Remarkable ease of use

Introducing a new design that’s even easier to fit between cables in confined spaces

CM 4000 SERIES
MADE IN JAPAN

CAT IV 600V
CAT III 1000V

Bluetooth®

Please see www.hioki.com for list of supported regions.
Models with Bluetooth® support:
CM4372, CM4374, CM4376, CM4142

CM4375, CM4376
AC/DC 999.9 A

CM4141, CM4142
AC 60.00A/600.0A/2000A

NEW
NEW

3 year Warranty
Even measure the thick double-wires connected to power conditioners

AC/DC CLAMP METER CM4375, CM4376
AC/DC 1000 A max, Core jaw diameter φ34 mm (1.34 in)

Traditional design: shorter tip makes it impossible to wrap around cables
New design: completely clamp doubled cables

The tip of traditional clamp sensors often lack the depth to completely surround doubled cables. The jaws of the new CM4375 and CM4376 are designed with this important application in mind, expanding their range of use.
Remarkable ease of use...

Easily Clamp Within Crowded Cables with New Jaw Design.
CM4141, CM4142, CM4375, CM4376

AC CLAMP METER CM4141, CM4142
AC 2000 A max, Core jaw diameter φ55 mm (2.17 in)

Get into the tightest gaps even with a large diameter clamp structure

Traditional design: thick jaws made it difficult to get between cables

New design: easily slide between narrow gaps with thin sensor

The large φ55mm clamp lets you measure higher currents up to 2000 A AC, yet still provides the ability to easily get into narrow gaps. Improve work efficiency especially when circuit breakers and terminal boxes are located in confined spaces.
Field-Proven Strength

Hioki measuring instruments have evolved as we’ve sought to engineer products that can withstand use in harsh and demanding environments. The CM4000 series has proven its capabilities against numerous performance tests to ensure even greater improvements in ruggedness, durability, and reliability. These tough clamp meters are designed to deliver ultimate safety and peace of mind.

Damage-resistant jaws

The 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. The CM4375, CM4376, CM4141 and CM4142 deliver the dual functionality of ease of clamping and resistance to damage.

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.

Guaranteed for 30,000 open-close cycles

-25°C to + 65°C

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 CM4000 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.

Expanded operating temperature range
Dustproof and waterproof performance

International Protection Code: IP64*  *Jaws (current sensor portion): IP50
Measurement functionality is maintained despite exposure to sand or dust as well as water droplets.
Use the clamp meters with confidence in harsh and dusty environments such as saw mills and grain processing facilities, as well as work sites that operate welding equipment. (CM4141 and CM4142: IP50)

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 enter.

Enhanced environmental resistance

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.

CAT IV 600 V

The CM4000 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.
Assess transient currents at motor startup

The CM4000 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.

Automatically hold display values

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.

Assess fluctuating current values

The ability to identify the maximum, minimum, average, and crest maximum and minimum values for equipment like machine tools whose load current fluctuates is useful in preventive maintenance and quality control.
Accurate testing assured

Get a correct reading of distorted waveforms with the True RMS method

Current waveforms are often distorted, causing the average-value and true RMS measurement methods to yield different results. To obtain accurate readings, RMS measurement is indispensable.

Low pass filter delivers stable measurement values

Cutting the harmonic component serves to stabilize values, an approach that is useful when measuring the secondary side of a switching power supply or inverter.

Current waveform from an inverter (primary side)

Average-value method measured value  True RMS method measured value

Frequency characteristics when using the filter*

CM4371, CM4372, CM4373, CM4374, CM4375, CM4376

Solar power system maintenance

Automatically detect the signal when AC and DC are mixed

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

*The CM4141 and CM4142 support automatic AC/DC detection for voltage measurement.

Avoid missing DC wiring mistakes

If the DC voltage and DC current measured values are negative, the instrument will warn the user by sounding a beep and changing the backlight color. This functionality is useful when measuring no-load voltage and current in solar power systems. Thresholds: -10 V, -10 A

During DC measurement, the clamp meter can simultaneously display current and voltage values. Press a button to read the power value.

