HIOKI

# AC/DC CLAMP METER
# CM4370 series

NEW


**CM4371, CM4372 : 600 A AC/DC**
**CM4373, CM4374 : 2000 A AC/DC**

**Speedy Performance of Professional Testing**
**Made in Japan for rock-solid quality.**

# Rugged clamp meters for the toughest situations

- INCREASED JAW STRENGTH
- WIDE OPERATING TEMPERATURE RANGE
- DUSTPROOF AND WATERPROOF DESIGN
- HIGH-VOLTAGE MEASUREMENT
- CAT IV 600 V

CE 3 years Guaranteed for 3 years
CAT IV 600V
CAT III 1000V

Bluetooth®
*Models with *Bluetooth*® support : CM4372, CM4374

**Countries and regions where wireless operation is currently supported: Japan, U.S.A., Canada, EU, and Vietnam.**

As of February 2016.
For an updated list, please visit the HIOKI website at www.hioki.com.

**The CM4370 Series surpassed the requirements of numerous durability tests to deliver safety, confidence and peace of mind.**

# Rugged clamp meters for the toughest situations

## TOUGH Damage-resistant jaws

Guaranteed for 30,000 open-close cycles

A revised 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.

### Clamp open/ close test

In this test, the jaws are opened and closed a specified number of times at the rate of one cycle per second. In addition, the test is continued until the jaws break to provide a better understanding of their strength. Tests like this help us improve the instrument's durability.

## TOUGH -25°C to + 65°C

Expanded operating temperature range

Thanks to an operating temperature range that has been expanded from the previous design (which could be used from 0°C to 40°C), the CM4370 Series can be used in freezing temperatures or on the hottest summer days.

### Temperature test

In this test, we verified that the clamp meter can operate for an extended period of time while taking normal measurement in the specified temperature range.

## RUGGED Dustproof and waterproof performance

Enhanced environmental resistance

International Protection Code: IP54*
*Jaws (current sensor portion): IP50
Measurement functionality is maintained despite exposure to sand or dust as well as water droplets.

Caution: The CM4370 Series' waterproof enclosure is designed to enable the instrument to maintain its measurement functionality even when wet. Getting the instrument wet or measuring energized parts with wet hands increases risk of electric shock.

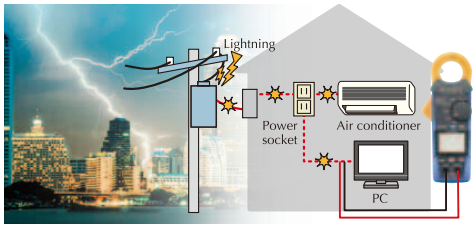
### Dustproof and waterproof tests

In the dustproof test, the clamp meter's enclosure is placed under reduced pressure and exposed to dust, and in the waterproof test, the instrument is sprayed with water from multiple directions in order to investigate how readily dust and water can get in.

## SAFE CAT IV 600 V

Expanded range of measurement targets

The CM4370 Series can safely measure service wires with a wire-to-ground voltage of up to 600 V as well as wires found in distribution panels.
The clamp meter series features a safe design that can withstand a transient overvoltage of 8 kV in case of a lightning strike.




