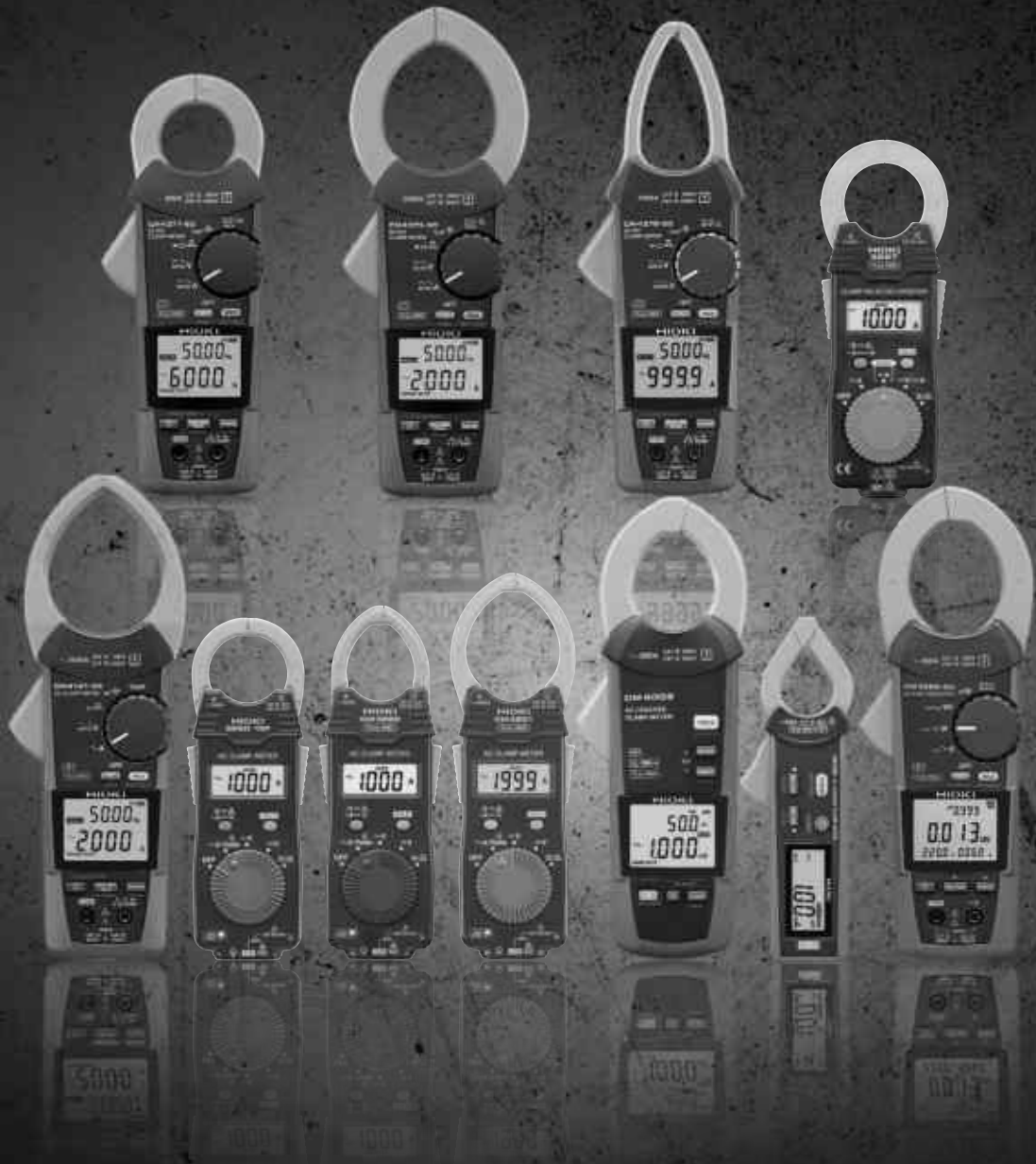


HIOKI

CLAMP METER Series



CLAMP METERS



Remarkable Ease of Use New "Slim Jaw" Design

Innovative slim jaw resolves worksite issues such as crowded wiring to deliver safe, accurate and high-performance testing.

CM4375-50



Traditional design



Easily Clamp Within Crowded Cables with
New Slim Jaw Design



CM4375-50

34 mm=1.34 in



CM4141-50

55 mm=2.17 in



CM3289

33 mm=1.30 in



CM3281
CM3291

46 mm=1.81 in



CM4001

24 mm=0.94 in

Safe, Durable, Reliable

**-25°C to 65°C
operating temperature^{*1}**



CM4000 Series can be used in freezing temperatures or on the hottest summer days.

CAT IV 600V^{*1}



Safely measure embedded cables and electric panels with a maximum rated voltage to earth of 600V

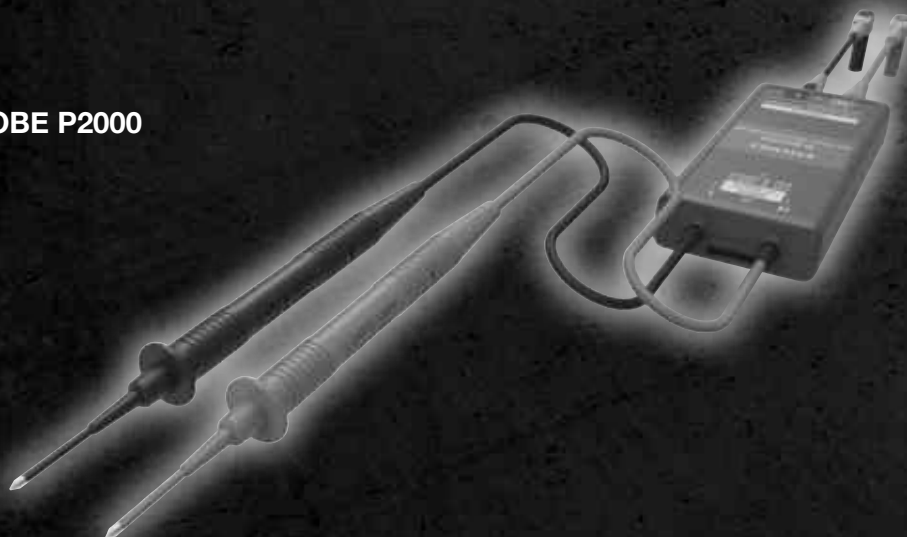
**Dustproof and
waterproof performance^{*2}**



International Protection Code: IP54 (while in storage, or when measuring the current in an insulated conductor). Measurement functionality is maintained despite exposure to sand or dust as well as water droplets.

