



*A Full Line-up of Digital  
and Analog*





*Clamp Meters to  
Suit Any Need*



Please see [www.hioki.com](http://www.hioki.com) for list of supported regions.

# Selection Guide

## A Complete HIOKI Digital & Analog Clamp Tester

Model	CM4371, CM4372	CM4373, CM4374	3280-10F, 3280-20F	3281, 3282
				
True RMS rectifier	✓ Crest factor 7.5 at 20.00 A range 3 or less at 600.0A range	✓ Crest factor 3 or less at 600.0 A range 2.84 or less at 2000 A range	(3280-20F) ✓ Crest factor 2.5 or less	✓ Crest factor 2.5 or less 3281: 2.5 (1.7 at 600 A range) 3282: 2.5 (1.7 at 1000 A range)
MEAN rectifier	N/A	N/A	(3280-10F) ✓	N/A
AC Current ranges	20.00 A/ 600.0 A	600.0 A/ 2000 A	42.00 A/ 420.0 A/ 1000 A	(3281) 30.00/ 300.0/ 600 A (3282) 30.00/ 300.0/ 1000 A
AC Voltage ranges	6.000/ 60.00/ 600.0 V/ 1000 V	6.000/ 60.00/ 600.0 V/ 1000 V	4.200 / 42.00/ 420.0/ 600 V	300.0/ 600 V
Frequency characteristics	AC A: 10 Hz to 1 kHz AC V: 15 Hz to 1 kHz	AC A: 10 Hz to 1 kHz AC V: 15 Hz to 1 kHz	(3280-10F) AC A: 50 to 60 Hz (3280-20F) AC A: 40 to 1 kHz AC V: 45 to 500 Hz	40 to 1000 Hz
DC Current ranges	20.00 A/ 600.0 A	600.0 A/ 2000 A	N/A	N/A
DC Voltage ranges	600.0 m/ 6.000/ 60.00/ 600.0 V/ 1500 V	600.0 m/ 6.000/ 60.00/ 600.0 V/ 1500 V	420.0 m/ 4.200/ 42.00/ 420.0/ 600 V	N/A
Basic accuracy (at 50/60Hz)	AC A: ±1.3% rdg. ±3 dgt. AC V: ±0.9% rdg. ±3 dgt. DC A: ±1.3% rdg. ±8 dgt. DC V: ±0.5% rdg. ±3 dgt.	AC A: ±1.3% rdg. ±3 dgt. AC V: ±0.9% rdg. ±3 dgt. DC A: ±1.3% rdg. ±8 dgt. DC V: ±0.5% rdg. ±3 dgt.	AC A: ±1.5 % rdg. ±5 dgt. AC V: ±1.8 % rdg. ±7 dgt. DC V: ±1.0 % rdg. ±3 dgt.	AC A: ±1% rdg. ±5 dgt. AC V: ±1% rdg. ±3 dgt.
Resistance ranges	600.0 Ω to 600.0 kΩ, 4 ranges	600.0 Ω to 600.0 kΩ, 4 ranges	419.9 Ω to 41.99 MΩ, 6 ranges	1000 or 10.00 kΩ
Continuity	✓	✓	✓	✓
Frequency (Hz)	✓	✓	N/A	✓