## HIGH VOLTAGE DC 1700 V

Measure high DC voltages

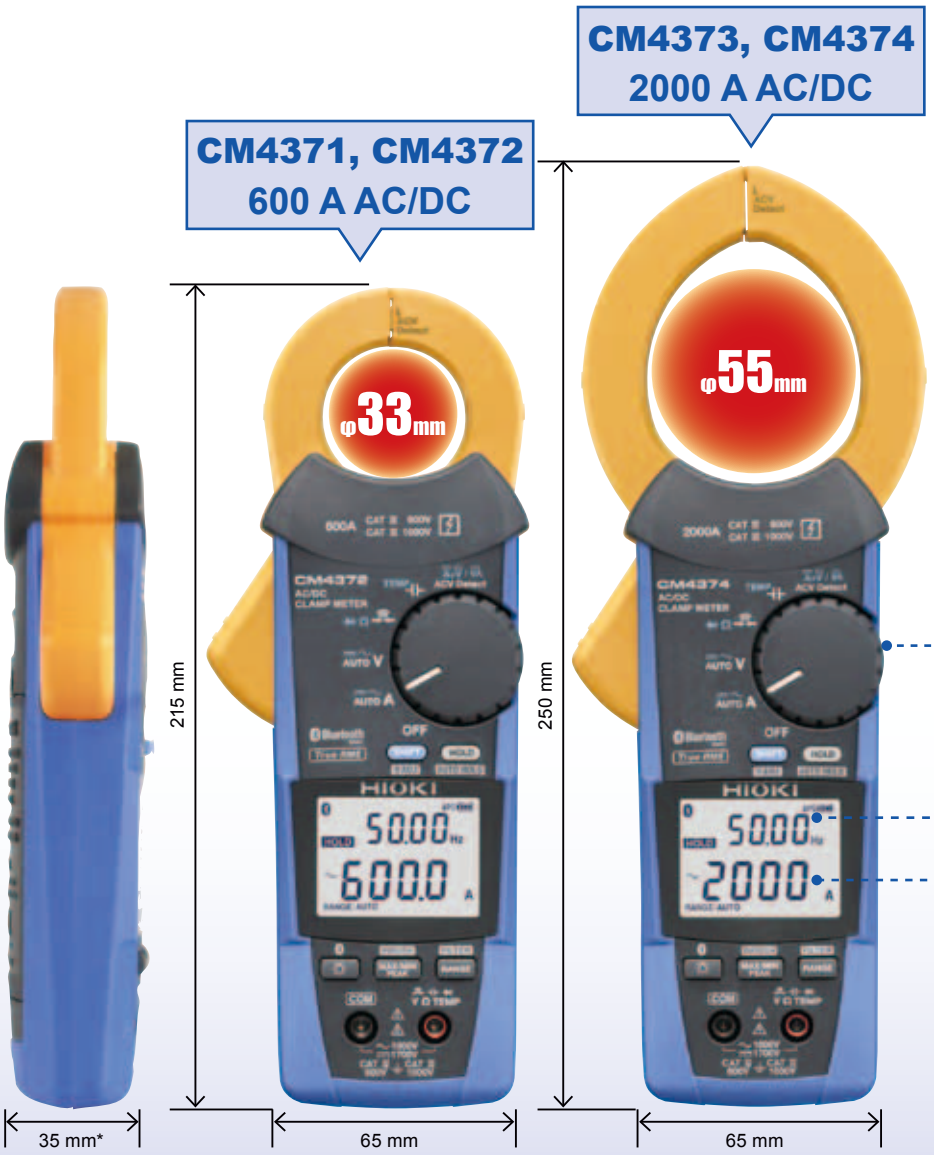
The CM4370 Series can measure DC voltages of up to 1700 V, making them ideal for no-load voltage inspections of rapidly evolving solar power systems.

### Safety test

Temperature of the various parts of the clamp meter was measured while 1700 V DC was applied in order to ensure that there is no risk of burns or other injury.

Get Jobs Done Faster

# Giving shape to ease of use and intuitive operation




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

Turn the rotary switch while holding the instrument in the same hand.
Grooves on the switch make it easy to rotate even while wearing work gloves.

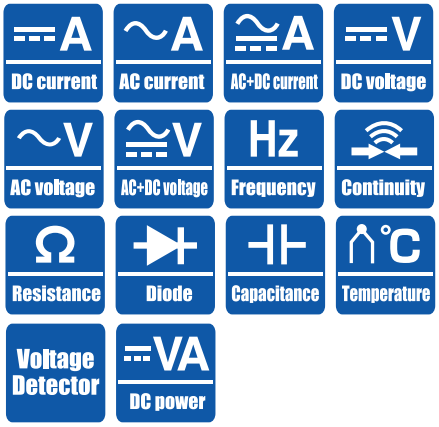
## White backlight

A white backlight makes the measured values stand out, even in dim locations.


## Wide viewing angle display

High quality screen lets you read measurements from any angle.


## *Extensive range of measurable parameters*





More Than Just Tough

# Packed with useful features

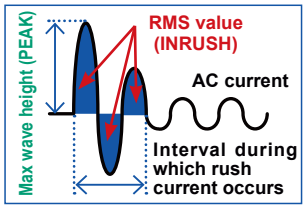
## ■ Testing current has never been more convenient

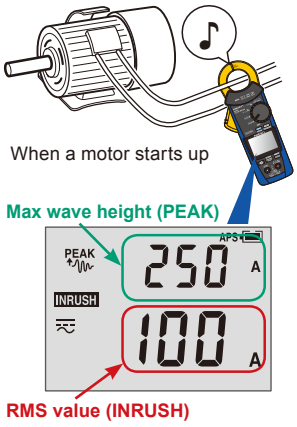
### Inrush (Rush current)

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) and measure the current during that interval, enabling them to yield more accurate measurements than standard clamp-on meters whose measurement interval is fixed to 100 ms.

*Sampling frequency
RMS value and maximum wave height calculation: 4.8 kHz
Smartphone waveform rendering: 2.4 kHz

*600 A range (fixed) (CM4371, CM4372), Rush current (INRUSH) detection level: ±10 A or more
2000 A range (fixed) (CM4373, CM4374), Rush current (INRUSH) detection level: ±100 A or more

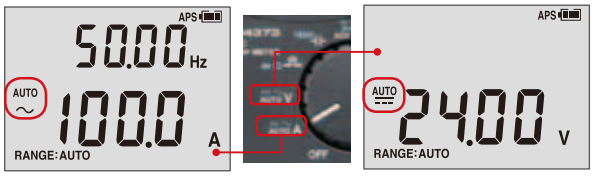



### Automatic AC/DC detection

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.

