

HIOKI

2004

FIELD MEASURING INSTRUMENTS



<http://www.hioki.co.jp/>

ISO14001
JQA-E-90091

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

3280-10•3280-20 DIGITAL CLAMP ON HITESTER

All In One (Durability, Versatility, Accuracy)

CE
CAT III 600V
(A range)
CAT II 600V
(V range)
UL LISTED
RMS
3280-20 only



- Slim body design allows easy clamping even for narrow spaces
- Independent-opening double-lever design
- Eliminates magnetization-induced heat and noise, even in heavy-current measurement
- 3280-20 True RMS measurement

- AC A: -10; 42/420/1000A (50/60Hz; $\pm 1.5\%$ rdg. ± 5 dgt.), -20; 42/420/1000A (45 to 66Hz; $\pm 1.5\%$ rdg. ± 5 dgt., 40 to 45Hz or 66Hz to 1kHz; $\pm 2.0\%$ rdg. ± 5 dgt.) ● DC V: 420m/4.2/42/420/600V ($\pm 1.3\%$ rdg. ± 4 dgt.)
- AC V: 4.2/42/420/600V (50 to 500Hz, $\pm 2.3\%$ rdg. ± 8 dgt.)
- Ω : 420/4.2k/42k/420k Ω ($\pm 2.0\%$ rdg. ± 4 dgt.), 4.2M Ω ($\pm 10.0\%$ rdg. ± 4 dgt.)
- Continuity: 420 Ω ($\pm 2.0\%$ rdg. ± 6 dgt./Buzzer sounds at approx. 50 Ω or less)
- Max. core jaw dia.: ϕ 33mm ● Max. usable circuit voltage: 600Vrms
- Max. allowable current: 2000A AC rms cont.
- Overload protection: DCV/ACV 600V DC/AC rms; Ω /continuity 250V DC/AC rms
- Power supply: CR2032(1), continuous use 150 hours [3280-10] /50 hours [3280-20]
- Accessories: 9208 TEST LEADS, 9398 CARRYING CASE
- OPTION: 9209 TEST LEADS HOLDER

3280-20
57W×175H×16D mm, 100 g

3280-10

3281•3282 DIGITAL CLAMP ON HITESTER

Compatible with Distorted Waveforms

CE
CAT IV 600V
RMS



- Wave peak value, Waveform distortion check
- True RMS measurement

- AC A: 30/300/600A (3281), 30/300/1000A (3282) ($\pm 1\%$ rdg. ± 5 dgt. 300/600, 1000A)
- AC V: 300/600V ($\pm 1\%$ rdg. ± 3 dgt.)
- Hz: 100/1000Hz ($\pm 1\%$ rdg. ± 3 dgt.)
- Ω : 1k/10k Ω
- -50 to 150°C, -58 to 302°F (9462 temperature probe required)
- Continuity (buzzer sounds at approx. 30 Ω or less)
- Crest factor display for showing crest values or the state of distortion
- Power supply: 6F22(9V)×1, continuous use 50 hours max.
- Dimensions: [3281] 62W×218H×39Dmm, 350g, [3282] 62W×230H×39Dmm, 400g
- Accessories: 9207-10 TEST LEADS, 9399 CARRYING CASE

3281

3282

3283 CLAMP ON LEAK HITESTER

CE
CAT III 300V
RMS



- Measures very small leak current
- High-sensitivity with a full scale of 10mA (resolution: 10 μ A)
- True RMS measurement

- AC A: 10m/100m/1/10A ($\pm 1\%$ rdg. ± 5 dgt.), 200A ($\pm 1.5\%$ rdg. ± 5 dgt.)
- Hz: 100Hz ($\pm 0.3\%$ rdg. ± 1 dgt.)/1000Hz ($\pm 1.0\%$ rdg. ± 1 dgt.)
- Power supply: 6F22(9V)×1, continuous use 40 hours or more (continuous, no load) or AC ADAPTER
- Dimensions: 62W×225H×39Dmm, 400g
- Accessory: 9399 CARRYING CASE

3284•3285 CLAMP ON AC/DC HITESTER

CE RMS
CAT III 600V



- True RMS measurement, External output
- AC/DC Voltage, Frequency besides AC/DC current

- AC, AC+DC (RMS or Peak value) [3284] 20.00 to 200.0A AC, 2 ranges, [3285] 200.0 to 2000A AC, 2 ranges
- DC (Average or Peak value) [3284] 20.00 to 200.0A DC, 2 ranges, [3285] 200.0 to 2000A DC, 2 ranges (1.3% rdg. ± 3 dgt.)
- Power supply: 6F22(9V)×1 or AC ADAPTER
- Dimensions: [3284] 62W×230H×39D mm, 460 g, [3285] 62W×260H×39D mm, 540 g

3284

3285

3287•3288 CLAMP ON AC/DC HITESTER

Compact AC/DC Clamp

CE
CAT III 600V
(A range)
CAT II 600V
(V range)
RMS
3287 only
UL LISTED



- [3288 1000 A rms max. MEAN Value] & [3287 100 A max. True RMS]
- A slim core of only 10 mm, allows easy clamping even in crowded wiring
- Independent-opening double-lever design
- No metal (iron core) exposure, ensuring enhanced safety

