

TECHNICAL DATA

# Fluke 370 FC Series True-rms Wireless AC/DC Clamp Meters





#### **LOG AND TREND MEASUREMENTS**

Transmit results wirelessly via Fluke Connect® Measurements app

#### **WORK SAFELY**

Capture measurements outside the arc flash zone with Bluetooth connectivity to your Apple or Android devices

#### **LO-PASS FILTER**

Integrated VFD low-pass filter (Fluke 376 FC and 375 FC) for accurate motor drive measurements

#### **TRUE-RMS**

True-rms voltage and current for accurate measurements on non-linear signals

#### **WARRANTY**

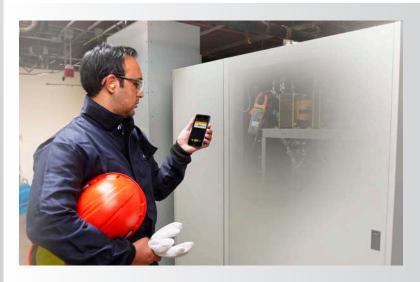
Three-year

The new Fluke 370 FC Series (376 FC, 375 FC and 374 FC) offers advanced troubleshooting performance. The iFlex® flexible current probe allows easy connections to wires in tight spaces. In addition, all three clamps are now part of the Fluke Connect® family of wireless test tools. Now you can:

- Log and trend measurements to pinpoint intermittent faults
- Transmit results wirelessly via Fluke Connect® Measurements app
- Create and send reports right from the field
- Capture measurements outside the arc flash zone with Bluetooth connectivity to your Apple or Android devices

#### **Product highlights**

- Connect your meter to your smartphone using Fluke Connect Measurements app to increase the troubleshooting power of your clamp
- Read measurements on your phone at a safe distance, wearing less PPE while your meter takes all the risks
- Record results directly to your phone and the Fluke Cloud™
- Capture intermittent faults while performing other tasks using the logging capabilities of the Fluke 376 FC and 375 FC
- Create and share reports from the field via email, or converse in real time with ShareLive™ video calls
- iFlex flexible current probe expands the measurement range to 2500 A ac; provides access to large conductors in tight spaces (included with 376 FC; compatible with 375 FC and 374 FC)



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- TPAK magnetic hanging strap (included with 376 FC; compatible with 375 FC and 374 FC) allows you to conveniently hang the meter while using the probes
- Integrated VFD low pass filter (Fluke 376 FC and 375 FC) for accurate motor drive measurements
- Proprietary in-rush measurement technology to filter out noise and capture motor starting current exactly as the circuit protection sees it
- CAT IV 600 V, CAT III 1000 V safety rating
- Three-year warranty
- Soft carrying case

#### **Measurement Capability**

- 1000 A ac and dc current measurement (376 FC); 600 A ac and dc (375 FC and 364 FC)
- 2500 A ac current measurement with iFlex® flexible current
- 1000 V ac and dc voltage measurement
- True-rms voltage and current for accurate measurements on non-linear signals
- Frequency measurement to 500 Hz with body jaw and iFlex (376 FC and 375 FC)
- Resistance measurement to 60 kΩ (376 FC and 375 FC) or 6000  $\Omega$  (374 FC), with continuity detection
- Min, max, average and in-rush recording to capture variations automatically
- 500 mV dc measurement range to interface with other accessories (376 FC and 375 FC)
- 1000 µF capacitance measurement





### **Comparison chart**

	Fluke 376 FC	Fluke 375 FC	Fluke 374 FC
CAT rating	CAT III 1000 V, CAT IV 600 V	CAT III 1000 V, CAT IV 600 V	CAT III 1000 V, CAT IV 600 V
A ac range	999.9 A with clamp jaws 2500 A with iFlex* flexible current clamp	600 A with clamp jaws 2500 A with optional iFlex® flexible current clamp	600 A with clamp jaws 2500 A with optional iFlex® flexible current clamp
A dc range	999.9 A	600 A	600A
Best resolution	0.1 A	O.1 A	0.1 A
V ac range	1000 V	1000 V	1000 V
V dc range	1000 V	1000 V	1000 V
mV dc range	500 mV	500 mV	
Ohms range	60.00 kΩ	60.00 kΩ	6,000 Ω
Frequency	5-500.0 Hz	5-500.0 Hz	
Capacitance	1 µF-1,000 µF	1 μF-1,000 μF	1 μ-1,000 μF
Auto shutoff	•	•	•
True RMS	•	•	•
Display hold	•	•	•
Inrush measurements	•	•	•
Backlight	•	•	•
DC zero	•	•	•
Min/max	•	•	•
VFD low pass filter	•	•	
Logging	•	•	
iFlex® flexible current clamp	Included	Optional	Optional
Fluke Connect® compatible	•	•	•