Other functions	Automatic AC/DC detection, Plus/Minus judgement function of DC A, DC V, Max/Min/Average/PEAK MAX/ PEAK MIN value display, Filter function, Display value hold, Auto hold, Back light, Auto-power save, Buzzer sounds, Zero-adjustment, Bluetooth® wireless technology (CM4372)	Automatic AC/DC detection, Plus/Minus judgement function of DC A, DC V, Max/Min/Average/PEAK MAX/ PEAK MIN value display, Filter function, Display value hold, Auto hold, Back light, Auto-power save, Buzzer sounds, Zero-adjustment, Bluetooth® wireless technology (CM4374)	Continuity: Buzzer sounds at 50 Ω ± 40 Ω or less, Data hold, Auto power save, Drop-proof from height of 1 meter	Current wave peak value, Voltage wave peak value, Distortion check, Max./ Min./ Average value record, Data hold, Auto power off
Monitor / Analog output	N/A	N/A	N/A	N/A
Display refresh rate	5 times/s	5 times/s	2.5 times/s	2.5 times/s, 1 time/3s
Max. rated voltage to earth	600 V AC rms	600 V AC rms	600 V AC rms	600 V AC rms
Measurement categories (current)	CAT IV 600 V CAT III 1000 V	CAT IV 600 V CAT III 1000 V	CAT IV 300V CAT III 600V	3281: CAT III 600V 3282: CAT IV 600V
Measurement categories (voltage)	CAT IV 600 V CAT III 1000 V	CAT IV 600 V CAT III 1000 V	CAT III 300V CAT II 600V	CAT IV 600V
Core jaw diameter	φ33 mm	φ55 mm	φ33 mm	(3281) φ33 mm (3282) φ46 mm
Power supply	LR03 Alkaline battery ×2	LR03 Alkaline battery ×2	CR2032 × 1	6F22 (006P) × 1
Model	CM4371	CM4373	3280-10F	3281
Dimensions and mass	65 mm (2.56 in) W × 215 mm (8.46 in) H × 35 mm (1.38 in) D mm, 340 g (12.0 oz)	65 mm (2.56 in) W × 250 mm (9.84 in) H × 35 mm (1.38 in) D mm, 530 g (18.7 oz)	57 mm (2.24 in) W × 175 mm (6.89 in) H × 16 mm (0.63 in) D, 100 g (3.5 oz)	62 mm (2.44 in) W × 218 mm (8.58 in) H × 39 mm (1.54 in) D, 350 g (12.3 oz)
Model	CM4372	CM4374	3280-20F	3282
Dimensions and mass	65 mm (2.56 in) W × 215 mm (8.46 in) H × 35 mm (1.38 in) D mm, 340 g (12.0 oz)	65 mm (2.56 in) W × 250 mm (9.84 in) H × 35 mm (1.38 in) D mm, 530 g (18.7 oz)	57 mm (2.24 in) W × 175 mm (6.89 in) H × 16 mm (0.63 in) D, 100 g (3.5 oz)	62 mm (2.44 in) W × 230 mm (9.06 in) H × 39 mm (1.54 in) D, 400 g (14.1 oz)