- DC/AC A: [3288] 100/1000A, [3287] 10/100A (DC and 30 to 500Hz, $\pm 1.5\%$ rdg. ± 5 dgt.)
- DC V: 420m/4.2/42/420/600V ($\pm 1.3\%$ rdg. ± 4 dgt.)
- AC V: 4.2/42/420/600V (30 to 500Hz, $\pm 2.3\%$ rdg. ± 8 dgt.)
- Ω : 420/4.2k/42k/420k Ω , 4.2M/42M Ω ($\pm 2.0\%$ rdg. ± 4 dgt.)
- Continuity: 420 Ω ($\pm 2.0\%$ rdg. ± 6 dgt./Buzzer sounds at approx. 50 Ω or less)
- Max. core jaw dia.: ϕ 35mm ● Max. usable circuit voltage: 600Vrms
- Crest factor (3287 only): 2.5 or less (150A max. 1000V max.)
- Overload protection: DCV/ACV 600V DC/AC rms; Ω /conductance 250V DC/AC rms
- Power supply: CR2032(1), continuous use 60 hours (3287: 25 hours) max.
- Accessories: 9208 TEST LEADS, 9398 CARRYING CASE

57W×180H×16D mm,
170 g (3288: 150g)

3287

3288

3286-20 CLAMP ON POWER HITESTER

TRMS Clamp-On Power Meter

CE
CAT III 600V
RS-232C
RMS



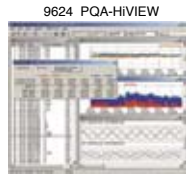
- Supports power checks for three-phase power lines
- True RMS measurement • For harmonic suppression

- AC A: 20/200/1000A ($\pm 1.3\%$ rdg. ± 3 dgt.)
- AC V: 150/300/600V ($\pm 1\%$ rdg. ± 3 dgt.)
- W: 3kW(1 ϕ) to 1200kW(3 ϕ) ($\pm 2.3\%$ rdg. ± 5 dgt.)
- Hz: 100/1000Hz ● Max. core jaw dia.: ϕ 55mm, 80mm × 20mm busbar max.
- Other functions: power factor, reactivity, phase angle, frequency, phase detection (3-phase), voltage/current harmonic levels to 20th order
- Power supply: 6LR61(9V)×1 (continuous use 25 hours max.) 6F22(9V)×1 (continuous use 10 hours max)
- Dimensions: 100W×287H×39Dmm, 650g
- Accessories: 9635 VOLTAGE CORD, 9245 CARRYING CASE, HAND STRAP
- OPTIONS: 9635-01 VOLTAGE CORD, 9636-01 RS-232C PACKAGE, 9442 PRINTER, 9443 AC ADAPTER (For 9442 printer), 9636 RS-232C CABLE

3196 POWER QUALITY ANALYZER

Complete instrument for power quality troubleshooting

CE **RMS** **RS-232C** **LAN**
STANDARD CAT III 600V



For complete data management on a PC

Measurement is not possible with the 3196 alone. Order the 9660, 9661, 9667, 9669, 9694 CLAMP ON SENSOR or 9290-10 CLAMP ON ADAPTER required for measurement.

- Monitor and record the quality of power to analyze the cause of trouble when it occurs!
- Measure Dips, Swells, Flicker, Transients, Harmonic to the 50th order
- High frequency transient, detection and waveform display
- 4 current and 4 voltage channels
- Measurement functions:
 1. Transient voltage, Voltage swell, Voltage dip, Voltage interruption
 2. Frequency, Voltage, Current, Voltage/Current peak, Active/Reactive/Apparent power, Power factor
 3. Voltage unbalance ratio, Current unbalance ratio
 4. Harmonic voltage/current/power, Inter harmonic voltage/current, Harmonic voltage/current phase angle, Total harmonic/interharmonic distortion
 5. IEC flicker (Pst, Plt) / ΔV10(Japan)

3169-20/21 CLAMP ON POWER HiTESTER

Portable Power Measurement

CE **RMS** **RS-232C**
CAT III 600V STANDARD



- Measurement function: Current, Voltage, Active power, Reactive power, Power factor, Apparent power, Frequency, Integrated power (with simultaneous integration of active/reactive/apparent power)
- Wide range of 0.5A to 1000A/75W (single phase two wire) to 9MW (three phase four wire)
- Power factor, integrated power measurements display polarity (±), Harmonics
- Interface: RS-232C • Data gathering by demand function
- Power supply: 100 to 240V AC • Dimensions: 210W×160H×60Dmm, 1.2kg
- Accessories: 9438-03 VOLTAGE CABLE SET, voltage cord, ground adapter, 9441 connection cable(for the 3169-21 only)
- OPTIONS: 9660 CLAMP ON SENSOR (100A AC max.), 9661 CLAMP ON SENSOR(500A AC max.), 9667 FLEXIBLE CLAMP ON SENSOR (5000A AC max.), 9669 CLAMP ON SENSOR (1000A AC max.), 9694 CLAMP ON SENSOR (5A AC max.), 9440 CONNECTION CABLE(for external I/O), 9612 RS-232C CABLE, 9442 PRINTER, 9443 AC ADAPTER(for the 9442), 9721 RS-232C CABLE(for connection to the 9442), 1196 RECORDING PAPER, 9720 CARRYING CASE, 9625 POWER MEASUREMENT SUPPORT SOFTWARE, 9626/9627/9726/9727/9728 PC CARD(32/64/128/256/512M)

Measurement is not possible with the 3169 alone. Order the 9660, 9661, 9667, 9669, 9694 CLAMP ON SENSOR or 9290-10 CLAMP ON ADAPTER required for measurement.