Simultaneous display of DC current and voltage, and display of DC power

Convenient when you need to check a series of locations

Beeping sound
Send measured values to a smartphone or tablet

**General Measurement**

Simply clamp and press **HOLD**

Automatically save measured values

**Logging**

Current that varies with time

Automatically save measured values at specific intervals

**Waveform Display**

Use as a simple oscilloscope to monitor current waveforms. Compare waveforms during operation under different loads.

**Augment Measured Values On Image**

Upload image to app

Display data right on image

Send data wirelessly

**GENNECT Cross**

SF4071 (Application for iOS)
SF4072 (Application for Android)

**Software specifications**

- **Interface:** Bluetooth® 4.0 LE
- **Communication distance:** 10 m (line of sight). Varies with device performance and signal reception.
- **Supported Android™ devices:** Android™ 4.3 or later
- **Supported iOS devices:** iOS 10 or later
  - *Bluetooth™ low energy enabled devices

**No. of controllable devices**

For data logging, up to 8 devices can be connected (up to 8 measured values can be logged) at once. Only 1 device can be used with the current/voltage waveform monitor and INRUSH waveform download function at any one time

**Get the App**

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.

**Software specifications**

- Bluetooth® low energy enabled devices
- **Interface:** Bluetooth® 4.0 LE
- **Communication distance:** 10 m (line of sight), Varies with device performance and signal reception.
- **Supported Android™ devices:** Android™ 4.3 or later
- **Supported iOS devices:** iOS 10 or later
  - *Android, Google Play and the Google Play logo are trademarks of Google Inc.*
  - *iOS is a registered trademark of Cisco Technology, Inc. and/or its affiliates in the United States and certain other countries.*
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  - *Apple and the Apple logo are trademarks of Apple Inc. App Store is a service mark of Apple Inc.*
  - *Microsoft, Windows, Windows Vista, and Excel are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.*
  - *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.*

**Instantly create reports and e-mail the data**

**Report creation function**

Edit the measurement data and image data selected from the data list to instantly create a PDF-format report.

Input a title, subtile, recipient, creator, and corporate logo on the cover sheet.

**E-mail transmission**

Send the saved data via e-mail or easily share it on iCloud™ or Dropbox™.

Data formats:
- Measured values: CSV or .hok
- Image data: JPEG or .hok

*“hok” refers to the HIOKI GENNECT Format.
Use the .hok format to load data into the PC version of the free app, GENNECT Cross for Windows.*
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.
Post-adjustment accuracy guaranteed 1 year
Guaranteed accuracy for temperature and humidity 23°C±5°C (73.0°F±9.0°F) 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*.)

Functions
Automatic AC/DC detection, DC current and DC voltage polarity detection function, Max/ Min/ AVG/ 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)
Electrostatic capacity: 0.5 to 5 times/s (The number of times varies depending on the capacitance.)
Frequency: 0.3 to 5 times/s (The number of times varies depending on the capacitance.)
Temperature: 1 times/s (including thermocouple wiring break check)

Dust-proof and water-proof
CM4371, CM4372, CM4373, CM4374, CM4375, CM4376
CM4141, CM4142

