HIOKI

3282 (1000A AC, ø46mm max.)
3281 (600 A AC, ø33mm max.)
DIGITAL CLAMP ON HiTESTER

Field measuring instruments

Beats distorted waveform

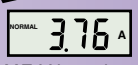
Easy to clamp!

Multi function!

Non-fuse type!

Current waveform of the inverter (primary side)

True RMS

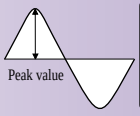


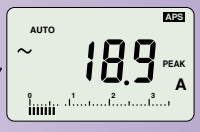
MEAN value method 3261

The MEAN value is **40% lower** than the true RMS

True RMS method 3281/3282

Peak Value





Peak value

Crest factor

Crest factor

= Peak value/ RMS value
= 18.99 A/6.35 A
= 2.99

3281

CAT Ⅳ 600V

CE

ISO14001
JQA-E-90091

INTERNET HIOKI Website
http://www.hioki.co.jp/

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

Actual-size

Designed for ease of use on the site !

The HAND STRAP fits the device neatly to the hand

The HAND STRAP not only prevents the device from being dropped when working, but also effectively imparts strength when parting crowded wiring to clamp.

The photograph is 3281.

⚠ 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

1. 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.
2. In order to prevent short-circuits and injury when the clamp core tip is open, do not use bare conductors.

Prevents careless mistakes

- Auto-power off to conserve battery life
- Non-fuse type protects up to 600V AC

Even if voltage is mistakenly applied to the resistance range, the internal excessive voltage protection element (PTC thermister) protects the circuits for up to 600 V AC.

9462 THERMISTER TEMPERATURE PROBE (optional)

● **Measuring range:**-50 to 150˚C/-58 to 302˚F● **Measuring accuracy:** -50 to 50 ˚C±3˚C/50 to 100˚C±4˚C/100 to 150˚C±5˚C Note: the temperature accuracy given above is only the accuracy for the temperature probe. ±2%rdg.±2˚C(˚F) is added for the actual accuracy of the 3281/3282 themselves.

Specifications [ ] in the Specification :3281 23˚C±5˚C, 80% or less.

Function	Mode	Range	Accuracy	Maximum permissible input
AC current A	RMS Effective value	30.00	±1.0%rdg.±0.7%f.s. (40 to 1 kHz)	600A rms continuous 1700A max.
		300.0	±1.0%rdg.±5dgt.*1 (45 to 66 Hz)	
		1000 [600]	±1.0%rdg.±5dgt.*1(45 to 66 Hz) [±1.0%rdg.±5dgt.*1(45 to 66 Hz)]	1000A rms 5 minutes [600A rms continuous 1000A max.]
	PEAK Peak value	30.0	±5.0%rdg.±5dgt.	600A rms continuous 1700A max.
		300	±3.0%rdg.±5dgt.	
		1000 [600]	±3.0%rdg.±5dgt. [±3.0%rdg.±5dgt.]	1000A rms 5 minutes [600A rms continuous 1000A max.]
AC voltage V	RMS	300.0/600	±1.0%rdg.±3dgt.*2(45 to 66 Hz)	600V rms continuous 1000V max.
	PEAK	300/600	±3.0%rdg.±5dgt.	
Crest factor		1.00 to 5.00	±10.0%rdg.±5dgt.	Effective in the voltage and current functions
Frequency Hz		100.0	±0.3%rdg.±1dgt. (30 to 99.9 Hz)	
		1000	±1.0%rdg.±1dgt. (95 to 1000 Hz)	
Resistance Ω		1k/10.00k	±1.5%rdg.±5dgt.	Overload protection : 600V rms Open terminal voltage: 3.0V DC max. (resistance,continuity functions)
Temperature probe sold separately	˚C	-50 to 150˚C	±2.0%rdg.±2dgt. Add the accuracy of the 9462	
	˚F	-58 to 302˚F		
continuity		1kΩ	Buzzer sounds at 30 Ω ± 5 Ω or less	
Display		LCD, digital (3000 counts, 999 counts (peak)), bar graph (35 segments)		

*1. 40 to 45Hz , 66 to 1kHz ±1.5%rdg.±5dgt. *2. 40 to 45Hz , 66 to 1kHz ±1.5%rdg.±3dgt.
Measurement accuracy applies to input of at least 10% of the current, voltage and resistance range.

●Measurable conductor diameter: 3282 ; ø46mm max. 3281 ; ø33mm max. **●Operatable locations:** up to 2000 m above sea level **●Operatable temperature and humidity range:** 0˚C to 40˚C, 80%rh or lower **●Auxiliary functions:** recording (for V, A, Hz measurements displays maximum value (MAX), minimum value (MIN), and average value (AVE)), data hold (holds display), auto power off (approx. 10 minutes, buzzer sounds just before power is turned off, can be extended or cancelled)**●Display refresh rate:** digital display FAST; approx. 4 times/second, NORMAL; approx. 2 times/second , SLOW; 1 time/ 3 seconds, bar graph display approx. 4 times/second **●Frequency characteristic:** 40Hz to 1kHz **●Effect of conductor position:** At any position based on the center of the core 3281 ; within ±4.0%, 3282 ; within ±1.0% **●Effect of external magnetic field:** In an external magnetic field of 400 A AC/m 3281 ; 1.5A max. 3282 ; 0.2A max.**●Circuit dynamic:** when performing full-scale input to the range 2.5 or less (600 A [3282 is 1000 A], 600 V range is 1.7 or less)**●Maximum useable circuit voltage:** 600 V rms (insulated conductor)**●Standards applying: Safety** EN61010-1:2001 Pollution degree 2 over voltage category Ⅳ (predicted transitory excess voltage 8000 V), EN61010-2-031:2002, EN61010-2-032:1995 **EMC** EN61326:1997 +A1:1998+A2:2001 **●Voltage resistance:** case-input terminal, between clamp cores 6.68 kV AC for 15 seconds **●Power supply:** Layered magnesium battery (6F22) X1, 45 hours or less (continuous use)**●Dimensions /mass:** 3281 ; Approx 62W×218H×39Dmm,350g 3282 ; Approx. 62W× 230H ×39Dmm, 400 g

Accessories

9207-10 TEST LEAD

9399 CARRYING CASE

3281 DIGITAL CLAMP ON HiTESTER
3282 DIGITAL CLAMP ON HiTESTER

(All include 9207-10 TEST LEAD, 9399 CARRYING CASE and HAND STRAP)

Option **9462** THERMISTER TEMPERATURE PROBE

DISTRIBUTED BY

HIOKI
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

Shanghai Representative Office :
1704 Shanghai Times Square Office
93 Huaihai Zhong Road
Shanghai, 200021, P.R.China
TEL +86-21-6391-0090, 0092
FAX +86-21-6391-0360
E-mail: hioki-sh@81890.net

3281E5-36E-05U Printed in Japan