3290 CLAMP ON AC/DC HiTESTER

New CE CAT III 600V



- Switchable among three measurement response times
- Filters out unnecessary harmonics (fc=500Hz)

Model	Measurable conductor diameter	Rated input	Measurement range on 3290	Maximum display	
				Normal measurement	Peak measurement
9691	∅35mm	100Arms	20.00A	25.00A	50.0A
		150Apeak	200.0A	105.0A	150.0A
9692	∅33mm	200Arms	20.00A	25.00A	50.0A
		300Apeak	200.0A	210.0A	300.0A
9693	∅55mm	2000Arms	200.0A	250.0A	500A
		2840Apeak	2000A	2100A	3000A

- AC/DC A: 20/200A(3290+9691, 3290+9692), 200/2000A(3290+9693) • Hz: 10/100/1000Hz
- Power supply: Four type 3 alkaline dry cells (LR6) or AC adapter
- Dimensions: 155W×98H×47Dmm, 545g • Accessories: strap
- OPTIONS: 9691 CLAMP ON AC/DC SENSOR(100A), 9692 CLAMP ON AC/DC SENSOR(200A), 9693 CLAMP ON AC/DC SENSOR(2000A), 9445 AC ADAPTER, 9094 OUTPUT CORD, 9400 CARRYING CASE

3127-10•3128-10 CLAMP ON HiTESTER

CE CAT III 600V



[3127-10] 78W×190H×34Dmm, 340g
[3128-10] 99W×237H×34Dmm, 570g

- AC A: [3127-10] 6/15/60/150/300A [3128-10] 15/60/150/600/1500A
- AC V: 150/300/750V DC V: 75V Accuracy: ±3% of f.s.(A, V)
- Ω: 1k/100kΩ (±3% of scale length)
- Temperature scale: -50 to 200°C • Power supply: R6P(AA)×1
- Accessories: 9067 TEST LEADS, carrying case
- OPTIONS: 9021-01 THERMISTER TEMPERATURE PROBE, 9131 CLAMP ON ADAPTER (for large AC current), CT101A LINE SPLITTER

CLAMP ON SENSORS



CE CAT III 1000V
9667 FLEXIBLE CLAMP ON SENSOR
(for 3196, 3169, 8800 MEMORY HiRECORDER Series)

Rated primary current: 500A/5000A AC(2range)
500 mV AC range f.s. output
∅254mm core jaw dia.



CE CAT III 600V
9668 CLAMP ON SENSOR
(for 8205-10/8206-10)

Rated current: Primary; 1000A AC
Secondary; 1000 mA AC
∅55mm core jaw dia. 80 × 20mm busbar



CE CAT III 600V
9669 CLAMP ON SENSOR
(for 3196, 3169, 8800 MEMORY HiRECORDER Series)

Rated primary current: 1000A AC
500 mV AC range f.s. output
∅55mm core jaw dia. 80 × 20mm busbar

CLAMP ON PROBES and CLAMP ON ADAPTERS



CE **9010/-10 (BNC)**
40Hz to 1kHz, 10A to 500A range
200mV / range output
∅46mm core jaw dia.



CE **9018/-10 (BNC)**
40Hz to 3kHz, 10A to 500A range
200mV / range output
∅46mm core jaw dia.






CE **9132/-10 (BNC)**
40Hz to 1kHz, 20A to 1000A range
200mV / range output
∅55mm core jaw dia.



New CE **9290-10**
20Hz to 4kHz
Up to 1500A, CT ratio 10:1
80×20mm busbar

3237 • 3238 • 3239 DIGITAL HiTESTER

High-speed DMM (3.3ms/sample)

 CAT II 600V
 CAT I 1000V
 Hi terminal
 GP-IB
 3237-01
 3238-01
 3239-01
 RS-232C
 STANDARD



- Samples at rates of up to 300 samples/sec. (3.3ms/sample)
- Minimizing tact time with sequence control at a truly affordable price(3237)
- High-accuracy, multi-functional models(3238 & 3239)

Common features

- LCD max.: 199999 ● Sampling rate: 300 samples/s, 8 to 9 samples/s, 1 samples/s
- Functions: Comparator, Average, Zero adjust, Trigger and the Save/Load functions
- Power supply: AC 100V/120V/220V/240V, 50/60Hz

Features of the 3237

- DCV: 200mV Ranges up to 1000V/±0.025%rdg.±2dgt./2V
- ACV: 2V Ranges up to 750V/±0.2%rdg.±100dgt./45 to 3kHz, True RMS
- Ω: 200Ω Ranges up to 100MΩ/±0.05%rdg.±2dgt./2k to 200kΩ

Common Features of the 3238 and the 3239

- DCV: 200mV Ranges up to 1000V/±0.01%rdg.±2dgt./2V
- ACV: 2V Ranges up to 750V/±0.1%rdg.±100dgt./45 to 10kHz, True RMS
- DC·ACA: 200mA and 2A/±0.1%rdg.±6dgt. (DC200mA) / ±0.3%rdg. ±100dgt. (AC200mA), True RMS
- Frequency: 100 Hz Ranges up to 300 kHz/±0.015%rdg.±2dgt./10 to 300kHz
- Ω: 200Ω Ranges up to 100MΩ/±0.02%rdg.±2dgt./2k to 200kΩ

Feature of the the 3239

- Ω (4-terminal measurement): 200Ω Ranges up to 2000MΩ/±0.02%rdg.±2dgt./2k to 200kΩ

215W×80H×265D mm, 2.6kg

3239

3801 • 3802 DIGITAL HiTESTER

High-accuracy DMM with RS-232C Communication

 CAT II 1000V
 CAT III 600V
 RMS
 RS-232C
 OPTIONS



Abundant Measurement Functions

In addition to basic functions such as measurement of DC and AC voltage and current, resistance, diode checking, and continuity checking, these handy DMMs can also measure frequency and capacitance.