CM4000 Series Basic Comparison

<table>
<thead>
<tr>
<th>Model No. (Order Code)</th>
<th>CM4371</th>
<th>CM4372</th>
<th>CM4373</th>
<th>CM4374</th>
<th>CM4375</th>
<th>CM4376</th>
<th>CM4141</th>
<th>CM4142</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Characteristics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current measurement</td>
<td>600 A AC/DC max.</td>
<td>2000 A AC/DC max.</td>
<td>1000 A AC/DC max.</td>
<td>2000 A AC max.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Core jaw diameter</td>
<td>φ33 mm (1.30 in)</td>
<td>φ55 mm (2.17 in)</td>
<td>φ34 mm (1.34 in)</td>
<td>φ55 mm (2.17 in)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interface</td>
<td>N/A</td>
<td>✔</td>
<td>N/A</td>
<td>✔</td>
<td>N/A</td>
<td>✔</td>
<td>N/A</td>
<td>✔</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Measurement Items (Typical ranges are indicated; may not reflect maximum or minimum measurable signal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DCA current</td>
</tr>
<tr>
<td>20.00 A / 600.0 A</td>
</tr>
<tr>
<td>600.0 A / 2000 A</td>
</tr>
<tr>
<td>999.9 A</td>
</tr>
<tr>
<td>N/A</td>
</tr>
<tr>
<td>ACA current</td>
</tr>
<tr>
<td>20.00 A / 600.0 A</td>
</tr>
<tr>
<td>600.0 A / 2000 A</td>
</tr>
<tr>
<td>999.9 A</td>
</tr>
<tr>
<td>60.00 A / 600.0 A / 2000 A</td>
</tr>
<tr>
<td>DCA + ACA</td>
</tr>
<tr>
<td>20.00 A / 600.0 A</td>
</tr>
<tr>
<td>600.0 A / 2000 A</td>
</tr>
<tr>
<td>999.9 A</td>
</tr>
<tr>
<td>N/A</td>
</tr>
<tr>
<td>DC voltage</td>
</tr>
<tr>
<td>600.0 mV / 6.000 V / 60.00 V / 600.0 V / 1500 V</td>
</tr>
<tr>
<td>AC voltage</td>
</tr>
<tr>
<td>6.000 V / 60.00 V / 600.0 V / 1000 V</td>
</tr>
<tr>
<td>DCV + ACV</td>
</tr>
<tr>
<td>6.000 V / 60.00 V / 600.0 V / 1000 V</td>
</tr>
<tr>
<td>DC Power</td>
</tr>
<tr>
<td>0.0 VA to 1020 kVA **</td>
</tr>
<tr>
<td>0.000 kVA to 3400 kVA **</td>
</tr>
<tr>
<td>0.000 kVA to 1700 kVA **</td>
</tr>
<tr>
<td>N/A</td>
</tr>
<tr>
<td>Resistance</td>
</tr>
<tr>
<td>600.0 Ω / 6.000 kΩ / 60.00 kΩ / 600.0 kΩ</td>
</tr>
<tr>
<td>Temperature</td>
</tr>
<tr>
<td>-40°C to -40°C</td>
</tr>
<tr>
<td>Capacitance</td>
</tr>
<tr>
<td>1.000 µF / 10.00 µF / 100.0 µF / 1000 µF</td>
</tr>
<tr>
<td>Frequency</td>
</tr>
<tr>
<td>9.999 Hz / 99.99 Hz / 999.9 Hz</td>
</tr>
</tbody>
</table>

Additional Functions
Automatic AC/DC detection Voltage/Current Voltage only
DC current and voltage DC + ACA
Low-pass filter Digital filter Cut-off: 100 Hz
Max/Min/G/PEAK value ✔ ✔ N/A
Simultaneous display of DC current and voltage ✔ ✔ N/A
Simultaneous display of DC current peak values and voltage peak values ✔ ✔ N/A
Auto hold ✔

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.
Post-adjustment accuracy guaranteed 1 year
Guaranteed accuracy for temperature and humidity 23°C±5°C (73.0°F±9.0°F) 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*.)

Number of sensor open/close cycles: 30,000
Functions
Automatic AC/DC detection, DC current and DC voltage polarity detection function, Max/ Min/ AVG/ 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)
Electrostatic capacity: 0.5 to 5 times/s (The number of times varies depending on the capacitance.)
Frequency: 0.3 to 5 times/s (The number of times varies depending on the capacitance.)
Temperature: 1 times/s (including thermocouple wiring break check)

*1: Your instrument can be used to measure voltages in excess of 1000 V DC if and only if both of the following conditions are satisfied: 1. The circuit under measurement is isolated from the commercial power grid. 2. The circuit under measurement is isolated from ground. e.g.: when measuring the no-load voltage of an ungrounded PV panel

CM4371, CM4372, CM4373, CM4374, CM4375, CM4376
CM4141, CM4142

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) 80% RH or less (no condensation)
Storage temperature and humidity -30°C to 70°C (-22.0°F to 158.0°F) 90% RH or less (no condensation)
Dust-proof and water-proof CM4371, CM4372, CM4373, CM4374, CM4375, CM4376
CM4141, CM4142

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)
Standards Safety: EN61010, EMC: EN61326

