HIOKI

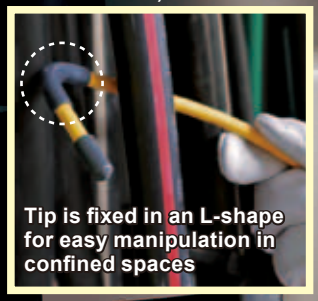
AC CLAMP METER
3280-10F, 3280-20F

Rugged & Compact

AC FLEXIBLE CURRENT SENSOR (option)
φ130 mm (5.12")
4200 A AC

Use with an AC Clamp Meter to measure large wires and currents.

Attachment
(Included with AC Flexible Current Sensor)



AC CLAMP METER
φ33 mm (1.30")
1000 A AC

Pocket size

Broad operating temperature range

Mechanically robust design

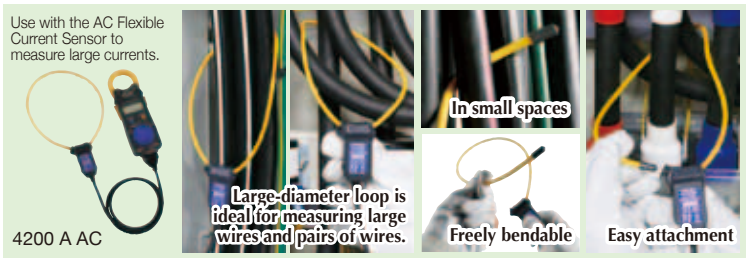
*AC Flexible Current Sensor optional.
Also available as part of a value-priced set.

CE 3 years Guaranteed for 3 years DROP PROOF

Measurement items

~A	~V	⎓V	Ω	
AC current	AC voltage	DC voltage	Resistance	Continuity

Essential equipment for professional electricians: Measure current and voltage with a single instrument!



Specifications

Basic accuracy figures for measurement ranges are indicated in parentheses.
Accuracy guaranteed for 1 year, Post-adjustment accuracy guaranteed for 1 year, Product warranty period is 3 years.

	3280-10F	3280-20F
AC measurement method	MEAN value	True RMS
Core jaw diameter	φ33 mm (1.30"), jaw thickness: 9.5 mm (0.37")	
Max. rated voltage to earth	Jaw : CAT IV 300 V, CAT III 600 V Voltage measurement terminal : CAT III 300 V, CAT II 600 V	
AC Current	42.00 A/ 420.0 A/ 1000 A (±1.5% rdg.±5 dgt.)	
Frequency characteristics	50 to 60 Hz	40 Hz to 1 kHz
AC Voltage	4.200 V to 600 V, 4 ranges (±1.8% rdg.±7 dgt.)	
Frequency characteristics	45 Hz to 500 Hz	
DC Voltage	420.0 mV to 600 V, 5 ranges (±1.0% rdg.±3 dgt.)	
Resistance	420.0 Ω to 42.00 MΩ, 6 ranges (±2.0% rdg.±4 dgt.)	
Continuity Check	420.0 Ω (±2.0% rdg.±4 dgt.) Threshold of buzzer sound 50 Ω±40 Ω or less	
Crest factor	-	2.5 or less (1.5 or less at 4200 counts)
Display refresh rate	400 ms	

Operating temperature and humidity	–25°C to 65°C (–13°F to 149°F), 80% RH or less (no condensation)	
Storage temperature and humidity	–25°C to 65°C (–13°F to 149°F), 80% RH or less (no condensation)	
Drop-proof distance	1 m onto concrete	
Dustproof and waterproof	IP40	
Standards	Safety : EN 61010, EMC : EN 61326	
Functions	Data hold, Auto power-saving function	
Power supply	Coin type lithium battery CR2032×1	
Continuous use	120 hours	70 hours
Dimensions and mass	57W×175H×16D mm (2.24"W × 6.89"H × 0.63"D), 100 g (3.5 oz.)	

AC FLEXIBLE CURRENT SENSOR CT6280 specifications

Core jaw diameter	φ130 mm (5.12") (Cable cross-section diameter: 5 mm (0.20"); tip cap diameter: 7 mm (0.28"))
AC Current	420.0 A/ 4200 A (±3.0% rdg.±5 dgt.) 40 Hz to 1 kHz
Cable length	800 mm (31.5")

Lineup

	AC CLAMP METER 3280-10F	AC CLAMP METER 3280-20F	AC CLAMP METER SET 3280-70F	AC CLAMP METER SET 3280-90F
AC measurement method	MEAN value	True RMS	MEAN value	True RMS
Order code	3280-10F	3280-20F	3280-70F	3280-90F
Includes	3280-10F CARRYING CASE 9398 TEST LEAD L9208 Coin type lithium battery CR2032 Instruction Manual	3280-20F CARRYING CASE 9398 TEST LEAD L9208 Coin type lithium battery CR2032 Instruction Manual	3280-10F AC FLEXIBLE CURRENT SENSOR CT6280 CARRYING CASE C0205 TEST LEAD L9208 Coin type lithium battery CR2032 Instruction Manual	3280-20F AC FLEXIBLE CURRENT SENSOR CT6280 CARRYING CASE C0205 TEST LEAD L9208 Coin type lithium battery CR2032 Instruction Manual
Image				

■ Options

CARRYING CASE 9398 (bundled with the 3280-10F/ 3280-20F)

AC FLEXIBLE CURRENT SENSOR CT6280
(includes C0205, attachment)

CARRYING CASE C0205 (bundled with the 3280-70F/ 3280-90F/ CT6280; fits CT6280, 3280-10F/ 3280-20F, and test leads)

TEST LEAD L9208 (bundled Accessory)

TEST LEADS HOLDER 9209

CONTACT PIN SET L4933*

SMALL ALLIGATOR CLIP SET L4934*


L4933


L4934

*Probe tips can be used on TEST LEAD L9208.

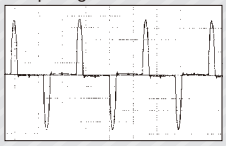
What is the difference between the Mean method and True RMS method?

There are two methods for converting current into RMS values: the mean method (mean rectification RMS value indication) and the true RMS method (true RMS value indication). Although both methods yield the same value for undistorted sine waves, distortion of the waveform causes the values to diverge.

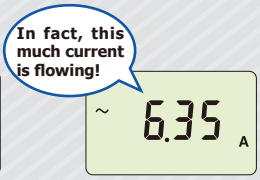
MEAN method (MEAN value)
The input waveform is treated as an undistorted sine wave (single frequency only).
The AC signal mean is calculated, converted to an RMS value, and displayed.
The measurement error increases when the waveform is distorted.

True RMS method (True RMS)
The waveform including harmonic components is calculated according to an RMS calculation formula and displayed.
True RMS measurement yields accurate display values even when measuring a distorted waveform, for example from an inverter-equipped device or switching power supply.

■ Comparing distorted current values from an inverter, etc.


Current waveform from an inverter (primary side)

MEAN method
(3280-10F)



True RMS method
(3280-20F)

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