for non-radiometric (jpeg) files Software Export file formats with software Display file file file file file file file file	IFOV (spatial resolution)	7.6 mRad, D:S 130:1
Fixed focus Data transfer Mini USB used to transfer image to PC Wireless connectivity Pluke Connect instant upload Yes, (802.11 b/g/n (2.4 GHz)) Pluke Connect instant upload Yes, connect your camera to your building's WiPi network (802.11 b/g/n (2.4 GHz)) Pluke Connect instant upload Yes, connect your camera to your building's WiPi network (802.11 b/g/n (2.4 GHz)) Yes, connect your camera to your building's WiPi network (802.11 b/g/n (2.4 GHz)) AutoBlend continuous O we to 100 % and a manual scale of the visible details to your infrared image RiF-Pusion technology AutoBlend continuous O % to 100 % and a manual scale Display 3.5° LCD touchscreen (landscape) Display scoution Thermal sensitivity (NETD) 60 mK Prame rate 9 Hz Data storage and image capture Memory Internal 4GB memory (includes slot for optional micro SD card up to 32GB) Image capture, review, save mechanism One-handed image capture, review, and save capability Image file formats One-handed image capture, review, and save capability Non-radiometric (jpeg), or fully radiometric (is2); no analysis software required for non-adiometric (jpeg) files Software Fluke Connect desktop software—full analysis and reporting software with access to the Fluke Connect system John, jpg., str., str.ff Batteries (field-replaceable, rechargable) Lithium ion smart battery pack with five-segment LED display to show charge level Battery tharging time Lithium ion smart battery pack with five-segment LED display to show charge level Battery charging system AC operation with included power supply (100 V AC to 240 V AC, 50/60 Hz) Power saving Automatic Shutdown: 5, 10, 15 and 20 minutes or never Temperature measurement Temperature measurement range (not calibrated below 0 °C) Target temp at or over 0 °C. Accuracy ± 2 °C or ± 2 °N at 25 °C, whichever is the greater. On-screen emissivity correction Center-point temperature Ves	Field of view	50° H x 38° V
Data transfer Mini USB used to transfer image to PC Yes, (802.11 h/g/n [2.4 GHz)] Fluke Connect instant upload Yes, connect your camera to your building's WiFi network (802.11 h/g/n [2.4 GHz)], and images taken automatically upload to the Fluke Connect system or your local server for storage and viewing on your PC Image quality Level and span Smooth auto and manual scaling RR-Fusion technology AutoBlend continuous 0 % to 100 %. Adds the context of the visible details to your interared image Display 3.5" LCD touchscreen (landscape) Display resolution Floram rate 9 Hz Data storage and image capture Memory Internal 4GB memory (includes slot for optional micro SD card up to 32GB) Image file formats One-handed image capture, review, and save capability Non-radiometric (ipsegl, or fully radiometric (iss2); no analysis software required for non-radiometric (ipsegl, or fully radiometric (ipsegl, or fully radio	Minimum focus distance	50cm (20 inches)
Wireless connectivity Yes, (802.11 b/g/n (2.4 GHz)) Yes, connect your camera to your building's WiFi network (802.11 b/g/n (2.4 GHz)), and images taken automatically upload to the Fluke Connect system of your local server for storage and viewing on your PC Image quality Level and span Smooth auto and manual scaling AutoBlend continuous 0 % to 100 %. Adds the context of the visible details to your infrared image 3.5" LCD touchscreen (landscape) Display 3.5" LCD touchscreen (landscape) Display 3.5" LCD touchscreen (landscape) Display 60 mK Frame rate 9 Hz Data storage and image capture Memory Internal 4GB memory (includes slot for optional micro SD card up to 32GB) Image falle formats Non-radiometric (jpeg), or flully radiometric (speg), fire flully radiometric (speg) files Software Pluke Connect desktop software—full analysis and reporting software with access to the Fluke Connect system Export file formats with software battery pack with five-segment LED display to show charge level Battery (field-replaceable, rechargable) Battery charging time 2.5 hours to full charge Battery charging system In-imager charging. Optional 12 V automotive charging adapter AC operation with included power supply (100 V AC to 240 V AC, 50/60 Hz) Automatic Shutdown: S, 10, 15 and 20 minutes or never Temperature measurement range [not calibrated below 0 °C) Target temp at or over 0°C: Accuracy: ± 2 °C or ± 2 % at 25 °C, whichever is the greater. On-screen emissivity correction Center-point temperature Ves	Focus system	Fixed focus
Fluke Connect instant upload Yes, connect your camera to your building's WiFi network (802.11 b/g/n (2.4 GHz)), and images taken automatically upload to the Fluke Connect system of your local server for storage and viewing on your PC John March	Data transfer	Mini USB used to transfer image to PC
GHz), and images taken automatically upload to the Fluke Connect system of your local server for storage and viewing on your PC Image quality Level and span Smooth auto and manual scaling Re-Fusion technology AutoBlend continuous 0 % to 100 %. Adds the context of the visible details to your infrared image Display 3.5° LCD touchscreen (landscape) Display resolution 60 mK Thermal ensitivity (NETD) Frame rate 9 Hz Data storage and image capture Memory Internal 4GB memory (includes slot for optional micro SD card up to 32GB) Image capture, review, save mechanism Non-radiometric (jpeg), or fully radiometric (jseg) in onalysis software required for non-radiometric (jpeg) files Software Export file formats with software File fo	Wireless connectivity	Yes, (802.11 b/g/n (2.4 GHz))