NEW NEW NEW NEW NEW NEW
### CM4371, CM4372 Measurement specifications

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

#### AC Current

<table>
<thead>
<tr>
<th>Range</th>
<th>Resolution</th>
<th>Accuracy guarantee range</th>
<th>Measurement accuracy</th>
</tr>
</thead>
<tbody>
<tr>
<td>20.00 A (1.0 A to 20.0 A)</td>
<td>0.01 A</td>
<td>10 Hz ≤ f ≤ 45 Hz ±1.8% rdg. ±0.1 A</td>
<td>±1.8% rdg. ±0.10 A</td>
</tr>
<tr>
<td>60.0 A (1.0 A to 600.0 A)</td>
<td>0.1 A</td>
<td>10 Hz ≤ f ≤ 45 Hz ±1.8% rdg. ±0.5 A</td>
<td>±2.0% rdg. ±0.10 A</td>
</tr>
</tbody>
</table>

#### DC Current

<table>
<thead>
<tr>
<th>Range</th>
<th>Resolution</th>
<th>Accuracy guarantee range</th>
<th>Measurement accuracy</th>
</tr>
</thead>
<tbody>
<tr>
<td>20.00 A (±0.0 A to ±20.00 A)</td>
<td>0.1 A</td>
<td>±1.3% rdg. ±0.1 A</td>
<td>±1.3% rdg. ±0.08 A</td>
</tr>
<tr>
<td>600.0 A</td>
<td>0.1 A</td>
<td>±1.3% rdg. ±0.5 A</td>
<td>±1.3% rdg. ±0.3 A</td>
</tr>
</tbody>
</table>

#### General Specifications

Current measurement: 600 A AC/DC max.

- Core jaw diameter: φ33 mm (1.30 in)
- Crest factor: For the 20.0 A range, 7.5
- For the 600.0 A range (greater than 500.0 A), 1.2
- Power supply: 300 A alkaline battery ×2
- Dimensions, Mass: Approx. 65 mm (2.56 in) W × 215 mm (8.46 in) H × 35 mm (1.38 in) D, 340 g (12.0 oz)
- Core jaw diameter: 69 mm (2.72 in) W × 14 mm (0.55 in)

### CM4373, CM4374 Measurement specifications

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

#### AC Current

<table>
<thead>
<tr>
<th>Range</th>
<th>Resolution</th>
<th>Accuracy guarantee range</th>
<th>Measurement accuracy</th>
</tr>
</thead>
<tbody>
<tr>
<td>600.0 A (1.0 A to 600.0 A)</td>
<td>0.1 A</td>
<td>10 Hz ≤ f ≤ 45 Hz ±1.8% rdg. ±0.5 A</td>
<td>±2.0% rdg. ±0.10 A</td>
</tr>
<tr>
<td>2000 A (10 A to 1800 A)</td>
<td>1 A</td>
<td>10 Hz ≤ f ≤ 45 Hz ±1.8% rdg. ±5 A</td>
<td>±2.0% rdg. ±0.5 A</td>
</tr>
<tr>
<td>600.0 A (1801 A to 2000 A)</td>
<td>1 A</td>
<td>10 Hz ≤ f ≤ 45 Hz ±1.8% rdg. ±3 A</td>
<td>±2.0% rdg. ±0.3 A</td>
</tr>
</tbody>
</table>

#### DC Current

<table>
<thead>
<tr>
<th>Range</th>
<th>Resolution</th>
<th>Accuracy guarantee range</th>
<th>Measurement accuracy</th>
</tr>
</thead>
<tbody>
<tr>
<td>600.0 A (1.0 A to 600.0 A)</td>
<td>0.1 A</td>
<td>±1.3% rdg. ±0.3 A</td>
<td>±1.3% rdg. ±0.1 A</td>
</tr>
<tr>
<td>30.0 A (10 A to 300 A)</td>
<td>1 A</td>
<td>±1.3% rdg. ±3 A</td>
<td>±1.3% rdg. ±1 A</td>
</tr>
</tbody>
</table>

#### DC Power

<table>
<thead>
<tr>
<th>Display range switching</th>
<th>Resolution</th>
<th>Measurement accuracy</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0 VA to 1020 kVA**</td>
<td>0.1 VA</td>
<td>±2.0% rdg. ±0.20 dgt.</td>
</tr>
</tbody>
</table>

** Your instrument can be used to measure voltages in excess of 1000 V DC if and only if both of the following conditions are satisfied: 1. The circuit under measurement is isolated from the commercial power grid. 2. The circuit under measurement is isolated from ground.

