

HIOKI

CLAMP ON AC/DC HiTESTER

3284 [200Arms, ϕ 33mm(1.30") max.]

3285/-20 [2000Arms, ϕ 55mm(2.17") max.]

Field measuring instruments



2000 A analysis

(3285 /3285-20)



3285



3284

3285-20

CAT III 600 V



Analysis for
DC to distorted
waves



ISO 9001
JMI-0216



ISO 14001
JQA-E-90091



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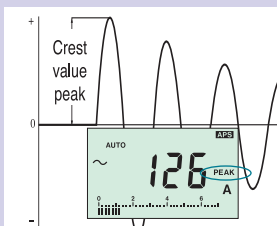
HIOKI company overview, new products, environmental considerations and other information are available on our website.

Analysis applications

Supporting a wealth of functions

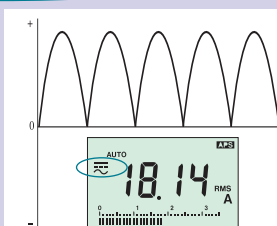
Inrush current crest value

The peak hold function displays the crest value of the inrush current occurring when electrical equipment is started.



RMS value of full-wave rectified waveforms

The AC+DC mode enables measurement of the RMS value of full- or half-wave rectified waveforms used in electrical machinery.



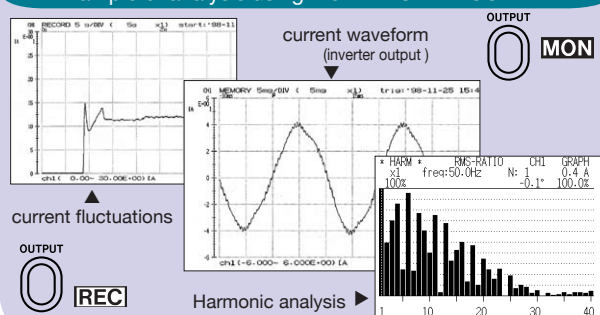
Waveform and harmonic analysis

Model 3284 and 3285 only



Using the external output functions of the 3284 or 3285 in combination with a HIOKI MEMORY HiCORDER enables recording of current and frequency fluctuations and recording and harmonic analysis of instantaneous waveforms. The monitor output (MON) spans a wide frequency range from DC to 20 kHz (15 kHz in the case of 3285), which allows the units to be used for electric current analysis in various fields ranging from batteries to inverters.

Example of analysis using the MEMORY HiCORDER



3284 / 3285 Specifications

[] in the Specification :3285,3285-20 Accuracy at 23 °C ± 5 °C (73 °F ± 9 °F), 80% rh or less. Measurement accuracy applies to input of at least 5% of the current range, and at least 10% of the voltage/frequency range.

| Function | Mode | Display Switch ^{*1} | Range | Accuracy at DC or 45 to 66 Hz | 10 to 45Hz or 66 to 2 [1] kHz | PEAK accuracy at DC or 45 to 66 Hz | Notes |
|-------------------------------|-------|------------------------------|--|---------------------------------|---------------------------------|------------------------------------|---|
| Current (A) | DC | Average / PEAK | 20.00 / 200.0 | ±1.3%rdg.±3dgt. | — | ±1.3%rdg.±7dgt. ^{*6} | Max. allowable current 200Arms cont. 300A peak max. [2000Arms cont. 2840A peak max.] |
| | AC | RMS / PEAK | [200.0 / 2000] | ±1.3%rdg.±3dgt. ^{*2} | ±2.0%rdg.±5dgt. ^{*3*4} | ±1.3%rdg.±7dgt. ^{*6} | |
| | AC+DC | RMS / PEAK | Resolution is 0.1 [1] A during PEAK | ±1.3%rdg.±13dgt. ^{*2} | ±2.0%rdg.±7dgt. ^{*3*4} | ±1.3%rdg.±7dgt. ^{*6} | |
| Voltage (V) | DC | Average / PEAK | 30.00 / 300.0 / 600 | ±1.0%rdg.±3dgt. | — | ±1.0%rdg.±7dgt. | Max. allowable voltage 600Vrms cont. 1000V peak max. |
| | AC | RMS / PEAK | Resolution is decreased by 1 digit except in the 600 V range during PEAK | ±1.0%rdg.±3dgt. | ±1.5%rdg.±5dgt. | ±1.0%rdg.±7dgt. ^{*7} | |
| | AC+DC | RMS / PEAK | | ±1.0%rdg.±7dgt. ^{*5} | ±1.5%rdg.±7dgt. ^{*5} | ±1.0%rdg.±7dgt. ^{*7} | |
| Frequency (Hz) | — | — | 10.00 / 100.0/1000 | ±0.3%rdg.±1dgt. | ±1.0%rdg.±1dgt. (at 1000Hz) | — | Effective in the V and A functions |
| Resistance(Ω) ^{*8} | — | — | 1000/10.00k | ±1.5%rdg.±5dgt. | — | — | Open terminal Voltage 3.1V DC or less |
| Continuity Check [†] | — | — | 1000 | Threshold level 30Ω ±5Ω or less | — | — | |