NEW

**DC HIGH VOLTAGE PROBE P2000
for CAT III 2000 V^{*3}**



Safe Inspection of Solar Installations with High Voltage



Solar installations (also known as photovoltaic or PV installations) are becoming increasingly high-voltage in order to reduce costs and improve the efficiency of power generation systems. As a result, it is important to select measuring instruments that support higher voltage measurement to protect the safety of inspection workers. The P2000 enables high voltage measurement up to CAT III 2000 V by simply connecting to a compatible Hioki clamp meter or digital multimeter.

Why is CAT III 2000 V capability necessary?



According to the standards for Photovoltaic (PV) module safety qualification (IEC 61730-1), PV modules are treated as the overvoltage category III, and a measuring instrument in the measurement category III is required. Using instruments that can accommodate the appropriate measurement category serves to protect workers and equipment from serious accidents such as electric shock and burnout. Currently, adoption of 1500 V solar installation is growing, but instruments that can accommodate even higher voltages will be necessary in the future as larger and even more efficient systems enter into use. Hioki developed the P2000 to support CAT III 2000 V measurement in response to the near-term prospect of such applications.

^{*1} Supported models : CM4371-50, CM4373-50, CM4375-50, CM4141-50, CM3286-50

^{*2} Supported models : CM4371-50, CM4373-50, CM4375-50

^{*3} Supported models : CM4371-50, CM4373-50, CM4375-50, CM4141-50

DC High Voltage Probe P2000

Compatible models with DC HIGH V PROBE mode

(DC HIGH V PROBE mode: conversion display in terms of partial pressure ratio)



CM4371-50



CM4373-50



CM4375-50



CM4141-50

So much more than just wireless

Wireless connectivity leading to versatility

Using Bluetooth® communication with the Z3210*1

Install the Wireless Adapter Z3210 to enable Bluetooth® communications.

With the Z3210, you can transfer data directly to an Excel® file and pair the instrument with GENNECT Cross.



Attach to enable Bluetooth® wireless technology



Transport to the Excel® file



Transport to GENNECT Cross



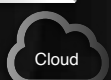
Z3210
For more details

Manage measurement data using GENNECT Cross*2

Pair clamp meters built in with Bluetooth(R) wireless technology with the free GENNECT Cross mobile app to upload data to your mobile device for further data management, processing and reporting.



Mail



Cloud



- Save data and create reports right on the App
- Share data via cloud services or E-mail

Bluetooth®
communications



Transfer data to
a tablet wirelessly



Take a picture of
the test location and
map measured
values on it



Verify current waveforms
on your mobile device



Visualize intermittent
GFCI and RCD trips
Review trip times and
maximum current values



Harmonic analysis for
troubleshooting

*1 Supported models : CM4371-50, CM4373-50, CM4375-50, CM4141-50, CM3286-50, CM4001, CM4002, CM4003

*2 Supported models : When the Z3210 is installed on a compatible model described above*1

Downloading GENNECT Cross

Data can be downloaded to tablets and smartphones using Hioki's dedicated apps available from the Google Play or App Store.
Search for "HIOKI" and download the "GENNECT Cross" app.

*Android, Google Play and the Google Play logo are trademarks of Google Inc.

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*Company names and Product names appearing in this catalog are trademarks or registered trademarks of various companies.

*The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by HIOKI E.E. CORPORATION is under license.

*For the latest information about countries and regions where wireless operation is currently supported, please visit the Hioki website.