### New insulated sleeves prevent short-circuits

No sleeves attached to the tip of test leads?  
**DANGER of short-circuit accident!!**

With sleeve attached to the tip of test leads,  
**short-circuit accidents can be prevented.**



### Conforms to safety standard

IEC61010-031 (revised) for hand-held probes

#### What are the new and additional requirements of the international safety standards?

- "Exposed metal part must be 4mm or shorter" (Previously, 19mm max.) for CAT III and IV environments to prevent short-circuits from occurring.
- Double-coating with different colors enables you to identify the wear condition of the test leads. (Previously, single-coated)

## Line-up to Suit Your Needs

Model	3284, 3285	3287, 3288, 3288-20	3291-50	3283, 3283-20	3293-50
					
True RMS rectifier	✓ Crest factor 2.5 or less 3284: 2.5 (1.5 at 200 A range) 3285: 2.5 (1.42 at 2000 A range)	3287, 3288-20: ✓ Crest factor 3287: 2.5 (150 A, 100 V max.) 3288-20: 3 (2 at 1000 A, 1.5 at AC V)	✓ Crest factor 2.8 or less (1.68 at 1000 A range)	✓ Crest factor 2.5 (1.5 at 200 A range)	✓ Crest factor 2.8 or less (1.68 at 1000 A range)
MEAN rectifier	N/A	3288: ✓	N/A	N/A	N/A
AC Current ranges	(3284) 20.00/ 200.0 A (3285/3285) 200.0/ 2000 A	(3287) 10.00/ 100.0 A (3288/3288-20) 100.0/ 1000 A	60.00/ 600.0/ 1000 A	10.00 m/ 100.0 m/ 1.000/ 10.00/ 200.0 A	30.00 m/ 300.0 m/ 6.000/ 60.00/ 600.0/ 1000 A
AC Voltage ranges	30.00/ 300.0/ 600 V	(3287) 10.00/ 100.0 A (3288/3288-20) 100.0/ 1000 A	N/A	N/A	N/A
Frequency characteristics	(3284) DC, 10 to 2 kHz (3285) DC, 10 to 1 kHz	(3287) DC, 10 to 1 kHz (3288/3288-20) DC, 10 to 500 Hz AC V: 30 to 500 Hz	45 to 400 Hz	40 to 2 kHz	45 to 400 Hz
DC Current ranges	(3284) 20.00/ 200.0 A (3285) 200.0/ 2000 A	(3287) 4.200/ 42.00/ 420.0/ 600 V (3288/3288-20) 4.200/ 42.00/ 420.0/ 600 V	N/A	N/A	N/A
DC Voltage ranges	30.00/ 300.0/ 600 V	420.0 m/ 4.200/ 42.00/ 420.0/ 600 V	N/A	N/A	N/A
Basic accuracy (at 50/60Hz)	AC A: ±1.3% rdg. ±3 dgt. AC V: ±1.0% rdg. ±3 dgt.	AC A: ±1.5% rdg. ±5 dgt. AC V: ±2.3% rdg. ±8 dgt. DC A: ±1.5% rdg. ±5 dgt. DC V: ±1.3% rdg. ±4 dgt.	AC A: ±1.5% rdg. ±5 dgt.	AC A: ±1.0% rdg. ±5 dgt. (at 10 m to 10 A range)	AC A: ±1.5% rdg. ±5 dgt.
Resistance ranges	N/A	420.0 Ω to 42.00 MΩ, 6 ranges	N/A	N/A	N/A
Continuity	N/A	✓	N/A	N/A	N/A
Frequency (Hz)	✓	N/A	N/A	✓	N/A
Other functions	AC+DC mode, Max./ Min./ Average value record, Data hold, Peak hold, Auto power off, Auto zero	Data hold, Auto power save, Auto zero (DC A)	N/A	Filter function, Max./ Min./ Average value record, Data hold, Auto power off	N/A
Monitor / Analog output	✓	N/A	N/A	3283: ✓ 3283-20: N/A	N/A
Display refresh rate	4 times/s (FAST), 1 time/3s (SLOW)	2.5 times/s	1.1 sec or less	4 times/s (Fast), 1 time/3s (Slow), 4 times/s (bar graph)	1.1 sec or less
Max. rated voltage to earth	600 V AC rms	600 V AC rms	600 V AC rms	300 V AC rms	300 V AC rms
Measurement categories (current)	CAT III 600V	CAT III 600V	CAT III 600V CAT IV 300V	CAT III 300V	CAT III 300V
Measurement categories (voltage)	CAT III 600V	CAT III 300V CAT II 600V	N/A	N/A	N/A
Core jaw diameter	(3284) φ33 mm (3285) φ55 mm	φ35 mm	φ30 mm	φ40 mm	φ24 mm
Power supply	6F22 (006P) × 1, or AC adapter	CR2032 × 1	CR2032 × 1	3283: 6LR61/6F22 (006P) × 1, or AC Adapter 3283-20: 6LR61/6F22 (006P) × 1	CR2032 × 1
Model	<b>3284</b>	<b>3287</b>	<b>3291-50</b>	<b>3283, 3283-20</b>	<b>3293-50</b>
Dimensions and mass	62 mm (2.44 in) W × 230 mm (9.06 in) H × 39 mm (1.54 in) D, 460 g (16.2 oz)	57 mm (2.24 in) W × 180 mm (7.09 in) H × 16 mm (0.63 in) D, 170 g (6.0 oz)	50 mm (1.97 in) W × 136 mm (5.35 in) H × 26 mm (1.02 in) D, 115 g (4.1 oz)	62 mm (2.44 in) W × 225 mm (8.86 in) H × 39 mm (1.54 in) D, 400 g (14.1 oz)	50 mm (1.97 in) W × 130 mm (5.12 in) H × 26 mm (1.02 in) D, 135 g (4.8 oz)
Model	<b>3285</b>	<b>3288, 3288-20</b>			
Dimensions and mass	62 mm (2.44 in) W × 260 mm (10.24 in) H × 39 mm (1.54 in) D, 540 g (19.0 oz)	57 mm (2.24 in) W × 180 mm (7.09 in) H × 16 mm (0.63 in) D, 150 g (5.3 oz)			