*1 The peak hold function works automatically during PEAK measurement. *2 Add ±1.0% rdg. in the 1800 to 2000 A interval for the 3285. *3 Add ±1.0% rdg. in the 1k to 2kHz interval for the 3284. *4 No assured accuracy in the 1800 to 2000 A interval for the 3285. *5 Add 6 dgt. in the 30 V range. *6 Add ±4.7% rdg. in the 2300 to 2840 A interval for the 3285. *7 Add ±1.0%rdg.±13dgt. when measuring 700 V to 1000V with Model 3285-20. *8 Model 3285-20 only.

Measurable conductor diameter : ø33 (1.30") mm, [ø55 (2.17") mm] max.

Max. usable circuit voltage : 600Vrms (insulated conductor)

Functions : recording (MAX. MIN. AVE), data hold, auto power-off, auto zero

Display update rate : digital indication FAST approx. 4 times/second, NORMAL approx. 2 times/second, SLOW 1 time/ 3 seconds; bar graph indication approx. 4 times/second

Display response time : 1 sec or less

Range switching : Auto/Manual (Except resistance.)

Frequency characteristic : 40 Hz to 2 [1] kHz accuracy

External output : A/Hz only: recording output DC1V/f.s. ±1.3% rdg.±10mV, Response: 250ms (Except model 3285-20) or less (at 0→90%) / MON A only : Waveform output 1Vrms/f.s. ±1.3% rdg.±5mV, Frequency band: DC to 20 [15] kHz ±3dB

Effect of conductor position : within ±0.5[0.7] % in any direction from the center of sensor

Effect of external magnetic field : 400A/m corresponds to 0.5 [2] A max.

Crest factor : 25 or less, 1.7 or less in the 600V range, 3284 is 1.5 or less in the 200A range [1.42 or less in the 2000A range]

Safety standard : EN61010 CAT III 600V, EN60529 IP40
EMC : EN61326, EN61000-3-2, EN61000-3-3

Ambient temperature of use : 0 to 40 °C (32 °F to 104 °F), 80%rh or less (no condensation)

Storage temperature range : -10 to 50 °C (14 °F to 122 °F) or less (no condensation)

Power supply : AC ADAPTER 9445 (Except Model 3285-20), or 6F22 manganese battery×1 (continuous operation : Model 3284/3285-25 hours, Model 3285-20-20 hours)

Dimensions and mass : Approx. 62W×230[260]H×39D mm, 460 [540]g (Approx 2.45" W×9.06[10.3]" H×1.54" D, 16.3 [19.1] oz.)

CLAMP ON AC/DC HITESTER 3284
CLAMP ON AC/DC HITESTER 3285
CLAMP ON AC/DC HITESTER 3285-20

(All include TEST LEADS 9207-10, CARRYING CASE 9399(3284), CARRYING CASE 9345(3285/3285-20), HAND STRAP)

Options

AC ADAPTER (UL) **9445-02**

AC ADAPTER (EU) **9445-03**

An AC Adapter can only be used with Models 3284 and 3285.

* OUTPUT CORD (Jack to banana plug) **9094** *No CE marking

HIOKI

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