### CM4375, CM4376 Measurement specifications

Measurement accuracy pertains to 1-year accuracy specifications.

#### AC Current

<table>
<thead>
<tr>
<th>Range</th>
<th>Resolution</th>
<th>Accuracy guarantee range</th>
<th>Measurement accuracy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000 A</td>
<td>±1.0 A to ±50.0 A</td>
<td>10 Hz ≤ f ≤ 45 Hz ±1.8% rdg. ±0.5 A</td>
<td>±1.8% rdg. ±0.10 A</td>
</tr>
<tr>
<td>50.0 A</td>
<td>±1.3% rdg. ±0.8 A</td>
<td>±1.3% rdg. ±0.5 A</td>
<td></td>
</tr>
</tbody>
</table>

#### DC Current

<table>
<thead>
<tr>
<th>Range</th>
<th>Resolution</th>
<th>Accuracy guarantee range</th>
<th>Measurement accuracy</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.000 kVA to 7000 kVA**</td>
<td>0.001 kVA</td>
<td>±1.3% rdg. ±0.8 A</td>
<td>±1.3% rdg. ±0.5 A</td>
</tr>
</tbody>
</table>

** For voltage range of 1000 V and input voltage range of ±1001 V to ±1700 V.

### General Specifications

**1** Crest factor: For the 1000 A range, 1.5
- Power supply: LR03 Alkaline battery ×2
- Dimensions, Mass: Approx. 65 mm (2.56 in) W × 292 mm (9.53 in) H × 38 mm (1.49 in) D, 340 g (12.0 oz)
- Core jaw diameter: 69 mm (2.72 in) W × 14 mm (0.55 in)

**2** Crest factor: For the 2000 A range (1000 A or less), 3
- Power supply: 300 A alkaline battery ×2
- Dimensions, Mass: Approx. 65 mm (2.56 in) W × 292 mm (9.53 in) H × 33 mm (1.30 in) D, 340 g (12.0 oz)
- Core jaw diameter: 69 mm (2.72 in) W × 14 mm (0.55 in)

### DC+AC Current

<table>
<thead>
<tr>
<th>Range</th>
<th>Resolution</th>
<th>Accuracy guarantee range</th>
<th>Measurement accuracy</th>
</tr>
</thead>
<tbody>
<tr>
<td>600.0 A (1.0 A to 600.0 A)</td>
<td>0.1 A</td>
<td>10 Hz ≤ f ≤ 45 Hz ±1.8% rdg. ±0.1 A</td>
<td>±2.0% rdg. ±0.1 A</td>
</tr>
<tr>
<td>2000 A (10 A to 1800 A)</td>
<td>1 A</td>
<td>10 Hz ≤ f ≤ 45 Hz ±1.8% rdg. ±7 A</td>
<td>±2.8% rdg. ±7 A</td>
</tr>
<tr>
<td>600.0 A (1801 A to 2000 A)</td>
<td>1 A</td>
<td>10 Hz ≤ f ≤ 45 Hz ±1.8% rdg. ±13 A</td>
<td>±2.8% rdg. ±13 A</td>
</tr>
</tbody>
</table>

**3** Crest factor: For the 600.0 A range (500.0 A or less), 3
- Power supply: 300 A alkaline battery ×2
- Dimensions, Mass: Approx. 65 mm (2.56 in) W × 292 mm (9.53 in) H × 38 mm (1.49 in) D, 340 g (12.0 oz)
- Core jaw diameter: 69 mm (2.72 in) W × 14 mm (0.55 in)

**4** Crest factor: For the 2000 A range (1000 A or less), 2.84
- Power supply: 300 A alkaline battery ×2
- Dimensions, Mass: Approx. 65 mm (2.56 in) W × 292 mm (9.53 in) H × 33 mm (1.30 in) D, 340 g (12.0 oz)
- Core jaw diameter: 69 mm (2.72 in) W × 14 mm (0.55 in)

