



HIOKI

POCKET SIZE CLAMP SERIES 3280s

Field Measuring Instrument



Pick the Card that is Right for You!



AC

AC/DC



ISO 9001
JMI-0216



ISO14001
JQA-E-90091



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!

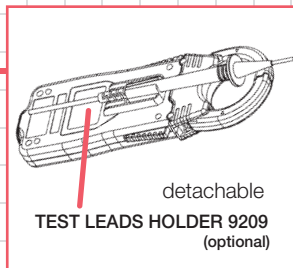


DMM Function

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

Option

TEST LEAD HOLDER 9209 for convenient voltage measurement



detachable TEST LEADS HOLDER 9209 (optional)

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

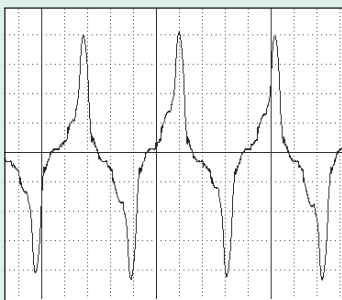
Lineup

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.

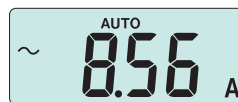


When measuring current waveforms distorted by inverters...



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, UL 61010B | | EN61010 , UL 61010B(except for 3288-20) CAN/CSA-C22.2 No.1010(except for 3288-20) | |
| 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.

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