

TECHNICAL DATA

Fluke 381 Remote Display True RMS AC/DC Clamp Meter with iFlex®



Key features

- Wireless technology allows the display to be carried up to 30 ft. away from the point of measurement with measurement accuracy
- Removable magnetic display can be mounted where it is easily seen
- iFlex® Flexible Current Probe expands the measurement range to 2500 A AC
- CAT IV 600 V, CAT III 1000 V

Product overview: Fluke 381 Remote Display True RMS AC/DC Clamp Meter with iFlex®

What once took two people, now takes one

Now one technician can do jobs that would otherwise require two people. Clamp the Fluke 381 around a conductor, remove the display and walk across the room to operate controls or remove protective equipment, all while watching real-time readings.

The iFlex® Flexible Current Probe (included) expands the measurement range to 2500 A AC while providing increased

display flexibility. With a cord that runs 6 feet, you can finally measure those tight spaces, awkward sized conductors and disorganized wires.

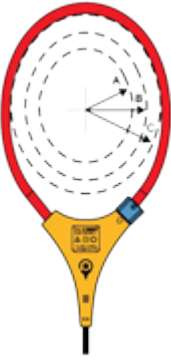
Other key features

- Integrated low pass filter and state-of-the-art signal processing allows for use in noisy electrical environments while providing stable readings
- Proprietary inrush measurement technology to filter out noise and capture motor starting current exactly as the circuit protection sees it
- Ergonomic design fits in your hand and can be used while wearing protective equipment
- Radio transmitter automatically sets the correct measurement range so you do not need to change the switch positions while taking a measurement
- Three-year warranty

Safety Conformance: IEC/EN 61010-1:2001, 1000V CAT III, 600V CAT IV

Specifications: Fluke 381 Remote Display True RMS AC/DC Clamp Meter with iFlex®

Electrical Specifications	
AC Current via Jaw	
Range	999.9 A
Resolution	0.1 A
Accuracy	2% ± 5 digits (10-100 Hz) 5% ± 5 digits (100-500 Hz)
Crest Factor (50/60 Hz)	3 @ 500 A 2.5 @ 600 A 1.42 @ 1000 A Add 2% for C.F. > 2
AC Current via Flexible Current Probe	
Range	999.9 A / 2500 A (45 Hz – 500 Hz)
Resolution	0.1 A / 1 A
Accuracy	3% ± 5 digits
Crest Factor (50/60 Hz)	3.0 at 1100 A 2.5 at 1400 A 1.42 at 2500 A Add 2% for C.F. > 2
Position Sensitivity	

	Distance from Optimum			
		i2500-10 Flex	i2500-18 Flex	Error
	A	0.5 in (12.7 mm)	1.4 in (35.6 mm)	±0.5%
	B	0.8 in (20.3 mm)	2.0 in (50.8 mm)	±1.0%
	C	1.4 in (35.6 mm)	2.5 in (63.5 mm)	±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	600 V / 1000 V
Resolution	0.1 V / 1 V
Accuracy	1.5% ± 5 digits (20 – 500 Hz)

DC Voltage

Range	600.0 V / 1000 V
Resolution	0.1 V / 1 V
Accuracy	1% ± 5 digits

Frequency – Via Jaw

Range	5.0 – 500.0 Hz
Resolution	0.1 Hz
Accuracy	0.5% ± 5 digits
Trigger Level	5 – 10 Hz, ≥ 10 A 10 – 100 Hz, ≥ 5 A 100 – 500 Hz, ≥ 10 A

Frequency via Flexible Current Probe

Range	5.0 to 500.0 Hz
Resolution	0.1 Hz
Accuracy	0.5% ± 5 digits
Trigger Level	5 to 20 Hz, ≥ 25 A 20 to 100 Hz, ≥ 20 A 100 to 500 Hz, ≥ 25 A

Resistance

Range	600 Ω/6 kΩ/60 kΩ
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Resolution	0.1 Ω/1 Ω/10 Ω
Accuracy	1% ± 5 digits
Mechanical Specifications	
Size (L x W x H)	277 x 88 x 43 mm (55 mm for remote unit)
Weight	350 g
Jaw Opening	34 mm
Flexible Current Probe Diameter	7.5 mm
Flexible Current Probe Cable Length (head to electronics connector)	1.8 m
Environmental Specifications	
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) (Without Condensation)
Operating Altitude	2,000 meters
Storage Altitude	12,000 meters
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: T68-F381 RSS-210 IC: 6627A-F381
Temperature Coefficients	Add 0.1 x specified accuracy for each degree C above 28°C or below 18°C
Wireless Frequency	2.4 GHz ISM Band 10 meter range
Safety Compliance	ANSI/ISA S82.02.01:2004 CAN/CSA-C22.2 No. 61010-1-04 IEC/EN 61010-1:2001 to 1000V CAT III, 600V CAT IV.
Double Insulation Clearance	Per IEC 61010-2-032
Double Insulation Creepage	Per IEC 61010-1
Agency Approvals	

Ordering information



Fluke 381

Fluke 381 Remote Display True RMS AC/DC Clamp Meter with iFlex®

Includes:

- 18-inch iFlex® flexible current probe
- Coated instruction card
- Safety information sheet
- Soft carrying case
- TL75 test leads
- Five AA Alkaline batteries

Optional accessories

Description

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.

C345 Soft Carrying Case

The perfect case for carrying a wide range of Fluke handheld test tools and accessories.

Fluke C550 Tool Bag

Steel reinforced frame, rugged ballistic cloth with heavy duty hardware, large zippered storage compartment with 25 pockets, weather resistant.

Fluke TL175 TwistGuard™ Test Leads

Simply twist to change the exposed probe tip length.

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

Fluke Corporation

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