GENNECT
Cross
For more details



~2000A CAT IV 600V CAT III 1000V

CM4141-50
AC CLAMP METER

TEMP

Ω

AUTO V

~A

True RMS

OFF

Fn

HOLD






0 ADJ AUTO HOLD

HIOKI

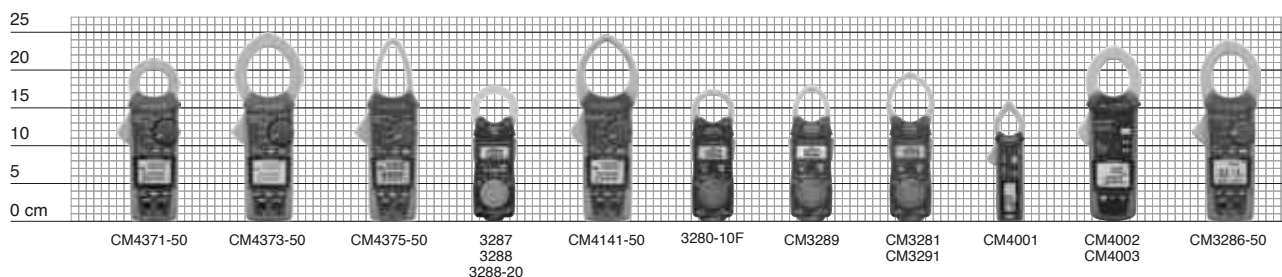
APC4888

6000









Lineup

| Measurement type | | AC / DC Current | | | | |
|---------------------------------------|---|---|---|---|---|---|
| Model | | CM4371-50 | CM4373-50 | CM4375-50 | 3287 | 3288 3288-20 |
| Appearance | | <div>NEW</div> | <div>NEW</div> | <div>NEW</div> |  |  |
| Core jaw diameter | | φ33 mm (1.30 in) | φ55 mm (2.17 in) | φ34 mm (1.34 in) | φ35 mm (1.38 in) | φ35 mm (1.38 in) |
| AC measurement system | | True RMS | True RMS | True RMS | True RMS | MEAN Value True RMS (-20) |
| Frequency characteristics | | 10 Hz to 1 kHz | 10 Hz to 1 kHz | 10 Hz to 1 kHz | 10 Hz to 1 kHz | 10 Hz to 500 Hz |
| Measurement parameters | AC current (Resolution) Guaranteed accuracy range | 600 A (0.01) 1 A to 600 A | 2000 A (0.1) 1 A to 2000 A | 1000 A (0.1) 1 A to 999.9 A | 100 A (0.01) Full display range ⁵ | 1000 A (0.1) Full display range ⁵ |
| | DC current (Resolution) | 600 A (0.01) | 2000 A (0.1) | 999.9 A (0.1) | 100 A (0.01) | 1000 A (0.1) |
| | AC Voltage | 1000 V | 1000 V | 1000 V | 600 V | 600 V |
| | DC Voltage | 2000 V ¹ | 2000 V ¹ | 2000 V ¹ | 600 V | 600 V |
| | Power | 1200 kVA (DC) ¹ | 4000 kVA (DC) ¹ | 2000 kVA (DC) ¹ | N / A | N / A |
| | Resistance | 6 MΩ | 6 MΩ | 6 MΩ | 42 MΩ | 42 MΩ |
| | Temperature | -40°C to 400°C | -40°C to 400°C | -40°C to 400°C | N / A | N / A |
| | Electrostatic capacity | ✓ | ✓ | ✓ | N / A | N / A |
| | Frequency | 999.9 Hz | 999.9 Hz | 999.9 Hz | N / A | N / A |
| | Rush current | ✓ | ✓ | ✓ | N / A | N / A |
| | Continuity check | ✓ | ✓ | ✓ | ✓ | ✓ |
| | Diode check | ✓ | ✓ | ✓ | N / A | N / A |
| | Non-Contact Voltage | ✓ | ✓ | N / A | N / A | N / A |
| Low-pass filter | | ✓ | ✓ | ✓ | N / A | N / A |
| Auto power off | | ✓ | ✓ | ✓ | ✓ | ✓ |
| Auto range | | ✓ | ✓ | ✓ | ✓ | ✓ |
| Data hold | | AUTO / MANUAL | AUTO / MANUAL | AUTO / MANUAL | MANUAL | MANUAL |
| Automatic AC/DC detection | | ✓ | ✓ | ✓ | N / A | N / A |
| MAX / MIN / AVG | | ✓ | ✓ | ✓ | N / A | N / A |
| Output | | N / A | N / A | N / A | N / A | N / A |
| Bluetooth® communication | | ✓ (with Z3210) | ✓ (with Z3210) | ✓ (with Z3210) | N / A | N / A |
| Backlight | | ✓ | ✓ | ✓ | N / A | N / A |
| Display refresh rate | | 5 times / s | 5 times / s | 5 times / s | 2.5 times / s | 2.5 times / s |
| Safety standard category | | CAT IV 600 V CAT III 1000 V | CAT IV 600 V CAT III 1000 V | CAT IV 600 V CAT III 1000 V | V: CAT III 300 V A: CAT III 600 V | V: CAT III 300 V A: CAT III 600 V |
| Safety standard category (with P2000) | | CAT IV 1000 V CAT III 2000 V | CAT IV 1000 V CAT III 2000 V | CAT IV 1000 V CAT III 2000 V | N / A | N / A |
| CE | | ✓ | ✓ | ✓ | ✓ | ✓ |
| Dustproof and waterproof | | IP20 ² , IP54 ³ | IP20 ² , IP54 ³ | IP20 ² , IP54 ³ | N / A | N / A |
| Drop proof | | N / A | N / A | N / A | N / A | N / A |
| Power supply | | LR03 x2 Alkaline | LR03 x2 Alkaline | LR03 x2 Alkaline | CR2032 x1 Coin type | CR2032 x1 Coin type |
| Dimensions (W × H × D) | | 65 × 215 × 35 mm 2.56 × 8.46 × 1.38 in | 65 × 250 × 35 mm 2.56 × 9.84 × 1.38 in | 65 × 242 × 35 mm 2.56 × 9.53 × 1.38 in | 57 × 180 × 16 mm 2.24 × 7.09 × 0.63 in | 57 × 180 × 16 mm 2.24 × 7.09 × 0.63 in |
| Weight | | 340 g / 12.0 oz | 530 g / 18.7 oz | 350 g / 12.3 oz | 170 g / 6.0 oz | 150 g / 5.3 oz |

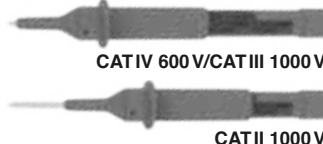
Size comparison



*1: Only when DC HIGH VOLTAGE PROBE P2000 is used *2: Voltage measurement in a completely dry condition. When jaw closes. *3: While in storage.
 *4: When measuring the current in an insulated conductor. Do not use when wet. *5: displayed 0 with below 0.06