A mixture of AC and DC signals

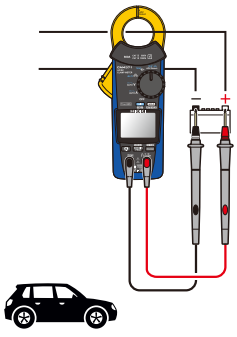


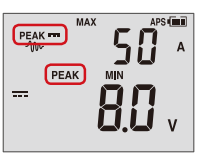
Current measurement　　Voltage measurement

### See DC current and voltage at the same time

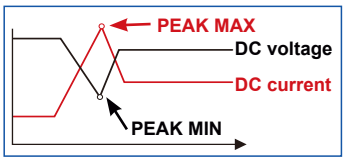
During DC measurement, current and voltage values can be displayed simultaneously on the screen.
In addition, the CM4370 Series can simultaneously display DC current and voltage peak values by measuring the peak maximum and peak minimum for both current and voltage.

*Sampling frequency: 4.8 kHz
*600 A range (fixed) (CM4371, CM4372)
2000 A range (fixed) (CM4373, CM4374)





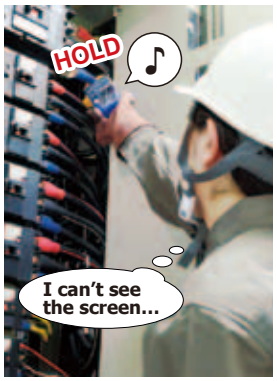
See both DC current and voltage at the same time.




In this way, the clamp meter can provide voltage and current values when a self-starting motor is operated.

### 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.



In locations where the display is out of view


You can obtain a stable reading

## Ensuring peace of mind

**Designed and manufactured in Japan**

All development, design, and manufacturing processes for almost all Hioki clamp meters are carried out at our Head Office in Nagano Prefecture. Some of the industry's most advanced technological capabilities enable us to deliver products of the highest possible quality.

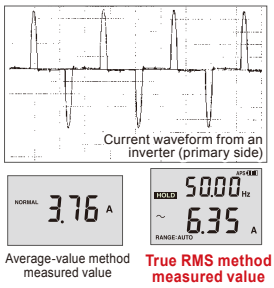
**From a one-year to a three-year warranty**

Hioki has extended the original one-year product warranty to three years so that operators can use the instrument for a longer period of time with peace of mind. After the first year of use, the instrument delivers measurement accuracy within 1.5 times the one-year accuracy. (3-year accuracy is for reference only.)

# ■ Useful functions and exceptional performance

## 1 Obtain accurate readings with true RMS measurement

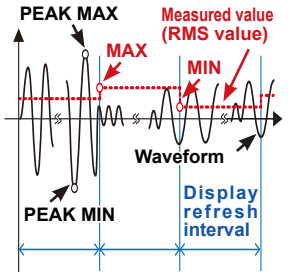
Since the CM4370 Series calculates measured values using the RMS method, it can accurately measure distorted current waveforms from equipment such as inverters.




## 2 Identify fluctuating current values

The CM4370 Series displays maximum, minimum, and average measured values as well as maximum and minimum peak values.

*Sampling frequency: 10 kHz

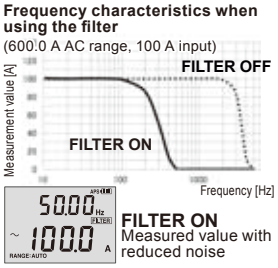



## 3 Determine whether a target is live

**AC Voltage detection function**
Check for safety before performing electrical work. The clamp meter instantly detects whether the wire is energized and warns the user by sounding a beep and turning the backlight red.

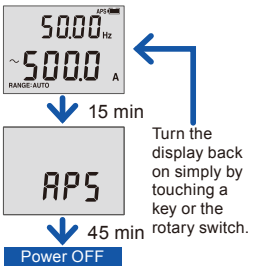
## 4 Display stable measured values

**Low-pass filter function**
The CM4370 Series cuts high-frequency components to stabilize values for measurement, enabling it to be used to measure switching power supplies and the secondary side of inverters.



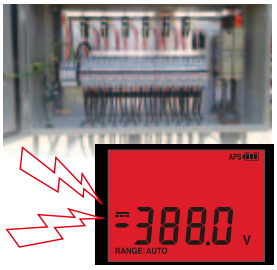

## 5 Avoid wasting batteries

**Auto Power Save**
To help conserve battery power, the CM4370 Series enters into a sleep state after 15 minutes of no operation and turns off completely after 45 minutes.



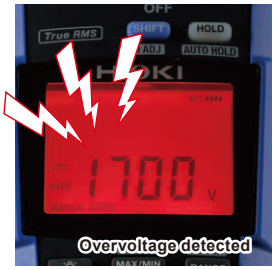

## 6 Avoid missing DC wiring mistakes

When DC V or DC A is a negative value, the clamp meter alerts you with a beeping tone as well as a warning backlight.
Thresholds: -10 V, -10 A




## 7 Remain alert to hazards

**Double warnings with sound and light**
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.

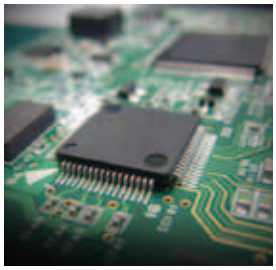



## 8 Choose from an extensive selection of probe tips

Choose the type of probe that best suits your measurement location, letting you measure in areas that can't be reached with conventional probes and busbars that you wish to clamp between probes.