Smooth auto and manual scaling RR-Fusion technology AutoBlend continuous 0 % to 100 %. Adds the context of the visible details to your infrared image Display 3.5° LCD touchscreen (landscape) Display resolution Remark as a stivity (NETD) Frame rate Data storage and image capture Memory Internal 4GB memory (includes slot for optional micro SD card up to 32GB) Image capture, review, save mechanism Image file formats Non-radiometric (jpeg), or fully radiometric (jpeg) files Software Export file formats with software Export file formats with software Export file formats with software Battery Batteries (field-replaceable, rechargable) Battery life Battery charging time Battery charging time Battery charging type Battery charging system AC operation AC operation AC operation AC operation with included power supply [100 V AC to 240 V AC, 50/60 Hz] Power saving Temperature measurement Temperature measurement range (not calibrated below 0 °C) Target temp at or over 0 °C: Accuracy: ± 2 °C or ± 2 % at 25 °C, whichever is the greater. On-screen emissivity correction Center-point temperature Ves	Fluke Connect instant upload	Yes, connect your camera to your building's WiFi network (802.11 b/g/n (2.4 GHz)), and images taken automatically upload to the Fluke Connect system or your local server for storage and viewing on your PC
AutoBlend continuous 0 % to 100 %. Adds the context of the visible details to your infrared image and image capture. Thermal sensitivity (NETD) Thermal sensitivity (Net on save sapability (Net on save sapability (Net on save save save save save save save save	Image quality	
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Thermal sensitivity (NETD) Frame rate Data storage and image capture Memory Internal 4GB memory (includes slot for optional micro SD card up to 32GB) Image capture, review, save mechanism One-handed image capture, review, and save capability Image file formats Non-radiometric (jpeg), or fully radiometric (is2); no analysis software required for non-radiometric (jpeg) files Software Fluke Connect desktop software—full analysis and reporting software with access to the Fluke Connect system Export file formats with software Battery Batteries (field-replaceable, rechargable) Battery (if the start of t	Display	3.5" LCD touchscreen (landscape)
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Data storage and image capture	Thermal sensitivity (NETD)	60 mK
Internal 4GB memory (includes slot for optional micro SD card up to 32GB) Image capture, review, save mechanism One-handed image capture, review, and save capability Image file formats Non-radiometric (jpeg), or fully radiometric (i.s2); no analysis software required for non-radiometric (jpeg) files Software Fluke Connect desktop software—full analysis and reporting software with access to the Fluke Connect system Lithium ion smart battery pack with five-segment LED display to show charge level Battery Batteries (field-replaceable, rechargable) Battery life Battery charging time Battery charging time Battery charging system AC operation AC operation AC operation with included power supply (100 V AC to 240 V AC, 50/60 Hz) Power saving Tomperature measurement Temperature measurement range (not calibrated below 0 °C) Target temp at or over 0 °C: Accuracy: ± 2 °C or ± 2 % at 25 °C, whichever is the greater. On-screen emissivity correction On-screen reflected background temperature compensation Center-point temperature Yes	Frame rate	9 Hz
Image capture, review, save mechanism One-handed image capture, review, and save capability Non-radiometric (jpeg), or fully radiometric (is2); no analysis software required for non-radiometric (jpeg) files Software Fluke Connect desktop software—full analysis and reporting software with access to the Fluke Connect system Lithium ion smart battery pack with five-segment LED display to show charge level Battery Battery life Battery charging time Battery charging system AC operation AC operation AC operation with included power supply (100 V AC to 240 V AC, 50/60 Hz) Power saving Automatic Shutdown: 5, 10, 15 and 20 minutes or never Temperature measurement Temperature measurement Temperature measurement Temperature measurement range (not calibrated below 0 °C) Target temp at or over 0 °C: Accuracy: ± 2 °C or ± 2 % at 25 °C, whichever is the greater. On-screen emissivity correction On-screen reflected background temperature compensation Center-point temperature Yes	Data storage and image capture	
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Fluke Connect desktop software—full analysis and reporting software with access to the Fluke Connect system Export file formats with software Battery Batteries (field-replaceable, rechargable) Battery life Battery life Battery charging time Battery charging system AC operation AC operation AC operation with included power supply [100 V AC to 240 V AC, 50/60 Hz] Power saving Temperature measurement Temperature measurement range (not calibrated below 0 °C) Accuracy Target temp at or over 0 °C: Accuracy: ± 2 °C or ± 2 % at 25 °C, whichever is the greater. On-screen emissivity correction Temperature Yes Temperature Yes	Image capture, review, save mechanism	