Common Features of the 3801 and 3802

- DC·ACV: 40mV Ranges up to 1000V(AC:750V)/±0.06%rdg.±3dgt. (DC)/±0.7%rdg.±5dgt. (AC)
- DC·ACA: 400μA Ranges up to 10A/±0.2%rdg.±3dgt. (DC)/±1%rdg.±5dgt. (AC)
- Ω: 400Ω Ranges up to 40 MΩ/±0.2%rdg.±3dgt. ● C: 4nF Ranges up to 9999μF/±2%rdg.±4dgt.
- Continuity/diode check ● Hz: Measurement range: 10 Hz to 200 kHz/±0.02%rdg.±1dgt.
- Power supply: 6F22(9V)×1, continuous use 50 hours max.

Additional Functions of the 3801

- AC+DC measurement function ● Peak hold function ● LCD panel with backlight
- Hz (frequency): measurement range: 1Hz to 10MHz ● Duty: measurement range: 0.1% to 99.9%
- Pulse width: measurement range: 0.1ms to 1999ms ● dBm: measurement range: -80.79 to 81.48 dBm
- Pulse output: setting range: 0.5Hz to 4800Hz ● Timer output: setting range: 1s to 99.999s
- Temperature: meter measurement range: -40°C to 1372°C / probe (option)

90W×192H×37Dmm, 640g

3802

3256-51 • 3257-51 DIGITAL HiTESTER

DMM with terminal shutter interlock mechanism



- The terminal shutter interlock mechanism exposes only the correct terminals for connection in the currently selected function.
- High-speed response, bar graph display
- Conforms with IEC 1010
- 3256-50 (without holster)
- 3256-51 (with holster)



- True RMS measurement supports distorted waveforms
- Outstanding safety features, CE marking, 1000V Bussmann fuse, fail-safe shutter mechanism
- Enhanced functions, duty factor measurement and relative function
- 3257-50 (without holster)
- 3257-51 (with holster)





3256-51

3257-51

- DC V: 420m/4.2/42/420/1000V(±0.5%rdg.±2dgt.) ● AC V: 420m/ 4.2/42/420/1000V(±1.2%rdg.±3dgt.) ● AC·DC A: 42μ/420μ/4200μ/42m/420m/10A (DC A: ±1.5%rdg.±4dgt. / AC A: ±2.5%rdg.±5dgt.) ● Ω: 420/4.2k/42k/420k/4.2M/42MΩ(±0.7%rdg.±2dgt.) ● Hz: 0.5Hz to 500kHz 5 ranges (±0.02%rdg.±1dgt.)
- Frequency characteristics: 50 to 500Hz (AC V, AC A) ● Continuity: 50Ω±30Ω ● Diode check: 3.4V open terminal voltage
- Power supply: R03(AAA)×2 dry batteries (Continuous use approx. 100hours) ● Dimensions: 76W×167H×33Dmm, 260g (without holster)
- Accessories: 9170 TEST LEADS, HOLSTER (3256-51, 3257-51), 9378 CARRYING CASE (3256-50, 3257-50)
- OPTIONS: 3853 CARRYING CASE (3256-51, 3257-51), 9014 30kV DC HIGH VOLTAGE PROBE

3803 • 3804 • 3805 DIGITAL HiTESTER

Compact and basic DMM with RS-232C Interface

 LISTED
 CAT II 1000V
 CAT III 600V
 RS-232C
 OPTIONS
 RMS
 3805 only



- The economically priced 3803**
- 4000 count display full scale

- The versatile 3804 adds recording and capacitance. The 3805 features true RMS measurement, providing greater utility for facility maintenance**
- 9999 count display full scale for voltage range
 - Easy harmonic distortion check function (3805)

Common Features of the 3803

- DC·AC V: 400mV Ranges up to 1000V ● DC·AC A: 400μA Ranges up to 10A
- Ω: 400Ω Ranges up to 40MΩ ● Continuity/diode check
- Power supply: 6F22(9V)×1, continuous use 200 hours

Common Features of the 3804 and 3805

- DC·ACV: 1V Ranges up to 1000V ● DC · ACA: 400μA Ranges up to 10A
- Ω: 400Ω Ranges up to 40MΩ ● C: 4μF Ranges up to 9999μF
- Continuity/diode check ● Power supply: 6F22(9V)×1, continuous use 100 hours

76W×167H×33Dmm, 400g

3804

3805

3246 PENCIL HiTESTER

Smart Design and Ease of Use

New

CE
CAT III 600V



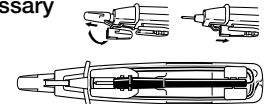
Backlight LCD



Penlight



- Pocket-size Pencil DMM
- Backlight LCD is highly visible, even in dark locations
- Penlight brightly illuminates test points
- 600V circuit protection makes fuses unnecessary
- Protective probe tip cap
- Test lead fits neatly into back of instrument