**5** Crest factor: For the 2000 A range (1000 A or less), 1.42
- Power supply: LR03 Alkaline battery ×2
- Dimensions, Mass: Approx. 65 mm (2.56 in) W × 292 mm (9.53 in) H × 33 mm (1.30 in) D, 340 g (12.0 oz)
- Core jaw diameter: 69 mm (2.72 in) W × 14 mm (0.55 in)
### CM4141 CM4142 Measurement specifications

#### General Specifications

- **Current measurement**: 2000 A AC max.
- **Core jaw diameter**: 0.55 mm (2.17 in)
- **Crest factor**: For the 60.0 A range (50.0 A or less), 3
  
  For the 60.0 A range (greater than 50.0 A and less than or equal to 60.0 A), 2.5
  
  For the 600.0 A range (500.0 A or less), 3
  
  For the 600.0 A range (greater than 500.0 A and less or equal to 600.0 A), 2.5
  
  For the 2000 A range (2000 A or less), 1.5
- **Power supply**: LR03 Alkaline battery x2
- **Continuous use**: Approx. 24 hours (Backlight OFF, Bluetooth® OFF)
  
  Approx. 48 hours (Backlight OFF, Bluetooth® ON)

#### DC voltage

<table>
<thead>
<tr>
<th>Range</th>
<th>Resolution</th>
<th>Measurement accuracy</th>
<th>Input impedance</th>
</tr>
</thead>
<tbody>
<tr>
<td>600.0 mV</td>
<td>0.1 mV</td>
<td>±0.5% rdg. ±0.05 mV</td>
<td>6.7 MΩ±5%</td>
</tr>
<tr>
<td>6.000 mV</td>
<td>0.01 mV</td>
<td>±0.5% rdg. ±0.003 V</td>
<td>6.1 MΩ±5%</td>
</tr>
<tr>
<td>60.0 mV</td>
<td>0.01 V</td>
<td>±0.5% rdg. ±0.03 V</td>
<td>6.0 MΩ±5%</td>
</tr>
<tr>
<td>600.0 V</td>
<td>0.1 V</td>
<td>±0.5% rdg. ±0.3 V</td>
<td></td>
</tr>
<tr>
<td>1500 V</td>
<td>1 V</td>
<td>±0.5% rdg. ±3 V</td>
<td></td>
</tr>
<tr>
<td>1500 V</td>
<td>(≤ 1001 V to ≤ 1700 V)</td>
<td>±2.0% rdg. ±5 V</td>
<td></td>
</tr>
</tbody>
</table>

**Frequency range of 15 Hz f<20 Hz is designated value.**

#### AC voltage

<table>
<thead>
<tr>
<th>Range</th>
<th>Resolution</th>
<th>Measurement accuracy</th>
<th>Input impedance</th>
</tr>
</thead>
<tbody>
<tr>
<td>600.0 mV</td>
<td>0.001 mV</td>
<td>±1.5% rdg. ±0.023 V</td>
<td>3.2 MΩ±5%</td>
</tr>
<tr>
<td>6.000 mV</td>
<td>0.001 V</td>
<td>±1.5% rdg. ±0.013 V</td>
<td>3.1 MΩ±5%</td>
</tr>
<tr>
<td>60.0 mV</td>
<td>0.01 V</td>
<td>±1.5% rdg. ±0.015 V</td>
<td>3.0 MΩ±5%</td>
</tr>
<tr>
<td>600.0 V</td>
<td>0.1 V</td>
<td>±1.5% rdg. ±0.07 V</td>
<td></td>
</tr>
<tr>
<td>1000 V</td>
<td>1 V</td>
<td>±1.5% rdg. ±0.07 V</td>
<td></td>
</tr>
</tbody>
</table>

