TECHNICAL DATA

Fluke 376 FC True-RMS Clamp Meter plus insulated hand tools starter kit



Key features

- 376 FC: Measure AC/DC current with included iFlex current probe
- 376 FC: VFD low pass filter for non-linear signals measurements
- Insulated tools: certified to 1000 V AC, 1500 V DC
- Insulated tools: ergonomic 8-piece set

Product overview: Fluke 376 FC True-RMS Clamp Meter plus insulated hand tools starter kit

The Fluke 376 FC True-RMS Clamp Meter combined with the insulated hand tools starter kit, the most often used screwdrivers, pliers and cutters.

376 FC Clamp Meter

- 1000 A ac and dc current measurement, 2500 A ac current measurement with iFlex flexible current probe
- 1000 V ac and dc voltage measurement
- True-rms voltage and current for accurate measurements on non-linear signals
- Log and trend measurements to pinpoint intermittent faults
- Transmit results wirelessly via Fluke Connect® Measurements app
- Create and send reports right from the field

- Stay safely away from the arc flash zone through Bluetooth connectivity to Apple and Android devices

Slotted screwdrivers

Three different bladeforms
Three handle lengths
Phillips screwdrivers, #1 and #2 tips
Two handle lengths

Long nose pliers with side cutter and gripping zones

Unique milled wave pattern gripping zones
4 gripping points for pulling round objects with superior grip that won't slip
Straight, half-round, long and slim knurled jaws, specially profiled
Side cutting edge for wire cutting

Heavy duty, high leverage diagonal cutter

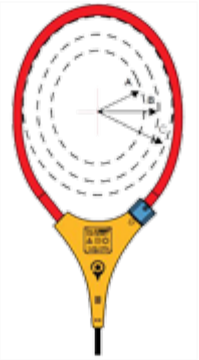
Cuts hard materials including steel and piano wire
Power joint and precision cutting edges

Heavy Duty Combination Pliers

Secure hold by aggressive serrated jaws and 4-point gripping hole
Slim shape for better access to wires in tight spaces
Powerful gripping jaw, yet 20% lighter weight than other designs ext, bullets if it makes sense

Specifications: Fluke 376 FC True-RMS Clamp Meter plus insulated hand tools starter kit

General Specifications	
AC Current via Jaw	
Range	999.9 A
Resolution	0.1 A
Accuracy	2% ±5 digits (10 Hz to 100 Hz)
	2.5% ±5 digits (100-500 Hz)
Crest Factor (50 Hz/60 Hz)	3 @ 500 A
	2.5 @ 600 A
	Add 2% for C.F. >2
AC Current via Flexible Current Probe	
Range	2500 A
Resolution	0.1 A (≤ 600 A)
	1 A (≤ 2500 A)
Accuracy	3% ±5 digits (5 – 500 Hz)

Crest Factor (50/60Hz)	3.0 at 1100 A	
	2.5 at 1400 A	
	1.42 at 2500 A	
	Add 2% for C.F. > 2	
Position Sensitivity		
		
	i2500-10 Flex	i2500-18 Flex
A		
Distance from Optimum	0.5 in (12.7 mm)	1.4 in (35.6 mm)
Error	±0.5 %	±0.5 %
B		
Distance from Optimum	0.8 in (20.3 mm)	2.0 in (50.8 mm)
Error	±1.0 %	±1.0 %
C		
Distance from Optimum	1.4 in (35.6 mm)	2.5 in (63.5 mm)
Error	±2.0 %	±2.0 %
Measurement uncertainty assumes centralized primary conductor at optimum position, no external electrical or magnetic field, and within operating temperature range.		
DC Current		
Range	999.9 A	
Resolution	0.1 A	
Accuracy	2% ±5 digits	
AC Voltage		
Range	1000 V	
Resolution	0.1 V (≤600.0 V)	
	1 V (≤1000 V)	
Accuracy	1.5% ±5 digits (20 Hz to 500 Hz)	
DC Voltage		
Range	1000 V	

Resolution	0.1 V (≤600.0 V)
	1 V (≤1000 V)
Accuracy	1% ±5 digits
mV dc	
Range	500.0 mV
Resolution	0.1 mV
Accuracy	1% ±5 digits
Frequency via Jaw	
Range	5.0 Hz to 500.0 Hz
Resolution	0.1 Hz
Accuracy	0.5% ±5 digits
Trigger level	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	
Range	5.0 Hz to 500.0 Hz
Resolution	0.1 Hz
Accuracy	0.5% ±5 digits
Trigger level	5 Hz to 20 Hz, ≥25 A
	20 Hz to 100 Hz, ≥20 A
	100 Hz to 500 Hz, ≥25 A
Resistance	
Range	60 kΩ
Resolution	0.1 Ω (≤600 Ω)
	1 Ω (≤6000 Ω)
	10 Ω (≤60 kΩ)
Accuracy	1% ±5 digits
Capacitance	
Range	1000 µF
Resolution	0.1 µF (≤ 100 µF)
	1 µ F (≤ 1000 µF)
Accuracy	1% ±4 digits
Mechanical Specifications	
Maximum voltage between any terminal and earth ground	1000 V
Batteries	2 AA, NEDA 15A, IEC LR6