- DC V: 420 m / 4.2 / 42 / 420 / 600 V (± 1.3 %rdg. ± 4 dgt.)
- AC V: 4.2 / 42 / 420 / 600 V (± 2.3 %rdg. ± 8 dgt.)
- Ω: 420 / 4.2k / 42k / 420k / 4.2M / 42MΩ (± 2.0 %rdg. ± 4dgt.)
- Measurement system: average value rectification
- Display: Max. 4199-count LCD
- Range switching: automatic or manual
- Ancillary functions: data hold function, auto power save function, battery life warning function, penlight, backlight LCD
- Sampling rate: 2.5 times/sec
- Overload protection: 600 Vrms (sin) or 3 × 10⁸ VHz for all functions
- Applicable standards: Safety - EN61010 CAT III 600 V, EMC - EN61326
- Ambient temperature of use: 0 to 40°C (32°F to 104°F), 80 %rh (no condensation)
- Storage temperature range: -20 to 60°C (-4°F to 140°F), (no condensation)
- Power supply: CR2032 battery × 1 (3V DC)
- Continuous operating time: approx. 150 h (During DC voltage measurement), approx. 30 h (During DC voltage measurement, assuming 10 sec illumination alternating with 20 sec dark)
- Dimensions: 30 W × 182 H × 26.5 Dmm, 80 g
- Accessory: strap
- OPTIONS: 9081 10 A SHUNT (output: 100 mV/10 A)

3244 CARD HiTESTER

CE
CAT II 500V



Handy Card-size DMM

- Only 9.5mm thick and 60g in weight
- Wide range, maximum reading 4199 digit
- Full auto ranging
- Auto power save function

- DC V: 420m/4.2/42/420/500V (±0.7% rdg. ±4 dgt./4.2V)
- AC V: 4.2/42/420/500V (±2.3% rdg. ±8 dgt.)
- Ω: 420/4.2k/42k/420k/4.2M/42MΩ (±2.0% rdg. ±4 dgt./420 to 420kΩ)
- Power supply: CR2032(1), continuous use 150 hours
- Dimensions: 55W×109H×9.5Dmm, 60g
- Accessory: CARRYING CASE

3255-50 DIGITAL HiTESTER

New
CE
CAT III 600V



Perfect for industrial power lines

- Built-in current limiter and fuse capable of withstanding 600V to prevent short-circuit accidents
- Dust-proof, water-proof construction

- AC · DC V: 419.9m/4.19/41.9/419/600V
- Ω: 420 to 42MΩ
- Display: 4199
- Power supply: R03(AAA)×2, LR03×2
- Dimensions: 70W×145H×31Dmm, 200g
- Accessory: 9207-10 TEST LEADS, 9371 CARRYING CASE
- OPTIONS: 9010 CLAMP ON PROBE(AC 500 A), 9018 CLAMP ON PROBE(AC 500 A), 9132 CLAMP ON PROBE(AC 1000 A)

3243 DIGITAL HiTESTER

CE
CAT III 500V



CE Mark Compliant Pocket-size DMM

- Automatic AC/DC discrimination function

- AC · DC V: 320m(DC)/3.2/32/320/450V
- Ω: 320/3.2k/32k/320k/3200k/32MΩ
- Hz: 3.2k/32k/320kHz
- Power supply: LR44×2
- Dimensions: 68W×120H×19Dmm, 100g

3030-10 HiTESTER (20kΩ/V)

CE
CAT III 600V



Basic tester with improved safety features

- Over voltage protection up to 250V
- Drop-proof construction

- DC V: 0.3/3/12/30/120/300/600V
- DC A: (60μA)/ 30/300mA
- AC V: 12/30/120/300/600V
- Ω: 3k/30k/300k/3MΩ
- Temperature: -50 to 150°C
- Power supply: R6P(AA)×2
- Dimensions: 95W×141H×39Dmm, 280g

3245 SOLAR HiTESTER

CE
CAT III 600V



Environmentally-friendly DMM

- Hybrid power system incorporates both solar-charged main battery and a backup battery

- DC V: 420m/4.2/42/420/600V (±1.3%rdg. ±4dgt.)
- AC V: 4.2/42/420/600V (±2.3%rdg. ±8dgt. /50 to 500Hz)
- Ω: 420/4.2k/42k/420k/4.2M/42MΩ (±2%rdg. ±4dgt. /420 to 420kΩ)
- Power supply: Lithium-ion main battery, and CR 2032(3V) backup battery(1)
- Dimensions: 60W×135H×23Dmm, 140g
- Accessory: carrying case

3008 HiTESTER (20kΩ/V)

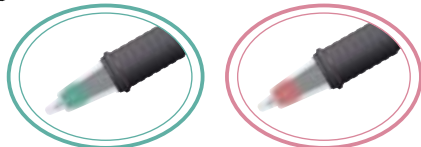


High safety standard for electrical equipment inspection (for maintenance)

- ◆ Drop proof
- DC V: 6/30/60/300/600V
- AC V: 6/30/150/300/600V
- Ω: 10k/100k/1MΩ
- Power supply: R6P(AA)×2
- Dimensions: 94W×134H×56Dmm, 350g

3120 VOLTAGE DETECTOR

Safe, reliable, and backed by the HIOKI guarantee



Battery Check: Green Indication: Red

- Detecting Range: AC 70 to 600V
- Measuring Frequency: 50/60 Hz
- Indication: Red LED and buzzer
- Battery Check: Green LED (checks to see if the internal batteries are up to performance)
- Power source: R03 Manganese or LR03 Alkali battery x 2
- Continuous operating time (Standby time): Approx. 200 hours (LR03) or Approx. 100 hours (R03)