**Frequency range of 10 Hz f<20 Hz is designated value.**

#### AC voltage detection function

<table>
<thead>
<tr>
<th>Range (detection sensitivity)</th>
<th>Detection voltage range</th>
<th>Detection target frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hi</td>
<td>40 V to 600 V</td>
<td>50/60 Hz</td>
</tr>
<tr>
<td>Lo</td>
<td>80 V to 600 V</td>
<td>50/60 Hz</td>
</tr>
</tbody>
</table>

#### Frequency

<table>
<thead>
<tr>
<th>Range</th>
<th>Resolution</th>
<th>Measurement accuracy</th>
<th>Open terminal voltage</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.999 Hz</td>
<td>0.001 Hz</td>
<td>±0.1% rdg. ±0.003 Hz</td>
<td>2.0 V DC or less</td>
</tr>
</tbody>
</table>

#### Continuity check

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

#### Diode

- **Short-circuit current**: 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

<table>
<thead>
<tr>
<th>Range</th>
<th>Resolution</th>
<th>Measurement accuracy</th>
<th>Open terminal voltage</th>
</tr>
</thead>
<tbody>
<tr>
<td>600.0 Ω</td>
<td>0.1 Ω</td>
<td>±0.7% rdg. ±0.05 Ω</td>
<td>2.0 V DC or less</td>
</tr>
<tr>
<td>60.0 kΩ</td>
<td>0.01 kΩ</td>
<td>±0.7% rdg. ±0.05 kΩ</td>
<td>2.0 V DC or less</td>
</tr>
<tr>
<td>600.0 kΩ</td>
<td>0.1 kΩ</td>
<td>±0.7% rdg. ±0.05 kΩ</td>
<td>2.0 V DC or less</td>
</tr>
</tbody>
</table>

#### Electrostatic capacity

<table>
<thead>
<tr>
<th>Range</th>
<th>Resolution</th>
<th>Measurement accuracy</th>
<th>Open terminal voltage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.000 μF</td>
<td>0.001 μF</td>
<td>±1.9% rdg. ±0.005 μF</td>
<td>2.0 V DC or less</td>
</tr>
<tr>
<td>10.00 μF</td>
<td>0.01 μF</td>
<td>±1.9% rdg. ±0.005 μF</td>
<td>2.0 V DC or less</td>
</tr>
<tr>
<td>100.0 μF</td>
<td>0.1 μF</td>
<td>±1.9% rdg. ±0.005 μF</td>
<td>2.0 V DC or less</td>
</tr>
</tbody>
</table>

#### Temperature

<table>
<thead>
<tr>
<th>Thermocouple type</th>
<th>Range</th>
<th>Resolution</th>
<th>Accuracy</th>
</tr>
</thead>
<tbody>
<tr>
<td>K</td>
<td>-40.0°F to 660.0°F</td>
<td>±1.0°F</td>
<td>±0.5% rdg. ±3.0°F</td>
</tr>
<tr>
<td></td>
<td>-40.0°F to 752.0°F</td>
<td>±1.0°F</td>
<td>±0.5% rdg. ±4.0°F</td>
</tr>
</tbody>
</table>
Order code/ Options

<table>
<thead>
<tr>
<th>Model No. (Order Code)</th>
<th>(Note)</th>
<th>Model No. (Order Code)</th>
<th>(Note)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CM4371</td>
<td></td>
<td>CM4141</td>
<td></td>
</tr>
<tr>
<td>CM4372</td>
<td>Built in Bluetooth® wireless technology</td>
<td>CM4142</td>
<td>Built in Bluetooth® wireless technology</td>
</tr>
<tr>
<td>CM4373</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CM4374</td>
<td>Built in Bluetooth® wireless technology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CM4375</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CM4376</td>
<td>Built in Bluetooth® wireless technology</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TEST LEAD L9207-10 Options**

![TEST LEAD L9207-10 Options](image)

- Cable length: 90 cm (2.95 ft) with one each red and black caps
- L4933 and L4934 probe tips (at right) can be used on L9207-10 Test Leads.

**CONNECTION CABLE L4930 Options**

![CONNECTION CABLE L4930 Options](image)

- Probe tips (at right) can be used on L4930 connection cables.
- Attaching the L4937 magnet generally compatible with M6 pan screws

**Other options**

- 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

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All information correct as of July 31, 2019. All specifications are subject to change without notice.