

Display Unit Specifications

(Guaranteed accuracy period: 3 years)

Input/output and measurement specifications

| | |
|----------------------------|--|
| Measured parameters | DC, AC, DC+AC, frequency (Hz) |
| Measurement method | True RMS measurement |
| Output methods | WAVE, RMS, PEAK, FREQ |
| Output impedance | 50 Ω (±5%) |
| Input connector | HIOKI PL14 |
| Display refresh times | FAST: 0.2 sec. / NORMAL: 0.2 sec. / SLOW: 1.0 sec. (when using the Hz output method, SLOW: 3 sec.) |
| Output refresh times | PEAK ---FAST: 0.02 sec. / NORMAL: 0.2 sec. / SLOW: 1 sec. FREQ ---FAST: 0.2 sec. / NORMAL: 0.2 sec. / SLOW: 3.0 sec. (WAVE and RMS use analog output.) |
| Peak detection interval | 2 ms or greater (with PEAK MAX, PEAK MIN, or PEAK output) |
| Zero display range | 29 count or less for AC and DC+AC RMS values |
| Crest factor | 3 at 5000 count or 2.5 at 6000 count for AC and AC+DC |
| Typical accuracy (display) | DC: ±0.3% rdg. ±8 dgt. / AC: ±0.3% rdg. ±8 dgt. (RMS) / DC+AC: ±0.3% rdg. ±12 dgt. (RMS) / Frequency: ±0.1% rdg. ±0.01 Hz |
| Typical accuracy (output) | DC: ±0.5% rdg. ±0.8 mV / Current: ±0.5% rdg. ±0.8 mV / DC+AC: ±0.5% rdg. ±1.2 mV / Frequency: ±0.3% rdg. ±2.2 mV |

*For range and output rates, see pages 10 and 11.

General specifications

| | |
|--|--|
| Operating and storage temperature and humidity range | -25 °C to 65 °C (-13 °F to 149 °F) , 80% RH (non-condensing, with batteries removed) |
| Dust and water resistance | IP54 (with sensor connected and caps fitted to AC adapter and power connector) |
| Standard compliance | Safety: EN61010 EMC: EN61326, EN61000 |
| Power supply | AA alkaline battery (LR6) × 2 / 5 V to 15 V external power supply |
| Maximum rated output | 2.5 VA |
| Continuous operating time | Max. approx. 16 hours (with backlight off using WAVE or RMS output and CT7631, CT7636, or CT7642 sensor) |
| External dimensions and mass | Approx. 52 mm (2 in) W × 163 mm (6.4 in) H × 37 mm (1.5 in) D, approx. 220 g (7.76 oz)(with protector and batteries) |
| Accessories | AA alkaline battery (LR6) × 2, protector (attach to unit), instruction manual |

Functions

| | | | |
|-------------------------------------|--|------------------------------------|-----|
| Auto-range function | Automatic configuration of optimal range (can also be set manually) | Display value hold function | YES |
| Zero-adjustment at power-on | Automatic zero-adjustment when powered on | Backlight | YES |
| Analysis display | Display of maximum, minimum, and average values as well as maximum and minimum crest values since activation of analysis display | Auto-power off | YES |
| Filter | 180 Hz low-pass filter, on/off pass band setting | Configuration save function | YES |
| Output amplification | Output at ×10 normal level | Key lock function | YES |
| Wireless data communications | Wireless transmission of measurement data using Bluetooth® (CM7291 only) | | |

Bluetooth® specifications (CM7291 only)

| | |
|-------------------------------|--|
| Display | Display of measured values on an iOS or Android handset using Bluetooth® communications |
| Interface | Bluetooth® 4.0 LE |
| Communications range | 10 m, line of sight |
| Communications profile | GATT(Generic Attribute Profile) |
| Supported devices | iOS (iPhone 5, third-generation iPad, iPad mini, iPad Pro, and fifth-generation iPod touch or later) Android (Bluetooth® Smart-ready and Bluetooth® Smart-compatible models only) |
| Supported OS | iOS 8 or later, Android™ 4.3 or later |

GENNECT Cross dedicated app specifications

| | |
|------------------------------------|--|
| Interface | Bluetooth® 4.0LE (Bluetooth® SMART) |
| Supported devices | iOS (iPhone®5, 3rd generation iPad®, iPad mini™, iPad Pro™, 5th generation iPod Touch® or later) 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 Only 1 device can be used at any one time when using the CM7291 as a current waveform monitor current waveform |