| Measurement type | | AC Current | | | | | Leakage Current | | AC Power |
|---------------------------------------|---|---|---|---|--|---|---|---|----------------------------------|
| Model | CM4141-50 | 3280-10F | CM3289 | CM3281 | CM3291 | CM4001 | CM4002 CM4003 | CM3286-50 | |
| Appearance |  |  |  |  |  |  |  |  | |
| Core jaw diameter | φ55 mm (2.17 in) | φ33 mm (1.30 in) | φ33 mm (1.30 in) | φ46 mm (1.81 in) | φ46 mm (1.81 in) | φ24 mm (0.94 in) | φ40 mm (1.57 in) | φ46 mm (1.81 in) | |
| AC measurement system | True RMS | MEAN Value | True RMS | MEAN Value | True RMS | True RMS | True RMS | True RMS | |
| Frequency characteristics | 45 Hz to 1 kHz | 50 / 60 Hz | 40 Hz to 1 kHz | 50 / 60 Hz | 40 Hz to 1 kHz | 40 Hz to 1 kHz | 15 Hz to 2 kHz | 45 Hz to 1 kHz | |
| Measurement parameters | AC current (Resolution) Guaranteed accuracy range | 2000 A (0.01) 1 A to 2000 A | 1000 A (0.01) 4 A to 1000 A | 1000 A (0.01) 4 A to 1000 A | 2000 A (0.01) 4 A to 1999 A | 2000 A (0.01) 4 A to 1999 A | 600 A (0.01mA)) 0.6 mA to 600 A | 200 A (0.001mA) 0.06 mA to 200 A | 600 A (0.001) 0.06 A to 600 A |
| | DC current (Resolution) | N / A | N / A | N / A | N / A | N / A | N / A | N / A | N / A |
| | AC Voltage | 1000 V | 600 V | 600 V | 600 V | 600 V | N / A | N / A | 600 V |
| | DC Voltage | 2000 V [†] | 600 V | 600 V | 600 V | 600 V | N / A | N / A | N / A |
| | Power | N / A | N / A | N / A | N / A | N / A | N / A | N / A | 360 kW (AC) |
| | Resistance | 6 MΩ | 42 MΩ | 42 MΩ | 42 MΩ | 42 MΩ | N / A | N / A | N / A |
| | Temperature | -40°C to 400°C | N / A | N / A | N / A | N / A | N / A | N / A | N / A |
| | Electrostatic capacity | ✓ | N / A | N / A | N / A | N / A | N / A | N / A | N / A |
| | Frequency | 999.9 Hz | N / A | N / A | N / A | N / A | 999.9 Hz | 2000 Hz | 999.9 Hz |
| | Rush current | ✓ | N / A | N / A | N / A | N / A | ✓ | ✓ | N / A |
| | Continuity check | ✓ | ✓ | ✓ | ✓ | ✓ | N / A | N / A | N / A |
| | Diode check | ✓ | N / A | N / A | N / A | N / A | N / A | N / A | N / A |
| Non-Contact Voltage | N / A | N / A | N / A | N / A | N / A | N / A | N / A | N / A | |
| Low-pass filter | ✓ | N / A | N / A | N / A | N / A | ✓ | ✓ | N / A | |
| Auto power off | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Auto range | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Data hold | AUTO / MANUAL | MANUAL | MANUAL | MANUAL | MANUAL | AUTO / MANUAL | AUTO / MANUAL | AUTO / MANUAL | |
| Automatic AC/DC detection | ✓ (Voltage only) | N / A | N / A | N / A | N / A | N / A | N / A | N / A | |
| MAX / MIN / AVG | ✓ | N / A | N / A | N / A | N / A | ✓ | ✓ | ✓ | |
| Output | N / A | N / A | N / A | N / A | N / A | N / A | ✓ (CM4003 only) | N / A | |
| Bluetooth® communication | ✓ (with Z3210) | N / A | N / A | N / A | N / A | ✓ (with Z3210) | ✓ (with Z3210) | ✓ (with Z3210) | |
| Backlight | ✓ | N / A | N / A | N / A | N / A | ✓ | ✓ | ✓ | |
| Display refresh rate | 5 times / s | 2.5 times / s | 2.5 times / s | 2.5 times / s | 2.5 times / s | 5 times / s | 5 times / s | 2 times / s | |
| Safety standard category | CAT IV 600 V CAT III 1000 V | V: CAT III 300 V A: CAT IV 300 V | V: CAT III 300 V A: CAT IV 300 V | V: CAT III 300 V A: CAT IV 300 V | V: CAT III 300 V A: CAT IV 300 V | CAT III 300 V | CAT IV 300 V (CM4002) CAT III 600 V (CM4002) CAT III 300 V (CM4003) | CAT IV 600 V CAT III 1000 V | |
| Safety standard category (with P2000) | CAT IV 1000 V CAT III 2000 V | N / A | N / A | N / A | N / A | N / A | N / A | N / A | |
| CE | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Dustproof and waterproof | IP50 ^{*3, *4} | IP40 | N / A | N / A | N / A | N / A | IP40 | IP20 ^{*2} , IP50 ^{*3} | |
| Drop proof | N / A | ✓ | ✓ | ✓ | ✓ | N / A | N / A | N / A | |
| Power supply | LR03 x2 Alkaline | CR2032 x1 Coin type | CR2032 x1 Coin type | CR2032 x1 Coin type | CR2032 x1 Coin type | LR03 x1 Alkaline | LR6 x2 Alkaline | LR03 x2 Alkaline | |
| Dimensions (W × H × D) | 65 × 247 × 35 mm 2.56 × 9.72 × 1.38 in | 57 × 175 × 16 mm 2.24 × 6.89 × 0.63 in | 57 × 181 × 16 mm 2.24 × 7.13 × 0.63 in | 57 × 198 × 16 mm 2.24 × 7.80 × 0.63 in | 57 × 198 × 16 mm 2.24 × 7.80 × 0.63 in | 37 × 160 × 27 mm 1.46 × 6.30 × 1.06 in | 64 × 233 × 36 mm 2.52 × 9.17 × 1.41 in | 65 × 241 × 35 mm 2.56 × 9.49 × 1.38 in | |
| Weight | 300 g / 10.6 oz | 100 g / 3.5 oz | 100 g / 3.5 oz | 103 g / 3.6 oz | 103 g / 3.6 oz | 115 g / 4.1 oz | 400 g / 14.1 oz | 450 g / 15.9 oz | |

New L9300 test leads with integrated cap for greater convenience and safety



Test leads L9300 now incorporate integrated caps. The design lets you change the measurement category simply by sliding the test lead's protective finger guard. As an added bonus, you no longer have to worry about losing caps!

AC/DC Current



AC/DC CLAMP METER CM4371-50, CM4373-50, CM4375-50

Product warranty for 3 years
Accuracy guaranteed for 1 year



Included accessories



L9300 C0203

- LR03 Alkaline battery x2
- Instruction manual

φ35 mm =1.30 in



NEW
CM4371-50

600 A AC/DC

True RMS

CAT IV 600 V
CAT III 1000 V

With P2000

CAT IV 1000 V DC
CAT III 2000 V DC

With Z3210

Bluetooth

Please see www.hioki.com
for list of supported regions.

GENNECT Cross

φ55 mm =2.17 in



NEW
CM4373-50

2000 A AC/DC

True RMS

CAT IV 600 V
CAT III 1000 V

With P2000

CAT IV 1000 V DC
CAT III 2000 V DC

With Z3210

Bluetooth

Please see www.hioki.com
for list of supported regions.

GENNECT Cross

φ34 mm =1.34 in



NEW
CM4375-50

1000 A AC/DC

True RMS

CAT IV 600 V
CAT III 1000 V

With P2000

CAT IV 1000 V DC
CAT III 2000 V DC

With Z3210

Bluetooth

Please see www.hioki.com
for list of supported regions.

