

HIOKI

AC LEAKAGE CLAMP METER CM4002, CM4003

NEW

Solve GFCI and RCD problems quickly

Prevent unexpected downtime!
Identify potential problems and
avoid large problems



ϕ 40 mm

AC A: 0.060 mA to 200.0 A

CAT IV: 300 V
CAT III: 600 V (CM4002)

CAT III: 300 V (CM4003)

IEC/EN 61557-13: Class2, 30 A/m



Easy visualization of intermittent trip events

Connect the WIRELESS ADAPTER Z3210 to add wireless communications. The CM4002 and CM4003 allows you to track changes in leakage current over time, helping to identify potential problems before they turn into major failures.



Specifications (1-year accuracy guarantee, 1-year post-adjustment accuracy guarantee, 3-year product warranty)

| | CM4002 | CM4003 | | CM4002 | CM4003 |
|---|--|--|---|---|--------------------|
| AC measurement method | True RMS | | Continuous operating time | Approx. 48 hr. (without Z3210 installed) Approx. 30 hr. (with Z3210 installed and using wireless communications) | |
| Functions | Max/ Min/ AVG/ PEAK MAX/ PEAK MIN value display; Low-pass filter (-3dB at 180Hz ±30Hz); Display value hold and auto hold; Backlight; Auto power save; Buzzer sound; Event count display; Comparator; Simple event recording; Rush current measurement | | Dimensions and weight | 64 mm (2.52 in.) W × 233 mm (9.17 in.) H × 37 mm (1.46 in.) D, 400 g (14.1 oz.) | |
| Operating temperature range | -10°C to 65°C | | Operating locations | Indoors, pollution level 2, elevation of 2000m (6561 ft.) or less | |
| Operating humidity range (non-condensing) | -10°C to 40°C, 80% RH or less 40°C to 45°C, 60% RH or less 45°C to 65°C, 50% RH or less | | Diameter of measurable conductors | φ 40 mm (1.57 in.) | |
| Storage temperature range | -30°C to 70°C | | Jaw dimensions | 75 mm (2.95 in.) × 20 mm (0.79 in.) | |
| Power supply | AA-size alkaline battery (LR6) × 2 | AA-size alkaline battery (LR6) × 2, AC Adapter Z1013 (5 V DC, 2.6 A) | Dust and water resistance | IP 40 (with jaws closed) | |
| | | | Standard compliance | Safety: EN 61010 (type A current sensor) EMC: EN 61326 | |
| | | | Other applicable standards | IEC/EN 61557-13: Class 2, ≤ 30 A/m | |
| | | | Maximum rated conductor-to-ground voltage | 300 V AC (CAT IV) 600 V AC (CAT III) | 300 V AC (CAT III) |

Measurement specifications (CM4002/CM4003)

| | | | | |
|-------------------------------------|---|------------|----------------------|---|
| Defined accuracy range | 0.060 mA to 200.0 A | | | |
| Zero display range | 5 digits or less | | | |
| AC current | Range | Resolution | Measurement accuracy | |
| | | | 45 Hz ≤ f ≤ 400 Hz | 15 Hz ≤ f < 45 Hz 400 Hz < f ≤ 2 kHz |
| | 6.000 mA | 0.001 mA | ±1.0% rdg. ±0.005 mA | ±2.0% rdg. ±0.005 mA |
| | 60.00 mA | 0.01 mA | ±1.0% rdg. ±0.05 mA | ±2.0% rdg. ±0.05 mA |
| | 600.0 mA | 0.1 mA | ±1.0% rdg. ±0.5 mA | ±2.0% rdg. ±0.5 mA |
| | 6.000 A | 0.001 A | ±1.0% rdg. ±0.005 A | ±2.0% rdg. ±0.005 A |
| | 60.00 A | 0.01 A | ±1.5% rdg. ±0.05 A | ±2.0% rdg. ±0.05 A |
| | 200.0 A | 0.1 A | ±1.5% rdg. ±0.5 A | ±2.0% rdg. ±0.5 A |
| Display refresh rate | 5 times/sec. | | | |
| Crest factor | 3 (other than 200.0 A range), 1.5 (200.0 A range) | | | |
| Effects of external magnetic fields | 4 mA or less (with a 400 A/m AC, 50 Hz/60 Hz external magnetic field) | | | |
| Frequency measurement | 15.0 Hz to 2000 Hz | | | |

Output specifications (CM4003 only)

| Output parameters | RMS (RMS value output), WAVE (waveform output) | |
|-------------------|--|--|
| Output level | RMS | 600 mV DC f.s. (other than 200.0 A range) 200 mV DC f.s. (200.0 A range) |
| | WAVE | 600 mV AC f.s. (other than 200.0 A range) 200 mV AC f.s. (200.0 A range) |
| Output accuracy | RMS | ±1.0% rdg. ±5 mV (for display digits) |
| | WAVE | ±3.0% rdg. ±10 mV (45 Hz to 400 Hz) ±5.0% rdg. ±10 mV (15 Hz to 45 Hz, 400 Hz to 2 kHz) |
| Output response | RMS | Refresh rate: 5 times/sec. |
| | WAVE | Frequency band: 15 Hz to 15 kHz (within ±3 dB) |

Model/Accessories

Model: AC LEAKAGE CLAMP METER CM4002, CM4003

| | | |
|------------------------|-----------|---|
| Model No. (order code) | CM4002 | |
| | CM4002-90 | CM4002 + Wireless Adapter Z3210 (Recommended) |
| | CM4003 | |
| | CM4003-90 | CM4003 + Wireless Adapter Z3210 (Recommended) |

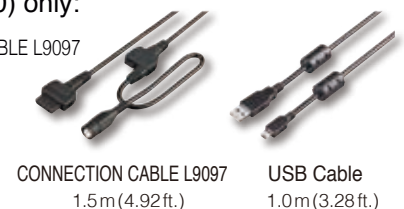
CM4002 (-90) / CM4003 (-90):

Product
CARRYING CASE C0203
User Manual and Operating Precautions
AA-size alkaline battery (LR6) × 2



CM4003 (-90) only:

CONNECTION CABLE L9097
USB Cable



CONNECTION CABLE L9097 1.5m (4.92 ft.)
USB Cable 1.0m (3.28 ft.)

Options



WIRELESS ADAPTER Z3210
Adds Bluetooth® wireless communications



CARRYING CASE C0203
External dimensions: 135 mm (5.31 in.) W × 265 mm (10.43 in.) H × 65 mm (2.56 in.) D



CONVERSION ADAPTER 9704
In: BNC female, out: banana male



AC ADAPTER Z1013
5 V DC, 2.6 A



CONNECTION CABLE L9097
1.5m (4.92 ft.), output terminal: BNC, power terminal: USB-C

The Bluetooth® word mark and logo are registered trademarks of Bluetooth SIG Inc. and used under license by HIOKI E.E. Corporation.

HIOKI
HIOKI E. E. CORPORATION

HEADQUARTERS
81 Koizumi,
Ueda, Nagano 386-1192 Japan
<https://www.hioki.com/>



Scan for all regional contact information