Operating temperature	-10 °C to +50 °C	
Storage temperature	-40 °C to +60 °C	
Operating humidity - non-condensing (< 10°C)	≤90% RH (at 10 °C to 30 °C)	
	≤75% RH (at 30 °C to 40 °C)	
	≤45% RH (at 40 °C to 50 °C)	
Operating altitude	2000 m	
Storage altitude	12,000 m	
Size (L x W x H)	249 x 85 x 45 mm	
Weight	395 g	
Jaw opening	34 mm	
Flexible current probe diameter	7.5 mm	
Flexible current probe cable length (head to electronics connector)	1.8 m	
Safety	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	
	IP rating	IEC 60529: IP30, non-operating
Radio Frequency Certification FCC ID	T68-FBLE IC:6627A-FBLE	
Electromagnetic Compatibility (EMC)		
International	IEC 61326-1: Portable, Electromagnetic Environment, IEC 61326-2-2	
	CISPR 11: Group 1, Class A	
	Group 1: Equipment has intentionally generated and/or uses conductively-coupled radio frequency energy that is necessary for the internal function of the equipment itself.	
	Class A: Equipment is suitable for use in all establishments other than domestic and those directly connected to a low-voltage power supply network that supplies buildings used for domestic purpose. There may be potential difficulties in ensuring electromagnetic compatibility in other environments due to conducted and radiated disturbances. Emissions that exceed the levels required by CISPR 11 can occur when the equipment is connected to a test object.	
Korea (KCC)	Class A Equipment (Industrial Broadcasting & Communication Equipment)	
	Class A: Equipment meets requirements for industrial electromagnetic wave equipment and the seller or user should take notice of it. This equipment is intended for use in business environments and not to be used in homes.	
USA (FCC)	47 CFR 15 subpart B. This product is considered an exempt device per clause 15.103.	
Temperature coefficients	Add 0.1 x specified accuracy for each degree C above 28 °C or below 18 °C	

87V Industrial Multimeter Specifications:

Voltage DC	Maximum voltage	1000 V
	Accuracy	±(0.05% + 1)
	Maximum resolution	10 µV
Voltage AC	Maximum voltage	1000 V
	Accuracy	±(0.7% + 2) True RMS
	AC bandwidth	20 kHz with low pass filter; 3 db @ 1 kHz
	Maximum resolution	0.1 mV
Current DC	Maximum amps	10 A (20 A for 30 seconds maximum)
	Amps accuracy	±(0.2% + 2)
	Maximum resolution	0.01 µA
Current AC	Maximum amps	10 A (20 A for 30 seconds maximum)
	Amps accuracy	±(1.0% + 2) True RMS
	Maximum resolution	0.1 µA
Resistance	Maximum resistance	50 MΩ
	Accuracy	±(0.2% + 1)
	Maximum resolution	0.1 Ω
Capacitance	Maximum capacitance	9,999 µF
	Accuracy	±(1% + 2)
	Maximum resolution	0.01 nF
Frequency	Maximum frequency	200 kHz
	Accuracy	±(0.005% + 1)
	Maximum resolution	0.01 Hz
Duty cycle	Maximum duty cycle	99.9%
	Accuracy	±(0.2% per khz + 0.1%)
	Maximum resolution	0.1%
Temperature	–200.0 °C – 1090 °C	
80 BK	–40.0 °C – 260 °C	
Conductance	Maximum conductance	60.00 nS
	Accuracy	±(1.0% + 10)
	Maximum resolution	0.01 nS
Diode	Range	3 V
	Resolution	1 mV
	Accuracy	±(2% + 1)
Duty cycle range	Accuracy	Within ±(0.2% per kHz + 0.1%)
Environmental Specifications		

Operating	–20 °C to + 55 °C	
Storage	–40 °C to + 60 °C	
Humidity	0% – 90% (0 °C – 35 °C)	
Operating	2000 m	
Safety Specifications		
Overvoltage	EN 61010–1 to 1000 V CAT III, 600V CAT IV	
Agency	UL, CSA, TÜV, VDE listed	
Mechanical and General Specifications		
Size	201 x 98 x 52 mm (with holster)	
Weight	355 g	
Display	Digital	6000 counts updates 4/sec.
	Analog	32 segments, updates 40/sec
	Frequency	19,999 counts, updates 3/sec at > 10 Hz
Warranty	Lifetime	
Battery Life	Alkaline	~400 hours typical, without backlight
Shock	1 Meter drop per IEC 61010–1:2001	
Vibration	Per MIL–PRF–28800 for a Class 2 instrument	