## **Specifications**

1000 V
2 AA alkaline batteries, NEDA 15A, IEC LR6
Operating: -10 °C to +50 °C (14 °F to + 122 °F) Storage: -40 °C to +60 °C (-40 °F to + 140 °F)
Non condensing (< 10 °C (50 °F)), $\leq$ 90 % RH (at 10 °C to 30 °C (50 °F to 86 °F)), $\leq$ 75 % RH (at 30 °C to 40 °C (86 °F to 104 °F)), $\leq$ 45 % RH (at 40 °C to 50 °C (104 °F to 122 °F))
Operating: 3,000 m (9,842 ft) Storage: 12,000 m (39,370 ft)
24.9 cm (9.8 in) x 8.5 cm (3.3 in) x 4.5 cm (1.7 in)
395 g (13.9 oz)
34 mm (1.3 in)
7.5 mm (.29 in)
1.8 m (70.8 in)
IEC 61010-1, Pollution Degree 2 IEC 61010-2-032: CAT III 1000 V / CAT IV 600 V IEC 61010-2-033: CAT III 1000 V / CAT IV 600 V
IEC 60529: IP30, non-operating
FCC ID:T68-FBLE IC:6627A-FBLE



General specifications continued	
Electromagnetic Compatibility (EMC)	International: IEC 61326-1: Portable, Electromagnetic Environment, IEC 61326-2-2 CISPR 11: Group 1, Class A
	Korea (KCC): Class A Equipment (Industrial Broadcasting & Communication Equipment)
	USA (FCC): 47 CFR 15 subpart B. This product is considered an exempt device per clause 15.103.
Temperature coefficients	Add 0.1 × specified accuracy for each degree C above 28 °C or below 18 °C

Function	Range	Resolution	Accuracy	Crest factor	Trigger level
AC current via jaw	374 FC and 375 FC: 600.0 A 376 FC: 999.9 A	0.1 A	2 % ±5 digits (10 Hz to 100 Hz)	3 at 500 A (375 FC and 376 FC only) 2.5 at 600 A 1.42 at 1000 A (376 FC only) Add 2 % for C.F. >2	
AC current via flexible current probe	2500 A	374 FC and 375 FC: 0.1 A (≤ 600.0 A), 1 A (≤ 2500 A) 376 FC: 0.1 A (≤ 999.9 A), 1 A (≤ 2500 A)	3 % ±5 digits (5 Hz to 500 Hz)	3.0 at 1100 A (375 FC and 376 FC only) 2.5 at 1400 A 1.42 at 2500 A Add 2 % for C.F. >2	
DC current	374 FC and 375 FC: 600.0 A 376 FC: 999.9 A	0.1 A	2 % ±5 digits		
AC voltage	1000 V	0.1 V (≤600.0 V) 1 V (≤1000 V)	1.5 % ±5 digits (20 Hz to 500 Hz)		
DC voltage	1000 V	0.1 V (≤600.0 V) 1 V (≤1000 V)	1 % ±5 digits		
mV dc	500.0 mV	0.1 mV	1 % ±5 digits		
Frequency via jaw	375 FC and 376 FC: 5.0 Hz to 500.0 Hz	0.1 Hz	0.5 % ±5 digits		5 Hz to 10 Hz, ≥10 A 10 Hz to 100 Hz, ≥5 A 100 Hz to 500 Hz, ≥10 A
Frequency via flexible current probe	375 FC and 376 FC: 5.0 Hz to 500.0 Hz	0.1 Hz	0.5 % ±5 digits		5 Hz to 20 Hz, ≥25 A 20 Hz to 100 Hz, ≥20 A 100 Hz to 500 Hz, ≥25 A
Resistance	374 FC: 6,000 Ω 375 FC and 376 FC: 60 kΩ	374 FC: 0.1 $\Omega$ (≤600 $\Omega$ ), 1 $\Omega$ (≤6000 $\Omega$ ) 375 FC and 376 FC: 0.1 $\Omega$ (≤600 $\Omega$ ), 1 $\Omega$ (≤6000 $\Omega$ ), 10 $\Omega$ (≤60 k $\Omega$ )	1 % ±5 digits		
Capacitance	1000 μF	0.1 μF (≤100 μF), 1 μ F (≤1000 μF)	1 % ±4 digits		