GENNECT Cross



WIRELESS ADAPTER
Z3210 (Option)
Attach to enable Bluetooth®
wireless technology



DC HIGH VOLTAGE PROBE
P2000 (Option)
Available to measure 2000 V DC



CLAMP ON AC/DC HiTESTER 3287, 3288, 3288-20

Product warranty for 3 years
Accuracy guaranteed for 1 year



Included accessories



L9208 9398

- Coin type lithium battery CR2032x1
- Instruction manual

φ35 mm =1.38 in



3287

100 A AC/DC

True RMS

V: CAT III 300 V
A: CAT III 600 V

φ35 mm =1.38 in



3288

1000 A AC/DC

True RMS

V: CAT III 300 V
A: CAT III 600 V

φ35 mm =1.38 in

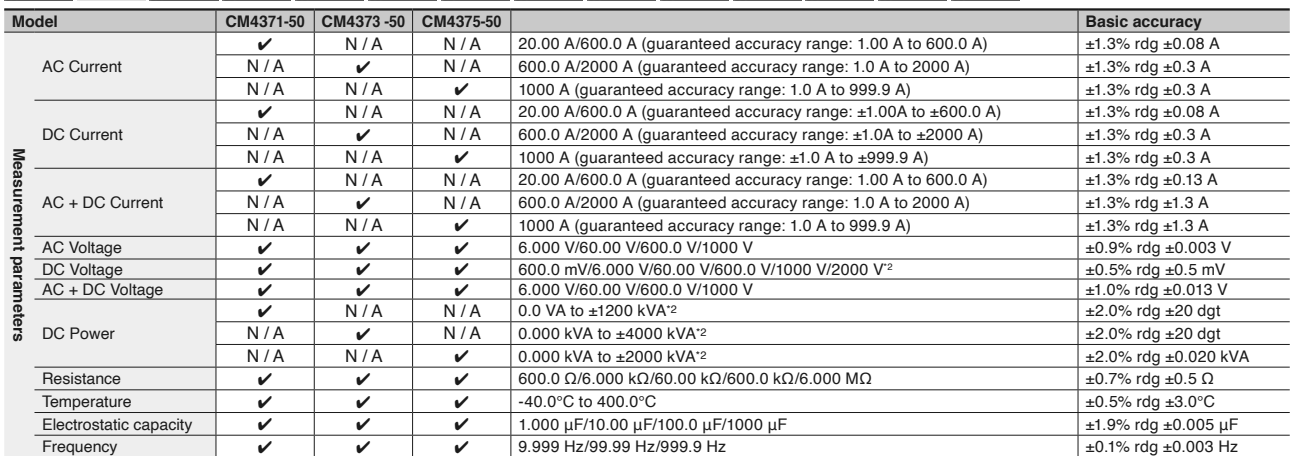


3288-20

1000 A AC/DC

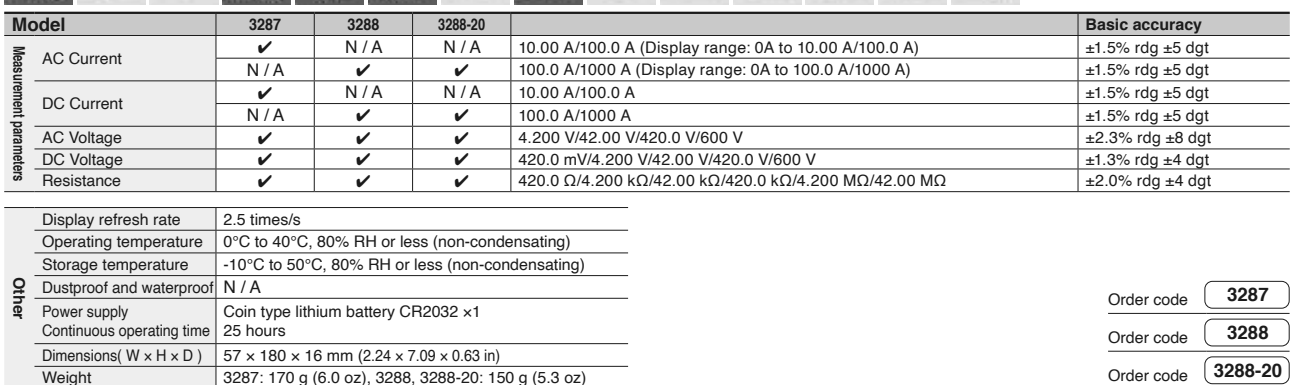
True RMS

V: CAT III 300 V
A: CAT III 600 V



| | | | | | |
|------------|------------------|------------|------------------|------------|------------------|
| Order code | CM4371-50 | Order code | CM4371-90 | Order code | CM4373-91 |
| Order code | CM4373-50 | Order code | CM4373-90 | Order code | CM4375-91 |
| Order code | CM4375-50 | Order code | CM4375-90 | Order code | CM4375-92 |

*1: Excludes CM4375-50 *2: Only when DC HIGH VOLTAGE PROBE P2000 is used *3: Excludes electrostatic capacity, frequency, and temperature
*4: Voltage measurement in a completely dry condition. When jaw closes. *5: While in storage. *6: With backlight and Bluetooth® communications turned OFF



AC Current

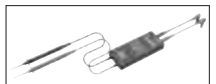
AC CLAMP METER CM4141-50



Product warranty for 3 years
Accuracy guaranteed for 1 year



WIRELESS ADAPTER
Z3210 (Option)
Attach to enable Bluetooth®
wireless technology



DC HIGH VOLTAGE PROBE
P2000 (Option)
Available to measure 2000 V DC

φ55 mm = 2.17 in

NEW
CM4141-50

2000 A AC

True RMS

CAT IV 600 V
CAT III 1000 V

With P2000

CAT IV 1000 V DC
CAT III 2000 V DC

With Z3210

Bluetooth®

Please see www.hioki.com
for list of supported regions.

GENNECT Cross

Included accessories



L9300 C0203

- LR03 Alkaline battery x2
- Instruction manual



AC CLAMP METER 3280-10F, CM3289, CM3281, CM3291



Product warranty for 3 years
Accuracy guaranteed for 1 year



Included accessory



L9208

- CARRYING CASE (models vary as shown on right)
- Coin type lithium battery CR2032x1
- Instruction manual



φ33 mm = 1.30 in

3280-10F
3280-70F

1000 A AC

MEAN Value

V: CAT III 300 V
A: CAT IV 300 V

9398

(-10F)

C0205

(-70F)



φ33 mm = 1.30 in

CM3289

1000 A AC

True RMS

V: CAT III 300 V
A: CAT IV 300 V

9398



φ46 mm = 1.81 in

CM3281
CM3291

2000 A AC

CM3281: MEAN Value
CM3291: True RMS

V: CAT III 300 V
A: CAT IV 300 V



CARRYING CASE

Leakage Current

AC LEAKAGE CLAMP METER CM4001, CM4002, CM4003



Product warranty for 3 years
Accuracy guaranteed for 1 year



WIRELESS ADAPTER
Z3210 (Option)
Attach to enable Bluetooth®
wireless technology



φ24 mm = 0.94 in

CM4001

0.6 mA to 600 A AC

True RMS

CAT III 300 V

Included accessory



CARRYING CASE

- STRAP
- LR03 Alkaline battery x1
- Instruction manual

With Z3210

Bluetooth®

Please see www.hioki.com
for list of supported regions.