## 9 Enjoy fast operation thanks to a proprietary dedicated IC

A dedicated IC that delivers the world's fastest speed for a chip of its kind* by bringing together a number of Hioki's high-speed measurement technologies.
*Based on market research conducted by Hioki in April 2015.



## 10 Built in *Bluetooth*® wireless technology

The instruments listed below will be able to send measured values to a smartphone or tablet using *Bluetooth*® wireless technology.
*Models with *Bluetooth*® support: CM4372, CM4374

Making measurement more intelligent

# Clamp-on meter with Bluetooth®

Models with *Bluetooth*® support:
**CM4372, CM4374**

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


## Software specifications

| | |
|---|---|
| Name | GENNECT Cross |
| Interface | *Bluetooth*® 4.0LE (*Bluetooth*® SMART) |
| Supported devices | iOS (iPhone®5, 3rd generation iPad®, iPad mini™, iPad Pro™, 5th generation iPod Touch® or later)<br>Android™ (Only for *Bluetooth*® SMART READY or *Bluetooth*® SMART model) |
| Supported OS | iOS 8 or later, Android™ 4.3 or later |
| No. of controllable devices | For data logging, up to 8 devices can be connected (up to 8 measured values can be logged) at once<br>Only 1 device can be used with the current/voltage waveform monitor and INRUSH waveform download function at any one time |

## Get the App

Download from Google play™ or App Store®

ANDROID APP ON Google play

Download on the App Store

App for iPhone®, iPad® or other Apple device is scheduled to be released at the beginning of March 2016.

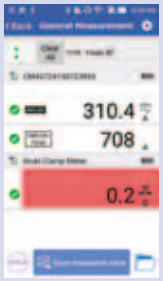


### Simple logging function

Convenient for observing fluctuations over a short period of time when it's not practical to set up large-scale recording equipment.

### Waveform monitor function

Review waveforms at the same time as measured values during current or voltage measurement, allowing the clamp meter to be used as a simple oscilloscope.



### Hold save function

Automatically save measured values while they are being held and at the completion of inrush measurement.

# Specifications

## CM4371, CM4372 Measurement specifications

Measurement accuracy pertains to 1-year accuracy specifications
Figures in parentheses for ranges indicate the guaranteed accuracy range.

### AC Current

| Range | Resolution | Accuracy guarantee frequency range | Measurement accuracy |
|---|---|---|---|
| 20.00 A (1.00 A to 20.00 A) | 0.01 A | 10 Hz ≤ f <45 Hz | ±1.8% rdg.±0.10 A |
| | | 45 Hz ≤ f ≤66 Hz | ±1.3% rdg.±0.08 A |
| | | 66 Hz < f ≤1 kHz | ±2.0% rdg.±0.10 A |
| 600.0 A (1.0 A to 600.0 A) | 0.1 A | 10 Hz ≤ f <45 Hz | ±1.8% rdg.±0.5 A |
| | | 45 Hz ≤ f ≤66 Hz | ±1.3% rdg.±0.3 A |
| | | 66 Hz < f ≤1 kHz | ±2.0% rdg.±0.5 A |

### DC Current

| Range | Resolution | Measurement accuracy |
|---|---|---|
| 20.00 A (±1.00 A to ±20.00 A) | 0.01 A | ±1.3% rdg.±0.08 A |
| 600.0 A (±1.0 A to ±600.0 A) | 0.1 A | ±1.3% rdg.±0.3 A |

### DC+AC Current

| Range | Resolution | Accuracy guarantee frequency range | Measurement accuracy |
|---|---|---|---|
| 20.00 A (1.00 A to 20.00 A) | 0.01 A | 10 Hz ≤ f <45 Hz | ±1.8% rdg.±0.10 A |
| | | DC, 45 Hz ≤ f ≤66 Hz | ±1.3% rdg.±0.13 A |
| | | 66 Hz < f ≤1 kHz | ±2.0% rdg.±0.10 A |
| 600.0 A (1.0 A to 600.0 A) | 0.1 A | 10 Hz ≤ f <45 Hz | ±1.8% rdg.±0.7 A |
| | | DC, 45 Hz ≤ f ≤66 Hz | ±1.3% rdg.±1.3 A |
| | | 66 Hz < f ≤1 kHz | ±2.0% rdg.±0.7 A |

### DC Power *

| Display range switching | Resolution | Measurement accuracy |
|---|---|---|
| 0.0 VA to 1020 kVA | 0.1 VA | ±2.0% rdg.±20 dgt. |

*Current: Fixed to 600.0 A range

## CM4373, CM4374 Measurement specifications

Measurement accuracy pertains to 1-year accuracy specifications
Figures in parentheses for ranges indicate the guaranteed accuracy range.