* Available August 2004

3454-11 DIGITAL MΩ HiTESTER



Functions

- Insulation and low resistance mode-comparator
- Measurement value hold
- Insulation resistance mode-auto discharge
- Insulation and AC voltage mode-live wire warning (when voltage of 70V±10V exists across measurement terminals)
- Low resistance mode-zero adjust
- All measurement mode-battery indicators
- Auto power save

- Power supply: R6P(AA)X4 or LR6(AA)X4
- Dimensions: 176W×148H×56Dmm, 530g
- Accessories: 9294 TEST PROBE, Strap band
- OPTIONS: *9288 BREAKER PIN, *9289 TEST PROBES (Alligator clips for Model 9289), 9257 CONNECTION CORD *No CE marking

3453 DIGITAL MΩ HiTESTER



- Four ranges within one body, 125V/40MΩ, 250V/200MΩ, 500V/2000MΩ, and 1000V/4000MΩ
- Recognizes variations of resistance
- Ability to measure AC voltage and low resistance (continuity), comparator, memory (20 data)
- Power supply: R6P(AA)X4 or LR6(AA)X4
- Dimensions: 155W×98H×80Dmm, 500g
- Accessories: 9294 TEST PROBE, display cover and suspension band

- OPTIONS: 9185 TEST LEAD, 9288 BREAKER PIN, 9257 CONNECTION LEAD

3403 • 3404 TACHO HiTESTER



• Auto ranging from 30 to 100,000 r/min



3404

3403

- Measurement range: at SLOW sampling: 30 to 99990 r/min, 0.5 to 1600r/s, ±1dgt.(typ.)/ at FAST sampling (3404 only): 120 to 99900 r/min, 2 to 1600 r/s, ±20dgt.(typ.)
- Analog output on 3404
- TOTAL mode (3404 only) : 0 to 599999
- PERIOD mode (3404 only) : 600μs to 2s ±1dgt.(typ.)
- Power supply: R6P(AA)X4 or AC ADAPTER (6V, 300mA)
- Dimensions: 62W×180H×38Dmm, 260g (3404: 260g)

3451 • 3452 MΩ HiTESTER



3452

- Luminous scales for easy use in dark locations
- Power supply : R6P(AA)X4
- Dimensions : 152W×95H×47Dmm, 420g
- Accessories : 9292 TEST PROBES, 9384 CARRYING CASE

- 3451-11 (125V/20MΩ), 3451-12 (250V/50MΩ), 3451-13 (500V/100MΩ)
- 3451-14 (500V/1000MΩ), 3451-15 (1000V/2000MΩ)

- 3452-11(25V/10M, 50V/10M, 100V/20MΩ), 3452-12(125V/20M,250V/50M, 500V/100MΩ), 3452-13(250V/50M, 500V/100M, 1000V/2000MΩ)

3660/3661/3662/3663 Network Testing



3660

3661

3662



3661 OPTICAL POWER METER

- Measurement functions: Optical power measurement(dBm), Optical loss measurement(dB)
- Calibration wavelength: 850 nm, 1310 nm, 1550 nm
- Power supply: LR6(AA)X4
- Dimensions: 85W×192H×35Dmm, 300g
- Dimensions: 76W×159H×35Dmm, 180g

3662/63 LASER LIGHT SOURCE

- Light-emitting element: Semiconductor laser diode
- Output connector: FC, SC(using optional connector adapter)
- Fiber type: Single mode
- Output wavelength: 1310 ±20 nm(3663), 1550 ±20 nm(3662)
- Power supply: LR6(AA)X2
- Dimensions: 76W×159H×35Dmm, 180g

3661 LAN CABLE HiTESTER

- Measure Wire map, Cable length and Direction
- Measurable cable:UTP cable; Characteristic impedance 100Ω, CAT3,4,5,5e
- Power supply: LR6(AA)X6
- Dimensions: 98W×160H×38Dmm, 290g

3126-01 PHASE DETECTOR



- Voltage range: 110V to 480V
- Time limit:110V/continuous, 220V/30min., 480V/4min.
- Frequency: 40 to 70Hz
- Cord length: 1.2m
- Dimensions: 70W×96H×54Dmm, 280g
- Accessory : soft case

3143 EARTH HiTESTER *No Auxiliary Grounding rods required*



- Measurement ranges: 20 to 49.9Ω (±10% rdg.), 50 to 500Ω, (±5% rdg.) voltage comparison method
- Open terminal voltage: 1V AC peak typ.
- Measurement current: 3.6mA AC max.
- Measurement frequency: 100kHz to 1.5MHz
- Power supply: LR6(AA)X4
- Dimensions: 155W×98H×49Dmm, 380g
- Accessory: 9265 MEASURING CABLE

3151 EARTH HiTESTER



- Measurement ranges: 10Ω(0 to 11.5Ω), 100Ω(0 to 115Ω),1000Ω(0 to 1150Ω), 3 ranges(±2.5% of f.s.), 30V(0 to 30VAC /±3% of f.s.) *Using two-wire measurement method; applied to 100Ω /1000Ω range only
- Measurement current : 15mA AC max.
- Measurement frequency : 575Hz or 600Hz selectable
- Power supply: R6P(AA)X6 or LR6(AA)X6
- Dimensions: 164W×119H×88Dmm, 800g
- Accessories: 9214 AUXILIARY EARTHING ROD, 9215 MEASURING CABLE(one earth; black 5m, yellow 10m, red 20m),9216 CABLE WINDER, 9393 CARRYING CASE
- OPTION: 9050 EARTH NETS (set of two)