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Battery Batteries (field-replaceable, rechargable) Batteries (field-replaceable, rechargable) Battery life Battery charging time Battery charging system AC operation Coperation Coperation Coperature measurement range (not calibrated below 0 °C) Coperation Cop	Software	Fluke Connect desktop software—full analysis and reporting software with access to the Fluke Connect system
Batteries (field-replaceable, rechargable) Lithium ion smart battery pack with five-segment LED display to show charge level ≥ 5 hours continuous (without WiFi) Battery charging time Battery charging system AC operation AC operation Power saving Automatic Shutdown: 5, 10, 15 and 20 minutes or never Temperature measurement Temperature measurement range (not calibrated below 0 °C) Accuracy Target temp at or over 0 °C: Accuracy: ± 2 °C or ± 2 % at 25 °C, whichever is the greater. On-screen emissivity correction Center-point temperature Yes	Export file formats with software	.bmp, .dib, .jpg, .tif, .tiff
to show charge level ≥ 5 hours continuous (without WiFi) Battery charging time Battery charging system AC operation AC operation with included power supply (100 V AC to 240 V AC, 50/60 Hz) Power saving Automatic Shutdown: 5, 10, 15 and 20 minutes or never Temperature measurement Temperature measurement range (not calibrated below 0 °C) Accuracy Target temp at or over 0 °C: Accuracy: ± 2 °C or ± 2 % at 25 °C, whichever is the greater. On-screen emissivity correction Yes, material table On-screen reflected background temperature Center-point temperature Yes Yes	Battery	
Battery charging time Battery charging system AC operation AC operation with included power supply (100 V AC to 240 V AC, 50/60 Hz) Power saving Automatic Shutdown: 5, 10, 15 and 20 minutes or never Temperature measurement Temperature measurement range (not calibrated below 0 °C) Accuracy Target temp at or over 0 °C: Accuracy: ± 2 °C or ± 2 % at 25 °C, whichever is the greater. On-screen emissivity correction Yes, material table On-screen reflected background temperature compensation Center-point temperature Yes	Batteries (field-replaceable, rechargable)	
In-imager charging. Optional 12 V automotive charging adapter AC operation AC operation with included power supply (100 V AC to 240 V AC, 50/60 Hz) Power saving Automatic Shutdown: 5, 10, 15 and 20 minutes or never Temperature measurement Temperature measurement range (not calibrated below 0 °C) Accuracy Target temp at or over 0 °C: Accuracy: ± 2 °C or ± 2 % at 25 °C, whichever is the greater. On-screen emissivity correction On-screen reflected background temperature compensation Center-point temperature Yes	Battery life	≥ 5 hours continuous (without WiFi)
AC operation AC operation with included power supply (100 V AC to 240 V AC, 50/60 Hz) Power saving Automatic Shutdown: 5, 10, 15 and 20 minutes or never Temperature measurement Temperature measurement range (not calibrated below 0 °C) Tis20+: -20 °C to 150 °C (-4 °F to 302 °F) Tis20+ MAX: -20 °C to 400 °C (-4 °F to 752 °F) Accuracy Target temp at or over 0 °C: Accuracy: ± 2 °C or ± 2 % at 25 °C, whichever is the greater. On-screen emissivity correction Yes, material table On-screen reflected background temperature compensation Center-point temperature Yes	Battery charging time	2.5 hours to full charge
Fower saving Automatic Shutdown: 5, 10, 15 and 20 minutes or never Temperature measurement Temperature measurement range (not calibrated below 0 °C) Accuracy Target temp at or over 0 °C: Accuracy: ± 2 °C or ± 2 % at 25 °C, whichever is the greater. On-screen emissivity correction On-screen reflected background temperature compensation Center-point temperature Yes	Battery charging system	In-imager charging. Optional 12 V automotive charging adapter
Temperature measurement range (not calibrated below 0 °C) Accuracy Target temp at or over 0 °C: Accuracy: ± 2 °C or ± 2 % at 25 °C, whichever is the greater. On-screen emissivity correction Yes, material table On-screen reflected background temperature compensation Center-point temperature Yes	AC operation	
Temperature measurement range (not calibrated below 0 °C) Accuracy Target temp at or over 0 °C: Accuracy: ± 2 °C or ± 2 % at 25 °C, whichever is the greater. On-screen emissivity correction On-screen reflected background temperature compensation Center-point temperature Yes	Power saving	Automatic Shutdown: 5, 10, 15 and 20 minutes or never
(not calibrated below 0 °C) TiS20+ MAX: -20 °C to 400°C (-4°F to 752 °F) Accuracy Target temp at or over 0 °C: Accuracy: ± 2 °C or ± 2 % at 25 °C, whichever is the greater. On-screen emissivity correction Yes, material table On-screen reflected background temperature compensation Center-point temperature Yes	Temperature measurement	
whichever is the greater. On-screen emissivity correction On-screen reflected background temperature compensation Center-point temperature Yes Yes	Temperature measurement range (not calibrated below 0 °C)	
On-screen reflected background temperature Yes compensation Center-point temperature Yes	Accuracy	
Compensation Center-point temperature Yes	On-screen emissivity correction	Yes, material table
	On-screen reflected background temperature compensation	Yes
Spot temperature Hot and cold spot markers	Center-point temperature	Yes
	Spot temperature	Hot and cold spot markers