GENNECT Cross



φ40 mm = 1.57 in

CM4002

0.06 mA to 200 A AC

True RMS

CAT IV 300 V
CAT III 600 V

Included accessory



C0203

- LR6 Alkaline battery x2
- Instruction manual

With Z3210

Bluetooth®

Please see www.hioki.com
for list of supported regions.

GENNECT Cross



φ40 mm = 1.57 in

CM4003

0.06 mA to 200 A AC

True RMS

CAT III 300 V

Included accessories



C0203 L9097

- LR6 Alkaline battery x2
- Instruction manual
- USB cable

With Z3210

Bluetooth®

Please see www.hioki.com
for list of supported regions.

GENNECT Cross

Functions

- External output
- External power supply



For more details



| Model | CM4141-50 | | Basic accuracy |
|------------------------|-----------|---|---------------------|
| AC Current | ✓ | 60.00 A/600.0 A/2000 A (guaranteed accuracy range: 1.00A to 2000 A) | ±1.5% rdg ±0.08 A |
| AC Voltage | ✓ | 6.000 V/60.00 V/600.0 V/1000 V | ±0.9% rdg ±0.003 V |
| DC Voltage | ✓ | 600.0 mV/6.000 V/60.00 V/600.0 V/1000 V/2000 V ¹ | ±0.5% rdg ±0.5 mV |
| AC + DC Voltage | ✓ | 6.000 V/60.00 V/600.0 V/1000 V | ±1.0% rdg ±0.013 V |
| Resistance | ✓ | 600.0 Ω/6.000 kΩ/60.00 kΩ/600.0 kΩ/6.000 MΩ | ±0.7% rdg ±0.5 Ω |
| Temperature | ✓ | -40.0°C to 400.0°C | ±0.5% rdg ±3.0°C |
| Electrostatic capacity | ✓ | 1.000 μF/10.00 μF/100.0 μF/1000 μF | ±1.9% rdg ±0.005 μF |
| Frequency | ✓ | 9.999 Hz/99.99 Hz/999.9 Hz | ±0.1% rdg ±0.003 Hz |

| | |
|---------------------------|--|
| Display refresh rate | 5 times/s ² |
| Operating temperature | -25°C to 65°C, 90% RH or less (non-condensating) |
| Storage temperature | -30°C to 70°C, 90% RH or less (non-condensating) |
| Dustproof and waterproof | IP50 ³ |
| Power supply | Alkaline battery LR03 x2 |
| Continuous operating time | 48 hours ⁴ |
| Dimensions(W × H × D) | 65 × 247 × 35 mm (2.56 × 9.72 × 1.38 in) |
| Weight | 300 g (10.6 oz) |

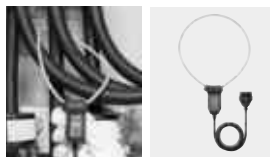
Order code **CM4141-50**Order code **CM4141-90**

Model CM4141-90 includes Z3210 as a set

¹: Only when DC HIGH VOLTAGE PROBE P2000 is used ²: Excludes electrostatic capacity, frequency, and temperature³: While in storage, or when measuring resistance or current in an insulated conductor in a completely dry condition. Do not use when wet. ⁴: With backlight and Bluetooth® communications turned OFF

| Model | 3280-10F | CM3289 | CM3281 · CM3291 | | Basic accuracy |
|------------|----------|--------|-----------------|---|------------------|
| AC Current | ✓ | ✓ | N / A | 42.00 A/420.0 A/1000 A (guaranteed accuracy range: 4.00A to 1000 A) | ±1.5% rdg ±5 dgt |
| AC Voltage | N / A | N / A | ✓ | 42.00 A/420.0 A/2000 A (guaranteed accuracy range: 4.00A to 1999 A) | ±1.5% rdg ±5 dgt |
| DC Voltage | ✓ | ✓ | ✓ | 4.200 V/42.00 V/420.0 V/600 V | ±1.8% rdg ±7 dgt |
| Resistance | ✓ | ✓ | ✓ | 420.0 mV/4.200 V/42.00 V/420.0 V/600 V | ±1.0% rdg ±3 dgt |
| | | | | 420.0 Ω/4.200 kΩ/42.00 kΩ/420.0 kΩ/4.200 MΩ/42.00 MΩ | ±2.0% rdg ±4 dgt |

| | |
|---------------------------|---|
| Display refresh rate | 2.5 times/s |
| Operating temperature | -25°C to 65°C, 80% RH or less (non-condensating) |
| Storage temperature | -25°C to 65°C, 80% RH or less (non-condensating) |
| Dustproof and waterproof | IP40 (EN60529) ² |
| Power supply | Coin type lithium battery CR2032 x1 |
| Continuous operating time | CM3280-10F: 120 hours CM3289: 70 hours CM3291: 70 hours |
| Dimensions (W × H × D) | 3280-10F: 57 × 175 × 16 mm (2.24 × 6.89 × 0.63 in) CM3289: 57 × 181 × 16mm (2.24 × 7.13 × 0.63 in) CM3281, CM3291: 57 × 198 × 16 mm (2.24 × 7.80 × 0.63 in) |
| Weight | 3280-10F: 100 g (3.5 oz) CM3289: 100 g (3.5 oz) CM3281, CM3291: 103 g (3.6 oz) |



3280F, CM3289, CM3291 are compatible with the CT6280 AC Flexible Current Sensor

Φ130mm (5.1 in), 4200 A AC

Model 3280-70F includes 3280-10F AC Clamp Meter and CT6280 AC Flexible Sensor as a set

