



# HIOKI

## POCKET SIZE CLAMP SERIES 3280s

Field Measuring Instrument



### *Pick the Card that is Right for You!*



# AC

# AC/DC



ISO 9001  
JMI-0216



ISO 14001  
JQA-E-90091



[www.hioki.com](http://www.hioki.com)

HIOKI company overview, new products, environmental considerations and other information are available on our website.



# A Current Clamp Meter that Fits Right in Your Pocket



Actual size

## Dual Action Jaw

For More Flexible Operation!

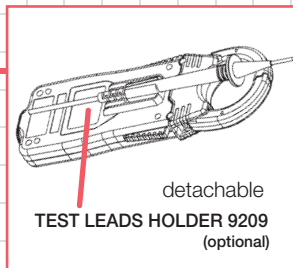


## DMM Function

1. Voltage : AC V / DC V 600V
2. Resistance : 420.0  $\Omega$  to 42.00 M $\Omega$
3. Continuity

## Option

TEST LEAD HOLDER 9209 for convenient voltage measurement



## Test Leads

Measure voltage and resistance (standard accessory)



## Pocket Size

Slim & Compact ! Fits in your palm  
Light 100g to 170g (3.5oz. to 6.0oz.), slim 16mm (0.63")

(0.63")  
16mm



Super slim core reaches into crowded wiring easily

Actual size

CLAMP ON HITESTER



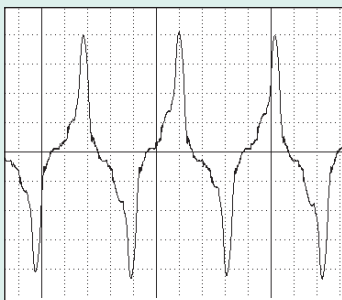
# Lineup

New Model 3288-20 True RMS AC/DC pocket clamp meter measuring up to 1000A further expands the HIOKI lineup.



## True RMS vs. MEAN Value

Two ways to convert alternating current to RMS are "true RMS response" and "average rectified RMS response" (averaging). Both display the same value for a sine wave, but can display very different values for distorted waveforms.



When measuring current waveforms distorted by inverters...



**True RMS**

the 3280-20 and 3287 and 3288-20 work this way



High-frequency waveform components are included in the calculated RMS display value.

**MEAN Value**

the 3280-10 and 3288 work this way



The measured waveform is treated as a single-frequency (undistorted) sine wave, and the calculated average of the AC signal is converted to an RMS display value. Measurement error increases with waveform distortion.

As inverters and switching power supplies proliferate, the need for the capability to measure distorted current waveforms grows.

**A true RMS clamp-on current meter is the proper tool for accurate measurements.**

# Specifications (accuracy at 23°C±5°C (73°F±9°F), 80% rh)

	3280-10	3280-20	3287	3288 / 3288-20	
Function	AC current	42.00/ 420.0/ 1000A (50 to 60Hz:±1.5%rdg.±5dgt.)	42.00/ 420.0/ 1000A (50 to 60Hz:±1.5%rdg.±5dgt.) (40 to 45Hz or 66Hz to 1kHz :±2.0%rdg.±5dgt.)	10.00/ 100.0A (45 to 66Hz:±1.5%rdg.±5dgt.) (10 to 20Hz:±5.0%rdg.±5dgt.) (20 to 45Hz or 66Hz to 1kHz:±2.0%rdg.±5dgt.)	100.0/ 1000A (45 to 66Hz:±1.5%rdg.±5dgt.) (10 to 45Hz or 66Hz to 500 Hz:±2.0%rdg.±5dgt.)
	AC voltage	4.200/ 42.00/ 420.0/ 600V (50 to 500Hz:±2.3%rdg.±8dgt.)		4.200/ 42.00/ 420.0/ 600V (30 to 500Hz:±2.3%rdg.±8dgt.)	
	DC current	---		10.00/ 100.0A (±1.5%rdg.±5dgt.)	100.0/ 1000A (±1.5%rdg.±5dgt.)
	DC voltage	420.0m/ 4.200/ 42.00/ 420.0/ 600V (±1.3%rdg.±4dgt.)			
	Resistance	420.0/ 4.200k/ 42.00k/ 420.0k/ 4.200M/ 42.00MΩ (±2.0%rdg.±4dgt.)			
	Continuity	420.0Ω (±2.0%rdg.±6dgt.) Threshold level : Less than 50Ω ±40Ω (Buzzer sound)			

AC measurement	MEAN value	True RMS	True RMS	MEAN value(3288) / True RMS(-20)
Maximum conductor diameter for measurement	φ33mm (1.30") or less		φ35mm (1.38") or less	
Maximum rated voltage to earth	ACA, DCA : CAT III 600V / ACV, DCV : CAT III 300V, CAT II 600V			
Display update rate	400ms ±25ms			
Range switching	Auto range/ Manual range			
Zero suppression	5 count or less (current measurement only)			
Effect of conductor position	within ±5.0%		within ±1.0%	within ±2.0%
Crest factor	---	2.5 or less (current measurement only)	2.5 (current range:150A max.,voltage range:1000V max.)	3(1000A range is 2 max.,voltage range:1.5 max.) (3288-20 only)
Drop proof	One meter to concrete		---	
Functions	auto power save, data hold, battery life warning			
Operating temperature and humidity	0 to 40°C(32 to 104°F), 80% RH max (no condensation)			
Temperature characteristics	In 0 to 40°C(32 to 104°F) range:0.1×Measurement accuracy/ (°C)			
Storage temperature	-10 to 50°C(14 to 122°F) (no condensation)			
Power supply	Lithium battery: CR2032×1 (Rated supply voltage 3 V DC)			
Maximum rated power	15 mVA			
Continuous operating time	Approx. 150 hours (standard), Approx.80 hours min. (in AC current measurement mode, continuous, no load)	Approx. 50 hours min. (in AC current measurement mode, continuous, no load)	Approx. 25 hours (continuous, no load)	Approx. 60 hours(3288) Approx. 35 hours (3288-20) (continuous, no load)
Dimensions and mass	Approx. 57W×175H×16D mm, approx. 100g (Approx. 2.24"W×6.89"H×0.63"D, approx. 3.5 oz.)		Approx. 57W×180H×16D mm, approx. 170g (3288/-20:150g) (Approx. 2.24"W×7.09"H×0.63"D, approx. 6.0 oz.(3288/-20:5.3 oz.))	
Withstand voltage	Between case and circuit: AC3536 Vrms for 15 sec. Between clamp sensor and case: AC5312 Vrms for 15 sec. Between clamp sensor and circuit: AC5312 Vrms for 15 sec.			
Safety standards	EN61010 CAT III 600V (AC A), CAT III 300V, CAT II 600V (AC /DC V) Type A current sensor		EN61010 CAT III 600V (AC/DC A), CAT III 300V, CAT II 600V (AC /DC V) Type A current sensor	
EMC standards	EN61326			
Accessories	CARRYING CASE 9398, TEST LEADS 9208			

## Accessories



Includes TEST LEAD 9208 and CARRYING CASE 9398



TEST LEAD HOLDER 9209

## Option



**⚠ WARNING** Inspect the unit and check that it is operating correctly before use. When carrying out measurement on live lines, wear proper protective gear, insulating rubber gloves, insulating rubber boots and safety helmet, and use extreme caution to avoid electric shock accidents.

**⚠ DANGER** In order to prevent short-circuits and injury, use the clamp product on electrical circuits with a voltage less than the maximum operation circuit voltage.

*Note: Company names and Product names appearing in this catalog are trademarks or registered trademarks of various companies.*

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