Screwdriver Type	Blade length (inches *mm*)	Handle length (inches *mm*)	Handle width (inches *mm*)	Bladeform diameter (inches *mm*)
Slot	3 *75*	3-3/8 *86*	1 *25*	3/32 *2.55*
Slot	4 *100*	3-11/16 *94*	1 5/16 *30*	5/32 *4.0*
Slot	5 *125*	4-3/16 *106*	1 7/16 *36*	1/4 *6.0*
Phillips #1	3 *80*	3-11/16 *94*	1 3/16 *30*	7/32 *5*
Phillips #2	4 *100*	4-3/16 *106*	1 7/16 *36*	1/4 *6*

Pliers Type	Nominal Length (inches)	Nominal Length (mm)
Long Nose	8	200
Diagonal Cutters	8	200
Lineman Combination Pliers	8	200

Warranty

Fluke Insulated Hand Tool Lifetime Limited Warranty

Each Fluke Insulated Hand Tool will be free from defects in material and workmanship for its lifetime. As used herein, “lifetime” is defined as seven years after Fluke discontinues manufacturing the product, but the warranty period shall be at

least fifteen years from the date of purchase. This warranty does not cover damage from neglect, misuse, contamination, alteration, accident or abnormal conditions of operation or handling, damage or normal wear and tear of mechanical components. This warranty covers the original purchaser only and is not transferable.

Recommendations for use and in-service care of Fluke Insulated Hand Tools

The following is guidance concerning the maintenance, inspection, retest and use of Fluke Insulated Hand Tools.

Warning – to avoid electrical shock or personal injury:

- Keep fingers behind the finger guards of the tool. Never touch conductive parts.
- Always wear approved eye protection.
- Do not use in wet or damp locations. Do not use unless the tool is clean and dry.
- Do not apply excessive force or stress to the tool insulation that may cause damage. Examples include using the insulated surfaces as a fulcrum to pry or wedge or gripping insulated tool handles with other tools such as pliers or wrenches to increase torque or leverage.

If the tool is used in a manner not specified, the protection may be impaired.

Storage

Insulated hand tools should be properly stored to minimize the risk of damage to the insulation due to storage or transportation. These insulated hand tools should be stored separated from other tools to avoid mechanical damage or confusion with uninsulated tools. Furthermore, these insulated hand tools should be prevented from contact with excessively hot surfaces (for example steam pipes) or exposure to excessive UV- radiation.

Inspection before use

Before use, each Insulated Hand Tool should be visually inspected by the user. If there is any doubt concerning the safety of the insulated hand tool, it should be subjected to examination by a competent person and if necessary retested to determine suitability or disposed of to prevent further use.

Temperature

Insulated Hand Tools should be used only in environments having temperatures between –20 °C and +70 °C and, for tools marked “C”, between –40 °C and +70 °C.

Periodic examination and electrical retesting

An annual visual examination by a suitably trained person is recommended to determine the suitability of the Insulated Hand Tool for further service. If an electrical retest is required by national regulation or in the case of doubt after visual examination, the applicable dielectric test of IEC 60900 for insulated hand tools should be performed.

For details contact a Fluke Service Center.

Ordering information



IB376K

Fluke 376 FC True-RMS Clamp Meter + Insulated Hand Tools Starter Kit (5 insulated screwdrivers and 3 insulated pliers)

Includes:

- Fluke 376 FC True-rms AC/DC Clamp Meter with iFlex®
- 18-inch iFlex® Flexible Current Probe
- TPAK magnetic hanging strap
- TL75 test leads
- ISLS3 Insulated Slotted Screwdriver 3/32, 3"
- ISLS5 Insulated Slotted Screwdriver 5/32, 4"
- ISLS8 Insulated Slotted Screwdriver 1/4, 5"
- IPHS1 Insulated Phillips Screwdriver #1, 3"
- IPHS2 Insulated Phillips Screwdriver #2, 4"
- INLP8 Insulated Long Nose /w Side Cutter and Gripping Zones
- INDC8 Insulated Heavy Duty High Leverage Diagonal Cutter
- INCP8 Insulated Heavy Duty Linesman Combination Plier
- RUP8 Roll up pouch

Optional accessories	Description
Fluke TPAK ToolPak™ Magnetic Meter Hanger	Powerful magnetic strap for safe, hands free measurements.
Fluke TLK289 - Industrial Master Test Lead Set	Fluke test leads, alligator clips and test probes broaden the ability to take meter measurements in different environments. Buy Online Now.
Fluke AC220 SureGrip™ Alligator Clips	SureGrip™ accessories are designed to improve steadiness in slippery hands.
Fluke Pack30 Professional Tool Backpack	The Fluke Pack30 tool backpack gives you a comfortable hands-free experience vs. traditional tool belts that put all the weight on your lower back.



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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ANDROID APP ON Google play



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Smart phone wireless service and data plan not included with purchase. Fluke Connect is not available in all countries.

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