Fluke 381

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.

Rating: Not Rated Yet
Ask a question about this product

ManufacturerFluke

Description

- Wireless technology allows the display to be carried up to 30 ft. away from the point of measurement for added flexibility without interference with measurement accuracy
- The removable magnetic display can be conveniently 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
- 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
- Soft carrying case

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 ?/6 k?/60 k?
Resolution	0.1 ?/1 ?/10 ?
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