### AC Current

| Range | Resolution | Accuracy guarantee frequency range | Measurement accuracy |
|---|---|---|---|
| 600.0 A (1.0 A to 600.0 A)* | 0.1 A | 10 Hz ≤ f <45 Hz | ±1.8% rdg.±0.5 A |
| | | 45 Hz ≤ f ≤66 Hz | ±1.3% rdg.±0.3 A |
| | | 66 Hz < f ≤1 kHz | ±2.0% rdg.±0.5 A |
| 2000 A (10 A to 1800 A) | 1 A | 10 Hz ≤ f <45 Hz | ±1.8% rdg.±5 A |
| | | 45 Hz ≤ f ≤66 Hz | ±1.3% rdg.±3 A |
| | | 66 Hz < f ≤1 kHz | ±2.0% rdg.±5 A |
| 2000 A (1801 A to 2000 A) | 1 A | 10 Hz ≤ f <45 Hz | ±2.8% rdg.±5 A |
| | | 45 Hz ≤ f ≤66 Hz | ±2.3% rdg.±3 A |
| | | 66 Hz < f ≤1 kHz | - |

*For currents of 30.0 A or less, add 0.5 A to the measurement accuracy

### DC Current

| Range | Resolution | Measurement accuracy |
|---|---|---|
| 600.0 A (±1.0 A to ±600.0 A)* | 0.1 A | ±1.3% rdg.±0.3 A |
| 2000 A (±10 A to ±2000 A) | 1 A | ±1.3% rdg.±3 A |

*For currents of 30.0 A or less, add 0.5 A to the measurement accuracy

### DC+AC Current

| Range | Resolution | Accuracy guarantee frequency range | Measurement accuracy |
|---|---|---|---|
| 600.0 A (1.0 A to 600.0 A) | 0.1 A | 10 Hz ≤ f <45 Hz | ±1.8% rdg.±0.7 A |
| | | DC, 45 Hz ≤ f ≤66 Hz | ±1.3% rdg.±1.3 A |
| | | 66 Hz < f ≤1 kHz | ±2.0% rdg.±0.7 A |
| 2000 A (10 A to 1800 A) | 1 A | 10 Hz ≤ f <45 Hz | ±1.8% rdg.±7 A |
| | | DC, 45 Hz ≤ f ≤66 Hz | ±1.3% rdg.±13 A |
| | | 66 Hz < f ≤1 kHz | ±2.0% rdg.±7 A |
| 2000 A (1801 A to 2000 A) | 1 A | 10 Hz ≤ f <45 Hz | ±2.8% rdg.±7 A |
| | | DC, 45 Hz ≤ f ≤66 Hz | ±2.3% rdg.±13 A |
| | | 66 Hz < f ≤1 kHz | - |

### DC Power *

| Display range switching | Resolution | Measurement accuracy |
|---|---|---|
| 0.000 kVA to 3400 kVA | 1 VA | ±2.0% rdg.±20 dgt. |

*Current: Fixed to 2000 A range

# Shared specifications

Measurement accuracy pertains to 1-year accuracy specifications
Figures in parentheses for ranges indicate the guaranteed accuracy range.

## AC Voltage

| Range | Resolution | Accuracy guarantee frequency range | Measurement accuracy | Input impedance |
|---|---|---|---|---|
| 6.000 V (0.000 V to 0.299 V) | 0.001 V | 15 Hz ≤ f <45 Hz | ±1.5% rdg.±0.015 V | 3.2 MΩ±5% |
| | | 45 Hz ≤ f ≤66 Hz | ±0.9% rdg.±0.013 V | |
| | | 66 Hz < f ≤1 kHz | ±1.5% rdg.±0.015 V | |
| 6.000 V (0.300 V to 6.000 V) | 0.001 V | 15 Hz ≤ f <45 Hz | ±1.5% rdg.±0.005 V | |
| | | 45 Hz ≤ f ≤66 Hz | ±0.9% rdg.±0.003 V | |
| | | 66 Hz < f ≤1 kHz | ±1.5% rdg.±0.005 V | |
| 60.00 V (3.00 V to 60.00 V) | 0.01 V | 15 Hz ≤ f <45 Hz | ±1.5% rdg.±0.05 V | 3.1 MΩ±5% |
| | | 45 Hz ≤ f ≤66 Hz | ±0.9% rdg.±0.03 V | |
| | | 66 Hz < f ≤1 kHz | ±1.5% rdg.±0.05 V | |
| 600.0 V (30.0 V to 600.0 V) | 0.1 V | 15 Hz ≤ f <45 Hz | ±1.5% rdg.±0.5 V | 3.0 MΩ±5% |
| | | 45 Hz ≤ f ≤66 Hz | ±0.9% rdg.±0.3 V | |
| | | 66 Hz < f ≤1 kHz | ±1.5% rdg.±0.5 V | |
| 1000 V (50 V to 1000 V) | 1 V | 15 Hz ≤ f <45 Hz | ±1.5% rdg.±5 V | |
| | | 45 Hz ≤ f ≤66 Hz | ±0.9% rdg.±3 V | |
| | | 66 Hz < f ≤1 kHz | ±1.5% rdg.±5 V | |

