



CLAMP ON HITESTER 3291-50 CLAMP ON LEAK HITESTER 3293-50

Clamp Testers



The World's First Flip Clamp!



True RMS

measurements Adjustable display angle!

LOOK True RMS DISP MAX-CLR-HOLD HIOK

LED backlight provides clear viewing in dim locations



Bright white LEDs!

3291-50: Load current 3293-50: Leak current

3291-50

3293-50

Convenient pocket-size design





Powers on when you open the clamp





3293-50 CLAMP ON LEAK HITESTER



Flip-type clamp on design delivers the ease-of-use demanded by field technicians

Innovative Concept "Flip" clamp



- Easy visibility even when clamping in high and low places?
- Measurement values you can hold for later reading?
- A clamp sensor that won't break easily when twisted?



Slim Sensor New Design

Have you ever wanted...

- The ability to clamp even in crowded wiring locations?
- To have thinner clamp sensors?





Sometimes it's easier to clamp the target wire at an angle.

Thin sensors let you clamp easily, even around closely spaced wires.





Extensive current measurement functions

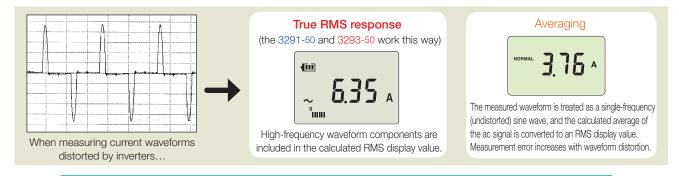
1

"True RMS" lets you measure even distorted currents accurately

True RMS

With "True RMS" measurement, the 3291-50 and 3293-50 accurately measure even distorted load and leakage currents.

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.



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.

2

Measure leak and load current with the 3293-50

The 3293-50 provides 6 ranges, from 30 mA to 1000 A. The 3291-50 provides 3 ranges, from 60 A to 1000 A.

3293-50	Auto range								
Range	30.00mA	300.0mA	6.000A	60.00A	600.0A	1000A			

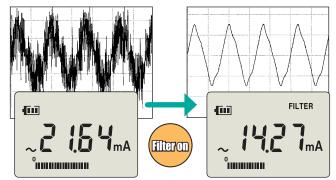
3291-50	Auto range							
Range				60.00A	600.0A	1000A		

Filter out noise

Provides a high-frequency noise filter.

When activated, the filter rejects frequencies above 180 Hz, approximating the filter characteristic of an earth leakage circuit breaker (ELCB) for measurements.

Cuts high-harmonic components to measure the fundamental waveform (The filter in the 3293-50 is enabled by default.)

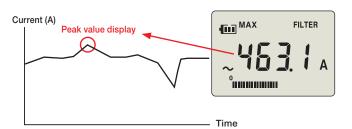


4

Includes a Peak Hold function

Captures the peak value of fluctuating currents.

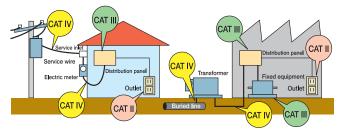
Retains the maximum value during data updating



Safety Design

3291-50 : CAT III 600 V (CAT IV 300 V)

3293-50 : CAT III 300 V



3291-50, 3293-50 Specifications

(accuracy at 23°C±5°C (73°F±9°F), 80% RH or less)

Pocket Size Clamp On Design

Fits perfectly into a shirt pocket. Compact design for superior portability



Loop a wrist strap through the small opening to help keep the instrument from being dropped

3291-50 3293-50 (Load) (Leak) Measurable ø24mm (0.94")max. ø30mm (1.18")max. conductor size Rectification True RMS Max. rated voltage 600Vrms, Measurement category III 300Vrms, Measurement 300Vrms, Measurement category IV to earth category III Measurement Range 30mA/300mA 60A/600A/1000A (Auto Range switching) 6A/60A/600A/1000A filter ON: $\pm 1.5\%$ rdg. ± 5 dgt. (50Hz to 60Hz) Accuracy filter OFF: ±1.5%rdg. ±5dgt. (45Hz to 66Hz) filter ON: fc=180Hz ±3.0%rdg. ±5dgt. (66Hz to 400Hz) **Guaranteeed Accuracy Period** 1 Year (or opening and closing of the sensor 10,000 times) Accuracy Guaranteed 2A to 1000A 1mA to 1000A Measurements Crest factor 2.8 or less (up to 600A), 1.68 or less (1000A range) Response Time 1.1sec. or less Display update Rate 1.1sec. or less Temperature Coefficient Add $(0.05 \times accuracy specifications)$ /°C (except 23°C ±5°C) Effect of within $\pm 0.1\%$ (up to 6A range) within ±5.0% **Conductor Position** within $\pm 5.0\%$ (greater than 60A range) Effect of External Max 7.5mA (within a 400A/m Magnetic Field magnetic field, at or below 6A range) Display hold, maximum value hold, reversible LCD display, Other Functions backlight, auto power off, battery level indication **Usage Environment** 0°C to 40°C/32°F to 104°F, 80%rh or less. (no condensation) Storage Environment 10°C to 50°C/14°F to 122°F, 80%rh or less. (no condensation) Safety EN61010 Type A current sensor Standards **EMC** EN61326 Rated Voltage and DC3V, 25mVA maximum rated power **Power Supply** Button type lithium battery (CR2032) \times 1 Approx. 20 hours Approx. 18 hours **Battery lifetime** 50W×136H×26Dmm, 115g 50W×130H×26Dmm, 135g Dimensions and mass 1.97"× 5.35" H × 1.02" D, 4.1 oz. | 1.97"× 5.12" H × 1.02" D, 4.8 oz.

Bundled Accessories: Carrying Case 9757 × 1, Wrist strap × 1, Button type lithium battery (CR2032 - test use only) × 1, Instruction Manual × 1





■ Carrying Case 9757

Protects the instrument Attaches conveniently to your belt









HIOKI E.E. CORPORATION

HEAD OFFICE:

81 Koizumi, Ueda, Nagano, 386-1192, Japan TEL +81-268-28-0562 / FAX +81-268-28-0568 E-mail: os-com@hioki.co.jp

HIOKI USA CORPORATION:

6 Corporate Drive, Cranbury, NJ 08512 USA TEL +1-609-409-9109 / FAX +1-609-409-9108 E-mail: hioki@hiokiusa.com

HIOKI (Shanghai) Sales & Trading Co., Ltd.:

1608-1610 Shanghai Times Square Office, 93 Huai Hai Zhong Road, Shanghai, P.R.China POSTCODE: 200021 TEL +86-21-6391-0090/0092 FAX +86-21-6391-0360 E-mail: info-sh@hioki.com.cn

Beijing Office:

Beljing Office: A-2602 Freetown, 58 Dong San Huan Nan Road Beijing, P.R.China POSTCODE: 100022 TEL +86-10-5867-4080/4081 FAX +86-10-5867-4090 E-mail: info-bj@hioki.com.cn

Guangzhou Office:

Room A-3206, Victory PlazaServices Center, No.103, Tiyuxi Road, Guangzhou, P.R.China POSTCODE:510620 TEL +86-20-38392673/2676 FAX +86-20-38392679 -mail: info-gz@hioki.com.cn

РАДАР - ОФИЦИАЛЬНЫЙ ДИЛЕР НІОКІ



РОССИЯ, 198152, Санкт-Петербург Краснопутиловская ул., д.25 Тел./факс +7 (812) 600-48-89 Тел.: +7 (812) 375-32-44

www.radar1.ru