3446-01•3447-01 TEMPERATURE HITESTER



3447-01:2ch, Waterproof type

Store temperature data in memory

- Measurement range:
-100 to 1000 °C K 1ch (3446-01)
-100.0 to 300.0 °C Pt 100 2ch (3447-01)
- Resolution:
3446-01; 0.1 °C (-100.0 to 300.0 °C) / 1 °C (-100 to 1000 °C)
3447-01; 0.1 °C
- Accuracy:
±0.1%rdg.±0.5 °C (0.1 °C resolution) (3446-01)
±0.1%rdg.±0.4 °C (3447-01)
- Functions: Clock, Display (Recording / Hold / Buzzer / Auto Power Save function ON/etc.), Comparator, Data back-up, RS-232C Interface
- Power supply: Four alkaline (LR03) batteries

3423 LUX HITESTER *Maximum Scale of 199,900lx*



Digital illumination meter, maximum scale of 199,900 lx

- Measurement ranges :
20/200/2000/ 20000/200000lx
- Accuracy : ±4%rdg.±1dgt.
- Analog output : 200mV DC of f.s.
±2.5% of f.s.
- Power supply : R6P(AA)×2, continuous use : Approx. 25 hours or AC adapter (6V, 300mA)
- Dimensions : 74W×170H×30D mm, 310g
- Accessories : sensor cap, 9376 CARRYING CASE

3441•3442 TEMPERATURE HITESTER



3441

3442: Waterproof type

Also available with C/F display

- Measurement range: -100°C to 1300°C K
- Resolution: 0.1°C(-100 to 199.9°C)
1°C(200 to 1300°C)
- Accuracy(23°C±5°C):
±0.1%rdg.±0.8°C(-100 to 200°C)
±0.2%rdg.±1°C(200 to 1300°C)
- OPTIONS
SHEATH TYPE TEMPERATURE PROBES:
9180,9182,9183(up to 750°C)
(Waterproof Probes): 9472,9474(up to 300°C),
9473(up to 800°C)9475(up to 500°C)
SURFACE TYPE TEMPERATURE PROBE:
9181(up to 400°C),9476(up to 500°C)

8420/21/22-51 MEMORY HILOGGER



Improved to be extra tough against noise

- 8420-51(8ch), 8421-51(16ch), 8422-51(32ch) All analog channels isolated
- Temperature (Thermocouples, Pt 100), voltage, humidity, cumulative pulses, rotations
- Functions:
Waveform compression and magnification, Event search, Waveform scroll, cursor measurement, scaling, automatic save, start condition retention, setting save, comment entry, automatic set up, numerical calculation

3630 LOGGER series

Temperature/Humidity/Instrumentation/Voltage/Current



3641-20
-40.0°C to 85.0°C
0.0 to 100.0% rh
(using the 9680 sensor)



3632-20
-20.0°C to 70.0°C
(internal sensor only)
Waterproof construction



3633-20
-40.0°C to 180.0°C
(external/internal sensor)



3634-20
0 to 20.00mA DC



3635-24,-25,-26
-24: ±500.0mV DC
-25: ±5.000V DC
-26: ±50.00V DC



3636-20
0 to 50.00/500.0A AC
2ch AC current measurement with optional clamp sensor



3637-20
0 to 600.0V AC
1ch AC voltage measurement



3638-20
AC Leak Current (2ch) with optional clamp-on leak sensor



3639-20
Pulse Totalizer (1ch)
9,999count/interval



3640-20
Illumination (1ch)
2000/20000/200000 lx



3645-20
Multi-range Voltage logger with preheat signal function



- Up to 16,000 or 32,000 measurement data can be collected with the optional 3911-20/3912-20 for processing by PC
- Special software bundled with the 3911-20/3912-20 enables storing of the recording time, interval, start, end, method and comments in the instruments memory
- Non-volatile memory preserves collected data even when the battery is depleted
- Power supply: [3631-20 to 3645-20] LR03(AAA)×2 or 4, [3911-20] LR03(AAA)×4, [3912-20] LR03(AAA)×4

3415-01•3416-01•3418 TEMPERATURE HITESTER



3415-01 3416-01 3418

Non-contact, Quick and Easy Temperature Management & RS-232C Communication (3443, 3444, 3445 only)

- Measurement ranges:
-50°C to 500°C, 1°C resolution
- Measurement field diameter:
ø72mm at a distance of 1 meter (3415-01,3418),
ø2.5mm at a distance of 30 mm (3416-01)
- Accuracy : ±1% rdg. (at 201 to 500°C), ±2°C(at 0 to 200°C)
- Response time : 1.5 seconds
- Power supply : R03(AAA)×4
- Dimensions :
40W×170H×36Dmm, 140g

3443•3444•3445 TEMPERATURE HITESTER



3443 with memory 3444 with real-time output 3445

- Measurement ranges : -50°C to 500 °C, 0.1°C resolution
- Measurement field diameter:
[3443, 3444] ø24 mm at a distance of 1 m, [3445] ø2.5mm at a distance of 70mm
- Accuracy : ±1% rdg. (at 200 to 500°C), ±2°C(at 0 to 200°C)
- Response time : 1.6 seconds
- Power supply : 6F22(9V)×1, or AC adapter
- Dimensions: 47W×200H×48Dmm, 280g

3550 • 3551 • 3555 BATTERY HiTESTER *Instantaneous determination of battery deterioration*



Get instantaneous results on the state of a battery, on a three-rank scale of Pass, Warning, or Fail, using a composite decision based on the internal resistance and the voltage. Select Model 3550 for medium-capacity alkali and lead-acid storage batteries, Model 3555 for compact storage batteries, and Model 3551 for high-capacity alkali and lead-acid storage batteries.