## Accessories : TEST LEAD L9208/ L9207-10/ L9207-30

Sleeve attached	CAT IV 600V	When the CAT (measurement category) rating of the main unit is lower than that of test leads, the CAT of the main unit takes precedence. <b>When measuring in a CAT IV or CAT III environment, be sure to attach the sleeve to the test leads.</b>
	CAT III 1000V	
No sleeve attached	CAT II 1000V	

## Sleeve attached

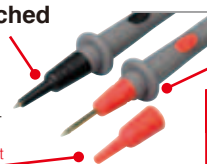
CAT III, CAT IV

## No sleeve attached

CAT I, CAT II

## Sleeve

included as a standard accessory (This sleeve cannot be attached to previous products)



## Detachable!

When a sleeve is not attached, the test leads can only be used in a CAT II environment.

# Pocket size CLAMP SERIES

## AC CLAMP METER

### 3280-10F 3280-20F

#### Rugged & Compact

- 3280-10F: MEAN Value / 3280-20F: True RMS
- AC 1000 A clamp aperture: 33 mm dia.
- Slim body allows easy clamping even for narrow conductors
- Expanded -25 °C to 65 °C operating temperature range
- Connect the CT6280 flexible sensor to measure up to 4199 A in thick or paired wires

#### Order Code

3280-10F (MEAN value)	The 3280-70F and 3280-90F includes both the meter and an AC Flexible Current Sensor.
3280-20F (True RMS)	1: AC CLAMP METER 3280-10F×1 (3280-70F) or 3280-20F×1 (3280-90F)
3280-70F (MEAN value)	2: AC FLEXIBLE CURRENT SENSOR CT6280×1
3280-90F (True RMS)	3: CARRYING CASE C0205×1

#### Accessories (3280-10F, 3280-20F)

TEST LEAD L9208 ×1  
CARRYING CASE 9398 ×1  
Instruction manual ×1  
Coin type lithium battery (CR2032) ×1

#### Options

AC FLEXIBLE CURRENT SENSOR CT6280  
CARRYING CASE C0205  
TEST LEADS HOLDER 9209  
CONTACT PIN SET L4933  
SMALL ALLIGATOR CLIP SET L4934



Use with an AC Clamp Meter to measure large wires and currents.



3 year  
Guarantee

CE

DROP PROOF

True RMS  
3280-20F

## CLAMP ON AC/DC HITESTER

### 3287 3288

#### Compact & easy, one-touch maintenance on all types of AC/DC equipment

- New Model 3288-20 True RMS AC/DC pocket clamp meter measuring up to 1000 A further expands the HIOKI lineup
- The 3287 can handle even cogenerator / inverter energy-saving equipment (10/ 100A)
- Use the 3288 for high current measurements such as UPS emergency batteries and train motors (100/ 1000A)
- A slim core of only 10 mm (0.39") for easy clamping even in crowded wiring

#### Order Code

3287 (True RMS, 100 A AC/DC)  
3288 (MEAN value, 1000 A AC/DC)  
3288-20 (True RMS, 1000 A AC/DC)

#### Accessories

TEST LEAD L9208 ×1  
CARRYING CASE 9398 ×1  
Instruction manual ×1

3288-20



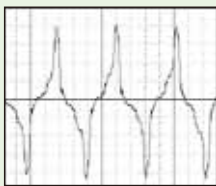
3 year  
Guarantee

CE

True RMS  
3287/ 3288-20

### 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

AUTO  
~ 8.56 A

High-frequency waveform components are included in the calculated RMS display value.