Specifications continued

Key features	TiS20+/TiS20+ MAX
Color palettes	
Standard palettes	6: Ironbow, Blue–Red, High Contrast, Amber, Hot Metal, Grayscale
General specifications	
Infrared spectral band	8 μm to 14 μm (long wave)
Operating temperature	-10 °C to 50 °C (14 °F to 122 °F)
Storage temperature	-40 °C to 70 °C (-40 °F to 158 °F)
Relative humidity	95 % non-condensing
Safety	IEC 61010-1: Pollution Degree 2
Electromagnetic compatibility	EN 61326-1, CISPR 11: Group 1, Class A
US FCC	CFR, Part 15C
Vibration and shock	10 Hz to 150 Hz, 0.15 mm, IEC 60068-2-6; 30 g, 11 ms, IEC 60068-2-27
Drop	Engineered to withstand 2 meter 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	0.72 kg (1.6 lb)
Enclosure rating	IP54 (protected against dust, limited ingress; protection against water spray from all directions)
Warranty	Two-years (standard)
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-TiS20+ 9HZ 120 x 90 Thermal Imager; 9 HZ FLK-TiS20+ 9HZ/CN 120 x 90 Thermal Imager; 9 HZ; China

FLK-TiS20+ MAX 9HZ 120 x 90 Thermal Imager; 9 HZ FLK-TiS20+ MAX 9HZ/CN 120 x 90 Thermal Imager; 9 HZ; China

Included

Infrared camera; AC power supply (including universal AC adapters); rugged lithium ion smart battery, USB cable; soft transport bag. Available by free download: Fluke Connect Desktop software and user manual.

Optional accessories

FLK-TIS-MSD Mini SD card FLUKE-TIX5XX HAND Handstrap FLK-TI-SBP3 Additional Smart Battery FLK-TI-SBC3B Smart Battery Charger TI-CAR CHARGER Car Charger

Visit your local Fluke website or contact your local Fluke representative for more information.





Share images from the field. Collaborate and report immediately.

Get the most out of your TiS20+ and TiS20+ MAX. Download Fluke Connect today.

Save time by sending your images to the team while working in the field.

The Fluke Infrared Cameras are part of a growing system of connected test tools and equipment maintenance software.