Frequency range of 15 Hz≤f<20 Hz is designed value

## DC Voltage

| Range | Resolution | Measurement accuracy | Input impedance |
|---|---|---|---|
| 600.0 mV (0.0 mV to ±600.0 mV) | 0.1 mV | ±0.5% rdg.±0.5 mV | 6.7 MΩ±5% |
| 6.000 V (0.000 V to ±6.000 V) | 0.001 V | ±0.5% rdg.±0.003 V | |
| 60.00 V (0.00 V to ±60.00 V) | 0.01 V | ±0.5% rdg.±0.03 V | 6.1 MΩ±5% |
| 600.0 V (0.0 V to ±600.0 V) | 0.1 V | ±0.5% rdg.±0.3 V | 6.0 MΩ±5% |
| 1500 V (0 V to ±1000 V) | 1 V | ±0.5% rdg.±3 V | |
| 1500 V (±1001 V to ±1700 V) | | ±2.0% rdg.±5 V | |

## DC+AC Voltage

| Range | Resolution | Accuracy guarantee frequency range | Measurement accuracy | Input impedance |
|---|---|---|---|---|
| 6.000 V (0.000 V to 0.299 V) | 0.001 V | 10 Hz ≤ f <45 Hz | ±1.5% rdg.±0.023 V | DC: 6.7 MΩ±5% AC: 3.2 MΩ±5% |
| | | DC, 45 Hz ≤ f ≤66 Hz | ±1.0% rdg.±0.023 V | |
| | | 66 Hz < f ≤1 kHz | ±1.5% rdg.±0.023 V | |
| 6.000 V (0.300 V to 6.000 V) | 0.001 V | 10 Hz ≤ f <45 Hz | ±1.5% rdg.±0.013 V | |
| | | DC, 45 Hz ≤ f ≤66 Hz | ±1.0% rdg.±0.013 V | |
| | | 66 Hz < f ≤1 kHz | ±1.5% rdg.±0.013 V | |
| 60.00 V (3.00 V to 60.00 V) | 0.01 V | 10 Hz ≤ f <45 Hz | ±1.5% rdg.±0.13 V | DC: 6.1 MΩ±5% AC: 3.1 MΩ±5% |
| | | DC, 45 Hz ≤ f ≤66 Hz | ±1.0% rdg.±0.13 V | |
| | | 66 Hz < f ≤1 kHz | ±1.5% rdg.±0.13 V | |
| 600.0 V (30.0 V to 600.0 V) | 0.1 V | 10 Hz ≤ f <45 Hz | ±1.5% rdg.±0.7 V | DC: 6.0 MΩ±5% AC: 3.0 MΩ±5% |
| | | DC, 45 Hz ≤ f ≤66 Hz | ±1.0% rdg.±0.7 V | |
| | | 66 Hz < f ≤1 kHz | ±1.5% rdg.±0.7 V | |
| 1000 V (50 V to 1000 V) | 1 V | 10 Hz ≤ f <45 Hz | ±1.5% rdg.±7 V | |
| | | DC, 45 Hz ≤ f ≤66 Hz | ±1.0% rdg.±7 V | |
| | | 66 Hz < f ≤1 kHz | ±1.5% rdg.±7 V | |

Frequency range of 10 Hz≤f<20 Hz is designed value

## Frequency

| Range | Resolution | Measurement accuracy |
|---|---|---|
| 9.999 Hz (1.000 Hz to 9.999 Hz) | 0.001 Hz | ±0.1% rdg.±0.003 Hz |
| 99.99 Hz (1.00 Hz to 99.99 Hz) | 0.01 Hz | ±0.1% rdg.±0.01 Hz |
| 999.9 Hz (1.0 Hz to 999.9 Hz) | 0.1 Hz | ±0.1% rdg.±0.1 Hz |

Frequency detection range of AC current
CM4371, CM4372: 20.00 A range 4.00 A or more, 600.0 A range 20.0 A or more
CM4373, CM4374: 600.0 A range 40.0 A or more, 2000 A range 200 A or more
The AC voltage frequency detection range is 10% of each range's full scale

## Continuity check

| Range | Resolution | Measurement current | Measurement accuracy | Open terminal voltage |
|---|---|---|---|---|
| 600.0 Ω (0.0 Ω to 600.0 Ω) | 0.1 Ω | 200 μA±20% | ±0.7% rdg.±0.5 Ω | 2.0 V DC or less |

Continuity on threshold: 25 Ω±10 Ω, Continuity off threshold: 245 Ω±10 Ω

## Diode

| Range | Resolution | Short-circuit current | Measurement accuracy | Open terminal voltage |
|---|---|---|---|---|
| 1.800 V (0.000 V to 1.800 V) | 0.001 V | 200 μA±20% | ±0.7% rdg.±0.005 V | 2.0 V DC or less |

Beeping buzzer tone at forward connection (0.15 V to 1.8 V)