- Resistance measurement: [3550] 30mΩ to 3Ω, 3 ranges, 10μΩ resolution max.
[3551] 3mΩ to 300mΩ, 3 ranges, 1μΩ resolution max.
[3555] 300mΩ to 30Ω, 3 ranges, 100μΩ resolution max.
- Voltage Measurement: 3 or 30V DC, 2 ranges, 1mV resolution max.
- Power supply: LR6(AA)×6 or (9418-15 AC ADAPTER/ 3551 only)
- Dimensions: 196W×130H×50Dmm, 710g(3550), 680g(3555)
196W×130H×65Dmm, 860g(3551)
- Accessories: [3550] 9460 CLIP-TYPE LEAD WITH TEMPERATURE SENSOR, 9382 CARRYING CASE,
[3551] 9465 PIN-TYPE LEAD, 9466 REMOTE CONTROL SWITCH, 9377 CARRYING CASE,
[3555] 9461 PIN-TYPE LEAD

8807-01 • 8808-01 • 8807-51 • 8808-51 MEMORY HiCORDER *B5-sized handy high-speed recorders*



RS-232C
STANDARD
FAX/modem
OPTIONS(9332)

- Models 8807-51/8808-51 MEMORY HiCORDERs with harmonic analysis function
- New concept incorporating detachable printer, B5-sized handy recorder
- Compact and thin body weighing in at under 1.2kg
- 5.7-inch STN color LCD display
- Measurement ranges: 10mV to 100V /division, 13 ranges(10 division f.s.) Resolution: 1/160 of range
- Frequency band: DC to 50 kHz, ±3dB
- Time axis at memory function: 200μs to 5 minutes/division, 19 ranges (1division = 80 samples)
- Functions: Memory recorder, Recorder, RMS & memory recorder (50/60 Hz or DC only)
- Number of input channels: 8807-01/-51 2 analog channels +8 logic / 8808-01/-51 4 analog channels +8 logic
- Memory capacity: Total 256k words Data storage: PCMCIA Type-II flash ATA card
- Interfaces: RS-232C, Printer(8992 PRINTER UNIT can be connected)
- Power supply: 9418-10 AC ADAPTER, LR6(AA)×6 (Continuous use 1 hour without Printer), 9447 BATTERY PACK
- Dimensions: 203W×170H×52Dmm, 8807-01/-51: 1.1kg 8808-01/-51: 1.2kg (printer detached)

8205-10 • 8206-10 MICRO HiCORDER *Easy data recording as convenient as a simple tester*



- Direct Measurement of Current up to 1000A (using optional 9668)
- Record voltage and current variations simply (Clamp-on sensor is optional)
- No. of channels: [8205-10] Voltage or Current 1 ch,
[8206-10] Voltage and Current 2 ch alternate recording
- Measurement ranges(1-2-5 steps):
[8205-10] AC A; 10 to 1000A f.s. 7 ranges (using optional 9668)(±6.03% f.s.)
AC/DC V: 0.1 to 500V f.s. 12 ranges
[8206-10] AC A; 10 to 1000A f.s. 7 ranges (using optional 9668)(±6.03% f.s.
reference value) AC V: 100/200/500 V f.s. 3 ranges
- Paper feed speed: [8205-10] 20 cm/minute to 2 cm/hour, 5 ranges,
[8206-10] 60 cm/hour to 2 cm/hour, 5 ranges
- Power supply: 100 to 240V AC (50/60Hz) or 9.5 to 14V DC, 2 way
- Dimensions: 250W×122H×94Dmm, 1.2kg
- OPTIONS: 9650 CLAMP ON SENSOR, 9651 CLAMP ON SENSOR, 9235 RECORDING PAPER,
9236-01 RECORDING PAPER (Climate resistant), 9668 CLAMP ON SENSOR

■ HIOKI products labeled with the CE marking are designed for fulfillment of these over-voltage category requirements. In order to ensure safe use of this instrument, please use a device showing the CAT marking that is appropriate for the place of use.



In some cases, power lines may carry voltage spikes of several times the normal supply voltage. For reasons of safety, ordinary testers should not be used to measure power lines carrying more than 250V. When measuring such power lines, always use a tester with built-in overcurrent protection to guard against short circuits, such as Model 3008 and a device showing the CAT III marking.

Note: The term "power line" refers to the entire electrical circuit providing power to factories, buildings and industrial machines. However, it does not include electrical circuits in ordinary dwellings. (lines protected by fuses or circuit breakers).



1. To avoid short circuits and electric shock accidents when using a clamp-on sensor, use only with power lines carrying voltages within the rating limit of the sensor.
2. To avoid short circuits and electric shock accidents when the clamp-on sensor is open, do not use on bare conductors.

HIOKI

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