MEAN  
Value

AUTO  
~ 7.35 A

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.

# HIGH PERFORMANCE CLAMP SERIES

## AC/ DC CLAMP METER

# CM4371 CM4372 CM4373 CM4374

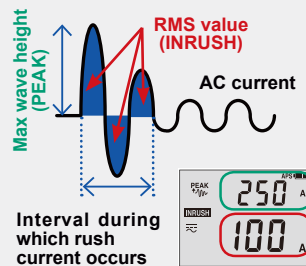
### Rugged clamp meters for the toughest situations

- CM4371, CM4372: 600 Arms, clamp aperture: 33 mm dia.
- CM4373, CM4374: 2000 Arms, clamp aperture: 55 mm dia.
- The CM4372 and CM4374 will be able to send measured values to a smart phone or tablet using Bluetooth® wireless technology
- Multiple measurement functions
- Expanded -25 °C to 65 °C operating temperature range
- IP54 dustproof and waterproof enclosure

\*Jaws (current sensor portion): IP50

### Inrush (Rush current)

The CM4370 series can simultaneously measure inrush current in RMS as well as maximum crest values at motor startup and for welding currents. The clamp meters automatically detect the duration of the inrush current (which can range from several dozen milliseconds to several hundred milliseconds).



### Automatic AC/DC detection

Simply rotate the rotary switch to the CURRENT MEASUREMENT or VOLTAGE MEASUREMENT function to take measurements after automatically detecting whether the signal is AC or DC. Since this functionality eliminates the need to operate the rotary switch in locations where AC and DC wires are intermingled, it helps boost work efficiency.



### AUTO HOLD

The clamp meters beep when the measured value stabilizes and then automatically hold the display value.

This is useful when using the instrument in locations where it is difficult to see the display or press the hold button.



### Making measurement more intelligent

The instruments listed below will be able to wirelessly send measured values to a smartphone or tablet using Bluetooth® wireless technology, enabling you to display measured values and waveforms in real time. (CM4372, CM4374)



3 year  
Guarantee

CE

True RMS

Bluetooth®

CM4372, CM4374



### Damage-resistant jaws

A new and improved design features stronger jaws (the current sensor portion of the instrument) and a dramatic boost in the duration of the warranty from 10,000 to 30,000 open-close cycles to ensure the instrument will provide even more years of reliable use.

### Dustproof and waterproof IP54

\*Jaws (current sensor portion): IP50

### Rotary switch that can be turned with a single hand

### Remain alert to hazards

When the clamp meter detects excessively high input or a short-circuit during a continuity check, it alerts you with a red backlight and beeping tone in order to help prevent accidents.



### 1700 V DC

The CM4370 Series can measure DC voltages of up to 1700 V, making them ideal for no-load voltage inspections of rapidly evolving solar power systems.

### Order Code

CM4371 (True RMS, 600 A AC/DC)  
 CM4372 (True RMS, 600 A AC/DC, built in Bluetooth® wireless technology)  
 CM4373 (True RMS, 2000 A AC/DC)  
 CM4374 (True RMS, 2000 A AC/DC, built in Bluetooth® wireless technology)

### Accessories

TEST LEAD L9207-10 ×1  
 CARRYING CASE C0203 ×1  
 LR03 Alkaline battery ×2  
 Instruction manual ×1  
 [CM4372, CM4374 only]  
 Precautions Concerning Use of Equipment That Emits Radio Waves