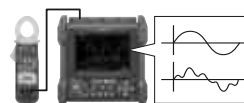
Order code **3280-10F**Order code **3280-70F**Order code **CM3289**Order code **CM3291**Order code **CM3281**¹ Excludes 3280F ² Excludes CM3289, CM3281, CM3291

| Model | CM4001 | CM4002·CM4003 | | Basic accuracy |
|------------|--------|---------------|---|---------------------|
| AC Current | ✓ | N / A | 60.00 mA/600.0 mA/6.000A/60.00A/600.0A (guaranteed accuracy range: 0.60 mA to 600.0A) | ±1.5% rdg ±0.05 mA |
| | N / A | ✓ | 6.000 mA/60.00 mA/600.0 mA/6.000A/60.00A/200.0A (guaranteed accuracy range: 0.060 mA to 200.0A) | ±1.0% rdg ±0.005 mA |
| Frequency | ✓ | N / A | 999.9 Hz | ±1.5% rdg ±0.1 Hz |
| | N / A | ✓ | 999.9 Hz/2000 Hz | ±0.1% rdg ±0.1 Hz |

| | |
|---------------------------|--|
| Display refresh rate | 5 times/s |
| Operating temperature | -10°C to 65°C (non-condensating) |
| Storage temperature | CM4001: -10°C to 65°C (non-condensating) CM4002, CM4003: -30°C to 70°C (non-condensating) |
| Dustproof and waterproof | CM4002, CM4003: IP40 |
| Power supply | CM4001: LR03 Alkaline battery × 1, 32 hours |
| Continuous operating time | CM4002, CM4003: LR6 Alkaline battery × 2, 48 hours (LR6, without Z3210) CM4003: AC ADAPTER Z1013 (Option) |
| Dimensions(W × H × D) | CM4001: 37 × 160 × 27 mm (1.46 × 6.30 × 1.06 in) CM4002, CM4003: 64 × 233 × 36 mm (2.52 × 9.17 × 1.41 in) |
| Weight | CM4001: 115 g (4.1 oz) CM4002, CM4003: 400 g (14.1 oz) |

Includes external output function (CM4003 Only)

Pair with a recorder to capture instantaneous or current waveforms

**RMS value output**
(RMS mode)

DC 600 mV/f.s.

Waveform output
(WAVE mode)

AC 600 mV/f.s.

^{*}Using CONNECTION CABLE L9097 (Accessories)Order code **CM4001**Order code **CM4001-90**Order code **CM4002**Order code **CM4002-90**Order code **CM4003**Order code **CM4003-90**Order code **Z3210**

Model CM4001-90, CM4002-90, CM4003-90 includes Z3210 as a set



AC Power

For more details



AC CLAMP POWER METER CM3286-50

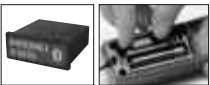
Product warranty for 3 years
Accuracy guaranteed for 1 year

φ46 mm=1.81 in



NEW
CM3286-50
AC 600 A
True RMS
CAT IV 600 V
CAT III 1000 V

With Z3210
Bluetooth®
Please see www.hioki.com
for list of supported regions.
GENNECT Cross

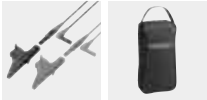


WIRELESS ADAPTER
Z3210 (Option)
Attach to enable Bluetooth®
wireless technology

Order code **CM3286-50**
Order code **CM3286-90**

Model CM3286-90
includes Z3210 as a set

Included accessories



L9257 **C0203**

- LR03 Alkaline battery x2
- Instruction manual

*1: Harmonics can be displayed using dedicated application software (GENNECT Cross)
*2: Voltage measurement in a completely dry condition. When jaw closes.
*3: While in storage.

| | | |
|---|--|--|
| Power (Active/ reactive/ apparent) | Single phase | 3.600 kW/36.00 kW/360.0 kW Guaranteed accuracy range: 0.005 kW to 360.0 kW Basic accuracy: ±2.0% rdg ±7 dgt |
| | Balanced three-phase 3-wire | 7.200 kW/72.00 kW/720.0 kW guaranteed accuracy range: 0.020 kW to 623.5 kW Basic accuracy: ±3.0% rdg ±10 dgt |
| | Balanced three-phase 4-wire | 10.80 kW/108.0 kW/1080 kW guaranteed accuracy range: 0.040 kW to 1080 kW Basic accuracy: ±2.0% rdg ±3 dgt |
| Measurement parameters | AC Current | 6.000 A/60.00 A/600.0 A Basic accuracy: ±1.0% rdg ±3 dgt |
| | AC Voltage | 600.0 V Basic accuracy: ±0.7% rdg ±3 dgt |
| | Power factor | Single-phase, Balanced three-phase 4-wire: [Regeneration] -1.000 to -0.001, [Consumption] 0.000 to 1.000 Balanced three-phase 3-wire: [Regeneration] -0.001, [Consumption] 0.000 to 1.000 |
| | Phase angle | Single-phase, Balanced three-phase 4-wire : [lead] -180.0° to -0.1°, [lag] 0.0° to 179.9° Balanced three-phase 3-wire: [lead] -90.0° to -0.1°, [lag] 0.0° to 90.0° |
| | Frequency | 45.0 Hz to 999.9 Hz |
| Other | Simple Active Energy Consumption (Single-phase) | 99.99 Wh/999.9 Wh/9.999 kWh/ 99.99 kWh/999.9 kWh/9999 kWh/ |
| | Harmonic*1 (With Z3210) | Voltage or current harmonic levels up to 30th order, content factor, total harmonic distortion ratio |
| | Display refresh rate | 2 times/s |
| | Operating temperature | -25°C to 65°C, 80% RH or less (non-condensating) |
| | Storage temperature | -25°C to 65°C, 80% RH or less (non-condensating) |
| | Dustproof and waterproof | IP20*2, IP50*3 |
| | Power supply Continuous operating time | LR03 Alkaline battery x2 25 hours |
| | Dimensions (W x H x D) | 65 x 241 x 35 mm (2.56 x 9.49 x 1.38 inch) |
| Weight | | 450 g (15.9 oz) |

Options

**3280-10F
CM3289
CM3291
3287*, 3288*
3288-20***

**CM4371-50
CM4373-50
CM4375-50
CM4141-50
CM3286-50**

1 L9208 Cable length 70 cm (2.3 ft) With the Cap (Red x1, Black x1)

2 CT6280** $\Phi 130$ mm (5.12 in) 4200 AAC

*1: Not available to use with 3287, 3288, 3288-20

1 L9300 Cable length 95 cm (3.12 ft)

2 L9207-10 Cable length 90 cm (2.95 ft) With the Cap (Red x1, Black x1)

3 L4930 Cable length 120 cm (3.94 ft)

4 L4931 Cable length 150 cm (4.92 ft) with the coupling connector

L4930, L4931 can be used to extend the cable

5 P2000**

*4: Not available to use with CM3286-50

6 DT4910** Cable length 150 cm (4.92 ft) (Probe side) -40 to 260°C Sensor length: 80 cm (2.62 ft)

3 L4933** 48 mm (1.89 in)

4 L4934** *2: Remove the cap of L9208 before attaching it

7 L4933** 48 mm (1.89 in)

8 L4934** *3: Remove the cap of L9207-10 before attaching it. Slide the guard of the L9300 and attach it in the measurement CAT II.