#### **Ordering information**

374 FC 600A AC/DC True-rms Wireless Clamp Meter 375 FC 600A AC/DC True-rms Wireless Clamp Meter 376 FC 1000A AC/DC True-rms Wireless Clamp Meter with iFlex®

#### **Included**

18-inch iFlex® Flexible Current Probe (376 FC only) TPAK Magnetic Hanging Strap (376 FC only) Soft Carrying Case TL75 Test Leads Two AA Alkaline Batteries Coated Instruction Card Safety Information Sheet

#### **Optional accessories**

TPAK Magnetic Hanging Strap (included with 376 FC) 18-inch iFlex® Flexible Current Probe (included with 376 FC)





#### Set up and sustain preventive maintenance practices with ease to help you oversee your complex world with the Fluke Connect® system of software and wireless test tools.

- · Maximize uptime and make confident maintenance decisions with data you can trust and trace.
- Save measurements to the Fluke Cloud<sup>™</sup> and associate with an asset so your team can consult both historical and current measurements from one location.
- · Collaborate with ease by sharing your data with others with ShareLive™ video calls and emails.
- Wireless one-step measurement transfer with AutoRecord™ measurements removes the need for clipboards and paperwork.
- · Consult summary views of all assets over time for easy identification of correlated or periodic failures for easier prioritization of maintenance work.
- Generate reports with multiple measurement types to provide status or work recommendations.

#### Find out more at **flukeconnect.com**

Download the app at:





Smartphone is not included with purchase.

#### Fluke. Keeping your world up and running.®

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# Fluke 114 Electrical Multimeter

#### **Technical Data**



#### Actual size















# Compact true-rms meter for electrical troubleshooting

The Fluke 114 is the troubleshooting tool for "go/no-go" testing. It includes a feature to prevent false readings caused by ghost voltage.

#### **Features include:**

- AutoVolt: automatic ac/dc voltage selection
- Large white LED backlight to work in poorly lit areas
- · Resistance and continuity
- Min/Max/Average 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:  $\pm$  (  $\lceil$  % of Reading  $\rceil$  +  $\lceil$  Counts  $\rceil$  )

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
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	<b>Accuracy</b> $\pm$ ([% 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 millivolts1 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 (dc, 45 Hz to 500 Hz) 2.0 % + 3 (500 Hz to 1 kHz)	
	600.0 V	0.1 V		
Continuity	600 Ω	1 Ω	Beeper on $<$ 20 $\Omega$ , off $>$ 250 $\Omega$ ; detects opens or shorts of 500 $\mu$ s or longer.	
Ohms	600.0 Ω	0.1 Ω	0.9 % + 2	
	6.000 kΩ	0.001 kΩ		
	60.00 kΩ	0.01 kΩ	0.9 % + 1	
	600.0 kΩ	0.1 kΩ	0.9 % + 1	
	6.000 MΩ	0.001 MΩ	]	
	40.00 MΩ	0.01 MΩ	1.5 % + 2	

#### Notes:

#### **Ordering Information**

#### Fluke-114 **Electrical Multimeter Included**

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



#### Fluke. Keeping your world up and running.™

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<sup>&</sup>lt;sup>1</sup> 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  $\leq 3$  at 4000 counts, decreasing linearly to 1.5 at full scale. AC volts is ac-coupled. Auto-V LoZ, and ac mV are dc-coupled.