### Options

TEST LEAD L9207-10 Options		CONNECTION CABLE L4930 Options	
CONTACT PIN SET	L4933	CONNECTION CABLE SET	L4930
SMALL ALLIGATOR CLIP SET	L4934	EXTENSION CABLE SET	L4931
		TEST PIN SET	L4932
THERMOCOUPLES(K)	DT4910	ALLIGATOR CLIP SET	L4935
GENNECT Cross (freeware)		BUS BAR CLIP SET	L4936
		MAGNETIC ADAPTER SET	L4937
		TEST PIN SET	L4938
		BREAKER PIN SET	L4939
		GRABBER CLIP	9243

# HIGH PERFORMANCE CLAMP

## DIGITAL CLAMP ON HiTESTER 3281 3282

The true RMS is shown in the distorted waveform

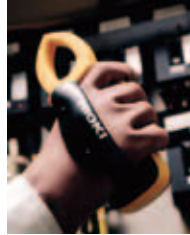
- 3281: 600A ACrms,  $\Phi$ 33mm dia.
- 3282: 1000A ACrms,  $\Phi$ 46mm dia.
- Non-fuse type protects up to 600VAC

### Order Code

3281 (True RMS, 600 A AC)  
3282 (True RMS, 1000 A AC)

### Accessories

TEST LEAD L9207-10 x1  
CARRYING CASE 9399 x1  
Hand strap x1  
Instruction manual x1  
Stacked manganese battery (6F22) x1



3282

Not CE Marked

3281

**True RMS**

3281

3282



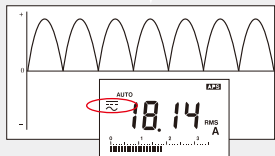
## CLAMP ON AC/DC HiTESTER 3284 3285

Analysis for DC to distorted waves

- 3284: 200 Arms, clamp aperture: 33 mm dia.
- 3285: 2000 Arms, clamp aperture: 55 mm dia.
- Inrush current peak value
- RMS value of full-wave rectified waveforms
- Waveform and harmonic analysis

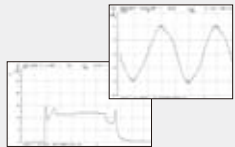
RMS value of **full-wave rectified waveforms**

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



**Easily monitor current fluctuations**

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.



3284

3285



Not CE Marked

**True RMS**

### Order Code

3284 (True RMS, 200 A AC/DC, Not CE marked)  
3285 (True RMS, 2000 A AC/DC, Not CE marked)

### Accessories

TEST LEAD L9207-10 x1  
CARRYING CASE (for 3284) 9399 x1  
CARRYING CASE (for 3285) 9345 x1  
Hand strap x1  
Instruction manual x1

### Options

AC ADAPTER (for USA)	9445-02
AC ADAPTER (for EU)	9445-03
CLAMP ON ADAPTER	9290-10
OUTPUT CORD (Connect to Banana terminal)	L9094
OUTPUT CORD (Connect to BNC terminal)	L9095
OUTPUT CORD (Connect to terminal block)	L9096

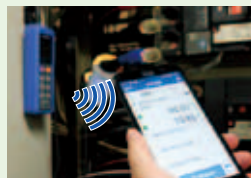
Multi-functional Display Unit to Use Right on the Field or Output to Advanced Recorder or Logger

## DISPLAY UNIT CM7290 CM7291



CT7742

Memory Recorders and Data Loggers



- Send measured values to a smartphone or tablet using Bluetooth® wireless technology (CM7291)
- Use the GENNECT Cross dedicated app to display and review measured values and waveforms in real time (CM7291)
- Simultaneous dual display of the measured values, frequency, and output rate
- Four output formats to output data to loggers or other devices (via Display Unit) \*Waveform, RMS, Peak, Frequency output