9 L9243 97 mm (3.82 in)

10 L4932 With the Cap (Red x1, Black x1)

11 L4935

12 L4936

13 L4937 30 mm (1.18 in) Magnet: $\phi 6$ mm (0.24 in)

14 9804 Magnet: $\phi 11$ mm (0.43 in)

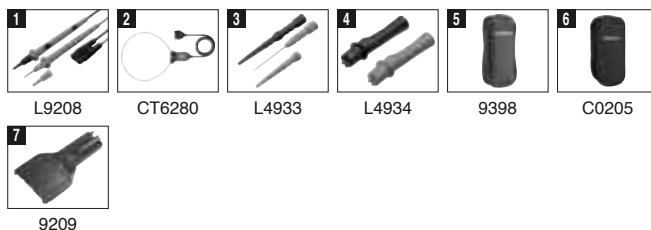
15 L4938 With the Cap (Red x1, Black x1) 22 mm (0.87 in), $\phi 3.7$ mm (0.15 in)

16 L4939 22 mm (0.87 in), $\phi 3.7$ mm (0.15 in), 48 mm (1.89 in), $\phi 2.6$ mm (0.1 in)

17 9290-10

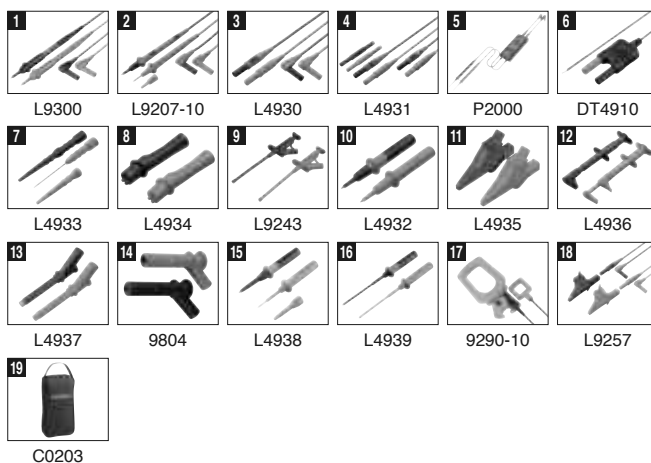
3280-10F, CM3289, CM3281, CM3291, 3287, 3288, 3288-20

| | |
|---|--|
| 1 | TEST LEAD L9208 |
| 2 | AC FLEXIBLE CURRENT SENSOR CT6280 For 3280-10F, CM3289, CM3281, CM3291 |
| 3 | CONTACT PIN SET L4933 |
| 4 | SMALL ALLIGATOR CLIP SET L4934 |
| 5 | CARRYING CASE 9398 For 3280-10F, CM3289, 3287, 3288, 3288-20 |
| 6 | CARRYING CASE C0205 Bundled accessory for CT6280 |
| 7 | TEST LEADS HOLDER 9209 For 3280-10F, CM3289, 3287, 3288, 3288-20 |



CM4371-50, CM4373-50, CM4375-50, CM4141-50, CM3286-50

| | |
|----|---|
| 1 | TEST LEAD L9300 |
| 2 | TEST LEAD L9207-10 |
| 3 | CONNECTION CABLE SET L4930 |
| 4 | EXTENSION CABLE SET L4931 |
| 5 | DC HIGH VOLTAGE PROBE P2000 |
| 6 | THERMOCOUPLES(K) DT4910 For CM437x-50 series, CM4141-50 |
| 7 | CONTACT PIN SET L4933 |
| 8 | SMALL ALLIGATOR CLIP SET L4934 |
| 9 | GRABBER CLIP L9243 |
| 10 | TEST PIN SET L4932 |
| 11 | ALLIGATOR CLIP SET L4935 |
| 12 | BUS BAR CLIP SET L4936 |
| 13 | MAGNETIC ADAPTER SET L4937 |
| 14 | MAGNETIC ADAPTER SET 9804 |
| 15 | TEST PIN SET L4938 |
| 16 | BREAKER PIN SET L4939 |
| 17 | CLAMP ON ADAPTER 9290-10 For CM3286-50 |
| 18 | CONNECTION CORD L9257 Combination of L4930 and L4935 |
| 19 | CARRYING CASE C0203 |














CM4002, CM4003
















| | |
|---|-------------------------|
| 1 | CONNECTION CABLE L9097 |
| 2 | CONVERSION ADAPTER 9704 |
| 3 | AC ADAPTER Z1013 |
| 4 | CARRYING CASE C0203 |



About the Marks

| | |
|--|--|
|  | Safety standard measurement categories* |
|  | Drop proof Robust design capable of withstanding a drop from a height of 1 m onto concrete |
|  | Backlight |
|  | Auto power OFF Automatically turns off after a certain time |
|  | Display hold |
|  | True RMS True RMS measurement for accurate measurement of even distorted current waveforms |
|  | Low-pass filter Cuts high frequency content to provide stable numerical values for measurement |
|  | AUTO AC/DC Automatically detects and measures AC and DC voltage |
|  | MAX/MIN/AVG value* Displays the maximum, minimum, and average of the displayed values |
|  | Peak measurement* Displays the wave maximum and minimum peak values |
|  | Flexible current sensor can be connected |

*For more detailed information, please refer to the next page.

| | |
|---|--|
|  | AC voltage |
|  | DC voltage |
|  | DCV + ACV |
|  | Frequency |
|  | Resistance |
|  | Capacitance |
|  | Temperature |
|  | ACA current |
|  | DCA current |
|  | DCA + ACA |
|  | DC Power |
|  | Continuity check Buzzer sounds when continuity is detected |
|  | Diode check Displays voltage if in the correct direction, and OVER if in the reverse direction |
|  | Non-Contact Voltage Buzzer sounds when AC voltage is detected |
|  | Inrush (Rush current) Measures inrush current when power is turned on, etc. |

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