## Resistance

| Range | Resolution | Measurement current | Measurement accuracy | Open terminal voltage |
|---|---|---|---|---|
| 600.0 Ω (0.0 Ω to 600.0 Ω) | 0.1 Ω | 200 μA±20% | ±0.7%rdg.±0.5 Ω | 2.0 V DC or less |
| 6.000 kΩ (0.000 kΩ to 6.000 kΩ) | 0.001 kΩ | 100 μA±20% | ±0.7%rdg.±0.005 kΩ | |
| 60.00 kΩ (0.00 kΩ to 60.00 kΩ) | 0.01 kΩ | 10 μA±20% | ±0.7%rdg.±0.05 kΩ | |
| 600.0 kΩ (0.0 kΩ to 600.0 kΩ) | 0.1 kΩ | 1 μA±20% | ±0.7%rdg.±0.5 kΩ | |

## Electrostatic capacity

| Range | Resolution | Discharge current | Measurement accuracy | Open terminal voltage |
|---|---|---|---|---|
| 1.000 μF (0.000 μF to 1.100 μF) | 0.001 μF | 10n/ 100n/ 1μA ±20% | ±1.9%rdg.±0.005 μF | 2.0 V DC or less |
| 10.00 μF (0.00 μF to 11.00 μF) | 0.01 μF | 100n/ 1μ/ 10μA ±20% | ±1.9%rdg.±0.05 μF | |
| 100.0 μF (0.0 μF to 110.0 μF) | 0.1 μF | 1μ/ 10μ/ 100μA ±20% | ±1.9%rdg.±0.5 μF | |
| 1000 μF (0 μF to 1100 μF) | 1 μF | 10μ/ 100μ/ 200μA±20% | ±1.9%rdg.±5 μF | |

## Temperature

| Thermocouple type | Range | Resolution | Accuracy |
|---|---|---|---|
| K | -40.0°C to 400.0°C | 0.1°C | ±0.5%rdg.±3.0°C |
| | -40.0°F to 752.0°F | 0.1°F | ±0.5%rdg.±5.4°F |

Accuracy does not include the error of the K thermocouple

## AC Voltage detection function

| Range (detection sensitivity) | Detection voltage range | Detection target frequency |
|---|---|---|
| Hi | AC 40 V to AC 600 V | 50/60 Hz |
| Lo | AC 80 V to AC 600 V | |

# General Specifications

| | |
|---|---|
| AC measurement method | True RMS measurement |
| Guaranteed accuracy period | 1 year/ 2nd and 3rd year accuracy is 1.5 times the 1-year accuracy specifications and should be used for reference only. |
| Guaranteed accuracy period after adjustment made by Hioki | 1 year |
| Guaranteed accuracy for temperature and humidity | 23°C±5°C (73.0°F±9.0°F)<br>90% RH or less (no condensation) |
| Product warranty period | 3 years (Measurement accuracy is defined in terms of a 1-year accuracy and a 3-year accuracy*.)<br>*2nd and 3rd year accuracy values are for reference only.<br>Number of sensor open/close cycles: 30,000 |
| Crest factor | **CM4371, CM4372:**<br>For the 20.00 A range, 7.5<br>For the 600.0 A range (500.0 A or less), 3<br>For the 600.0 A range (greater than 500.0 A and less than or equal to 600.0 A), 2.5<br>**CM4373, CM4374:**<br>For the 600.0 A range (500.0 A or less), 3<br>For the 600.0 A range (greater than 500.0 A and less than or equal to 600.0 A), 2.5<br>For the 2000 A range (1000 A or less), 2.84<br>For the 2000 A range (greater than 1000 A and less than or equal to 2000 A), 1.42 |
| Functions | Automatic AC/ DC detection, DC current and DC voltage polarity detection function, Max/ Min/ AVG/ PEAK MAX/ PEAK MIN value display, Low-pass filter function, Display value hold, Auto hold, Backlight, Auto power save, Buzzer sound, Zero-adjustment |
| Display update rate | Measured value excluding electrostatic capacity, frequency, and temperature: 5 times/s (after the range is fixed)<br>Electrostatic capacity: 0.5 to 5 times/s (The number of times varies depending on the capacitance.)<br>Frequency: 0.3 to 5 times/s (The number of times varies depending on the capacitance.)<br>Temperature: 1 times/s (including thermocouple wiring break check) |
| Operating environment | Indoors, pollution degree 2, altitude up to 2000 m (6562 ft.) |
| Operating temperature and humidity | -25°C to 65°C (-13.0°F to 149.0°F)<br>90% RH or less (no condensation) |
| Storage temperature and humidity | -30°C to 70°C (-22.0°F to 158.0°F)<br>90% RH or less (no condensation) |
| Dustproof and waterproof | Grip: IP54 (when measuring an insulated conductor only)<br>Jaw (the current sensor portion of the instrument), barrier: IP50<br>*Risk of electric shock from the conductor being measured increases when wet. |
| Dielectric strength | Between the jaw (the current sensor portion of the instrument) and chassis<br>Between the terminal and chassis<br>7.4 kV AC sine wave (50 Hz/60 Hz, 60 seconds) |
| Maximum terminal-to-terminal rated voltage | 1000 V AC (up to 1 kHz) /1700 V DC |
| Maximum rated voltage to earth | 1000 V AC (Measurement category III)<br>600 V AC (Measurement category IV) |
| Standards | Safety: EN61010, EMC: EN61326 |
| Power supply | LR03 Alkaline battery ×2 |
| Continuous use | Approx. 24 hours (Backlight OFF, *Bluetooth*® ON)<br>Approx. 45 hours (Backlight OFF, *Bluetooth*® OFF) |
| Dimensions, Mass | **CM4371, CM4372:** Approx. 65 mm (2.56 in) W × 215 mm (8.46 in) H × 35 mm (1.38 in) D mm, 340 g (12.0 oz)<br>**CM4373, CM4374:** Approx. 65 mm (2.56 in) W×250 mm (9.84 in) H×35 mm (1.38 in) D mm, 530 g (18.7 oz) |
| Core jaw diameter | **CM4371, CM4372:** 69 mm (2.72 in) W×14 mm (0.55 in) D, φ33 mm (1.30 in)<br>**CM4373, CM4374:** 92 mm (3.62 in) W×18 mm (0.71 in) D, φ55 mm (2.17 in) |