# Flip CLAMP and Leak CLAMP SERIES

**CLAMP ON HITESTER 3291-50**

**CLAMP ON LEAK HITESTER 3293-50**

Easily read measured values from all heights with the adjustable display

## 3291-50 Overview

- Innovative flip clamp design
- Flip display to see measurement readings from any angle
- Max. 1000A, 3 ranges, Bar graph display
- Filter out high frequency noises for a clean signal

## 3293-50 Overview

- Measure for leakage current and load all with the same device
- Innovative flip clamp design
- Flip display to see measurement readings from any angle
- 1mA to 1000A accuracy guaranteed, 6 ranges and bar graph display
- Measure and display only the leakage current of commercial frequency components using the filter function

3291-50



FLIP CLAMP CE True RMS

3293-50



### Order Code

3291-50  
3293-50

### Accessories

CARRYING CASE 9757 x1  
Hand strap x1  
Instruction manual x1  
Coin type lithium battery (CR2032) x1

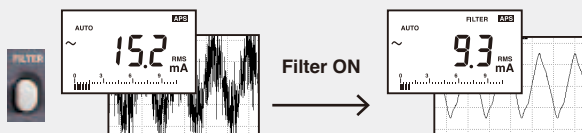
**CLAMP ON LEAK HITESTER 3283**

1mA to 200A AC Leakage Current Clamp Meter with 10  $\mu$ A Resolution to Analyze Distorted Waveforms

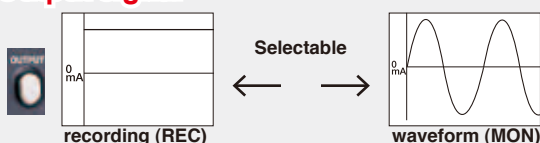
- Measure leak current using highly sensitive 10 $\mu$ A resolution (at 10.00 mA range)
- Indicate 50/60 Hz leak current components with the filtering function
- Monitor leak current conditions in combination with a Memory HiCorder (monitor output, Model 3283 only)
- 3283-20: EN 61010-2-032:2012 Type A to measure uninsulated hazardous live conductors such as busbars

### Filtering

Sharp Low-pass filter reduces harmonic currents.

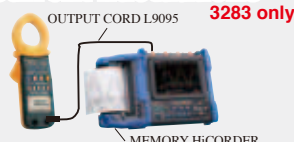


### Output signal 3283 only



### Easily monitor leakage current fluctuations

In combination with a HIOKI Memory HiCorder the 3283 can be used for long-term monitoring for leakage current fluctuations.



CE  
3283-20

Not CE Marked

3283



Insulated  
conductor

**True RMS**



3283-20

### Order Code

3283  
(with analog/ waveform monitor output,  
Not CE marked)  
3283-20  
(without analog/ waveform monitor output)

### Accessories

CARRYING CASE 9399 x1  
Hand strap x1 Instruction manual x1  
3283: Stacked manganese battery (6F22) x1  
3283-20: Alkaline battery (6LR61) x1

### Options

AC ADAPTER (for USA) 9445-02  
AC ADAPTER (for EU) 9445-03  
CLAMP ON ADAPTER 9290-10  
OUTPUT CORD L9094  
(Connect to Banana terminal)  
OUTPUT CORD L9095  
(Connect to BNC terminal)  
OUTPUT CORD L9096  
(Connect to terminal block)

# Power Measuring

## AC CLAMP POWER METER CM3286

### Quickly Check Current, Voltage, Power, and Power Factor

- Display four parameters simultaneously
- A handheld power meter that measures from 5 W of power and 60 mA of current Measure power ranging from 5 W at a low current of 60 mA to 360 kW
- In addition to current, voltage, and power, measure simple integral power consumption and phase sequence
- Features and functions deliver fast and efficient testing
- Hold measured values to send them to a smartphone, quick and easy data recording (CM3286-01 only)



**New**



CE

True RMS

Bluetooth®

CM3286-01

#### ■ Basic specifications (Accuracy guaranteed for 1 year, Post-adjustment accuracy guaranteed for 1 year)

Measurement line	Single-phase, Three-phase (should be balanced and no distortion)	
Max. rated voltage to earth	600 Vrms (CAT IV), 1000 Vrms (CAT III)	
AC voltage (Frequency characteristics)	80.0 V to 600.0 V, Single range (45 Hz to 1 kHz)	
Basic accuracy	45 to 66 Hz: $\pm 0.7\% \text{rdg} \pm 3 \text{dgt.}$	
AC current (Frequency characteristics)	0.060 A to 600.0 A, 3 range (45 Hz to 1 kHz)	
Basic accuracy	45 to 66 Hz: $\pm 1.3\% \text{rdg} \pm 3 \text{dgt.}$	
Power	Single phase	
	Accuracy	$\pm 2.0\% \text{rdg} \pm 7 \text{dgt.}$ (50/60 Hz, Power factor = 1)
	Balanced three phase	
Accuracy	$\pm 3.0\% \text{rdg} \pm 10 \text{dgt.}$ (50/60 Hz, Power factor = 1)	
Measurement items	Voltage, Current, Voltage/ current peak, Active/ reactive/ apparent power, Power factor, Phase angle <sup>*1</sup> , Frequency, Simple Active Energy Consumption (Single-phase) [CM3286-01 only <sup>*2</sup> ] Voltage/ current harmonic levels	
Harmonic (CM3286-01 only <sup>*2</sup> )	Voltage/ current harmonic levels up to 30th, Content factor, Total harmonic distortion ratio	
Other functions	PEAK, Phase detection, Max/ Min/ AVG value display, Auto hold, electric meter comparison, unbalanced 3-phase power estimate display, etc	
Dustproof and waterproof <sup>*3</sup>	IP54 (EN60529) Grip, excluding lever	
Bluetooth® (CM3286-01 only)	Supports devices: iOS10 or later, Android™ 4.3 or later smartphone/ tablet, Interface: Bluetooth® 4.0 LE, Communication distance: 10 m (line of sight)	
Power supply	LR03 Alkaline battery ×2	
Continuous operating time	25 hours	
Dimensions and mass	82 mm (3.23in) W × 241 mm (9.49in) H × 37 mm (1.46in) D, 450 g (15.9 oz)	

<sup>\*1</sup> Phase angle obtained from zero cross of current / voltage.

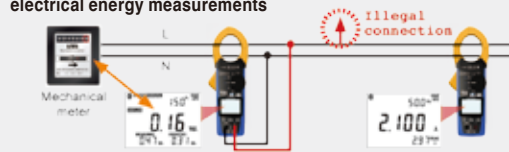
<sup>\*2</sup> Harmonic can be displayed by dedicated application software (Gennect Cross). iOS support scheduled for 2018.

<sup>\*3</sup> Although CM3286 is designed to resist the ingress of dust and dripping water, it is not entirely waterproof or dustproof. Therefore, to prevent an electric shock, do not use it in a wet or dusty environment.

### Discover electricity theft

Uncover tampering of electric meters by comparing electrical energy measurements

Discover direct theft by measuring current



Discover manipulation of electric meters by comparing meter and integral power consumption measurements.

Discover theft by measuring leakage current.

#### Order Code

CM3286  
CM3286-01 (Built in Bluetooth® wireless technology)

#### Accessories

CONNECTION CORD L9257 ×1  
CARRYING CASE C0203 ×1  
LR03 Alkaline battery ×2  
Instruction manual ×1  
[CM3286-01 only]  
Precautions Concerning Use of Equipment That Emits Radio Waves

#### Options

CONNECTION CABLE SET	L4930, L4931, L9257 Options
EXTENSION CABLE SET	L4932
CLAMP ON ADAPTER	L4935
TEST LEAD	L4936
GENNECT Cross (freeware)	L4937
	L4938
	L4939
	9243
	9804

**⚠ 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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