# Order code/ Options

## ■ Instrument

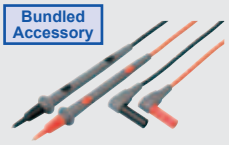
### AC/ DC CLAMP METER

| Model Name (Order Code) | (Note) | | |
|---|---|---|---|
| **CM4371** | 600A AC/DC | ϕ33 mm | |
| **CM4372** | 600A AC/DC | ϕ33 mm | Built in *Bluetooth*® wireless technology |
| **CM4373** | 2000A AC/DC | ϕ55 mm | |
| **CM4374** | 2000A AC/DC | ϕ55 mm | Built in *Bluetooth*® wireless technology |

**Accessories:**
TEST LEAD L9207-10
CARRYING CASE C0203
LR03 Alkaline battery ×2
Instruction Manual
Precautions Concerning Use of Equipment That Emits Radio Waves (only for CM4372, CM4374)

## ■ TEST LEAD L9207-10 Options

Bundled Accessory



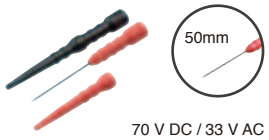
Cable length 90 cm (2.95 ft) with one each red and black caps

with cap
CAT IV 600 V
CAT III 1000 V

without cap
CAT II 1000 V

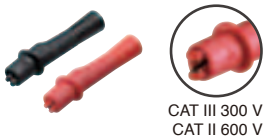
**TEST LEAD L9207-10**

L4933 and L4934 probe tips (at right) can be used on L9207-10 Test Leads.




70 V DC / 33 V AC

**CONTACT PIN SET L4933**



CAT III 300 V
CAT II 600 V

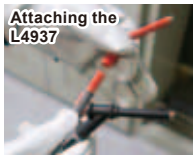
**SMALL ALLIGATOR CLIP SET L4934**

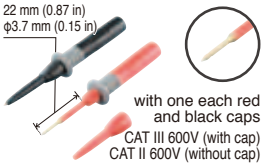
## ■ CONNECTION CABLE L4930 Options

Length : 1.2 m (3.94 ft)

**CONNECTION CABLE L4930**

Probe tips (at right) can be used on L4930 connection cables.



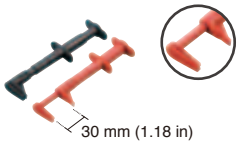




with one each red and black caps
CAT III 600V (with cap)
CAT II 600V (without cap)

**TEST PIN SET L4938**

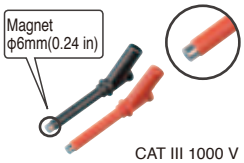
CAT IV 600 V
CAT III 1000 V

**ALLIGATOR CLIP SET L4935**



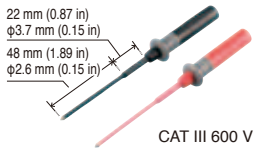
30 mm (1.18 in)
CAT III 600 V

**BUS BAR CLIP SET L4936**



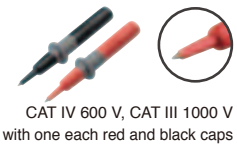

CAT III 1000 V

**MAGNETIC ADAPTER SET L4937**




CAT III 600 V

**BREAKER PIN L4939**

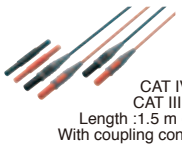


CAT IV 600 V, CAT III 1000 V
with one each red and black caps

**TEST PIN SET L4932**

CAT III 1000 V

**GRABBER CLIP 9243**



CAT IV 600 V
CAT III 1000 V
Length :1.5 m (4.92 ft)
With coupling connectors

**EXTENSION CABLE SET L4931**

## ■ Other options

Bundled Accessory

**CARRYING CASE C0203**

**THERMOCOUPLES (K) DT4910**

- Thermal junction form: exposed weld
- Sensor length: approx. 800 mm
- Measurement temperature range: -40 to 260°C
- Allowable tolerance:±2.5°C
- Operating temperature range: -15 to 55°C

DT4282 DT4256

### Test lead compatibility

The Test Lead L9207-10 and Connection Cable Set L4930 can also be used with the Digital Multimeter DT4280 and DT4250 series.



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