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

Sensor specifications





| | CT7631 / CT7731 | CT7636 / CT7736 | CT7642 / CT7742 |
|--|---|--|---|
| |  |  |  |
| Frequency band | CT7631, CT7636, CT7642: DC to 10 kHz (-3 dB) / CT7731, CT7736, CT7742: DC to 5 kHz (-3 dB) | | |
| Rated measurement current | 100 A AC/DC | 600 A AC/DC | 2000 A AC/DC |
| Measurable conductor diameter | ø 33 mm (1.3 in) or less | | |
| Output connector | HIOKI PL14 | | |
| Typical accuracy (continuous input) | ±1.0% rdg. ±0.5% f.s. (DC, 45 to 66 Hz) ±2.0% rdg. ±0.5% f.s. (66 Hz to 500 Hz) | ±2.0% rdg. ±0.5% f.s. (DC, 45 to 66 Hz) ±3.0% rdg. ±0.5% f.s. (66 Hz to 1 kHz) | ±1.5% rdg. ±0.5% f.s. (DC, 45 to 66 Hz) ±2.5% rdg. ±1.0% f.s. (66 Hz to 1 kHz) |
| Typical accuracy (phase) | ±1.8 deg. (up to 66 Hz) | ±1.8 deg. (up to 66 Hz) | ±2.3 deg. (up to 66 Hz) |
| Operating and storage temperature and humidity range | -25°C to 65°C (-13 °F to 149 °F) , 80% RH (non-condensing) | | |
| Dust and water resistance | IP40 | Jaws and barriers: IP50 / Grip: IP54 (when measuring insulated conductors only) (Do not use when wet.) | |
| Standard compliance | Safety: EN61010 EMC: EN61326 | | |
| Maximum rated input-to-ground voltage ¹ | 600 V AC/DC (CAT IV) | 1000 V AC/DC (CAT III) / 600 V AC/DC (CAT IV) | |
| External dimensions and mass ² | Approx. 58 mm (2.28 in) Wx132 mm (5.19 in) Hx18 mm (0.7 in) D Approx. 250 g (8.8 oz) | Approx. 64 mm (2.51 in) Wx160 mm (6.29 in) Hx34 mm (1.33 in) D Approx. 320 g (11.2 oz) | Approx. 64 mm (2.51 in) Wx195 mm (7.67 in) Hx34 mm (1.33 in) D Approx. 510 g (17.9 oz) |
| Jaw dimensions | Approx. 66 mm (2.6 in) W x 13 mm (0.5 in) D | Approx. 69 mm (2.7 in) W x 14 mm (0.6 in) D | Approx. 92 mm (3.6 in) W x 18 mm (0.7 in) D |
| Cable length | Approx. 2.5 m (8.2 ft) (extendable to max. of 100 m (328 ft) with optional products; subject to limits imposed by connected device) | | |

*1: Anticipated transient overvoltage: 8000 V *2: Not including dimensions of protruding parts, lever, or jaws. (Guaranteed accuracy period: 3 years)

| | CT7044 | CT7045 | CT7046 |
|--|---|--|--|
| |  |  |  |
| Frequency band | 10 Hz to 50 kHz (Within ±3 dB) | | |
| Rated measurement current | AC 6000 A | | |
| Measurable conductor diameter | ø 100 mm (3.93 in) or less | ø 180 mm (7.08 in) or less | ø 254 mm (10 in) or less |
| Available ranges*1 | 600 A AC / 6000 A AC *Range selection is controlled by a supported instrument. | | |
| Output connector | HIOKI PL14 | | |
| Typical accuracy (continuous input) | ±1.5% rdg. ±0.25% f.s. (f.s. is determined by the internal range) (45 to 66 Hz, in center of flexible loop) | | |
| Typical accuracy (phase) | Within ±1.0° (45 to 66 Hz) | | |
| Operating and storage temperature and humidity range | -25°C to 65°C (-13 °F to 149 °F) Humidity: Under 40°C, 80% RH or less; from 40°C to 65°C, maximum relative humidity reduces linearly from 80% RH at 40°C to 25% RH at 65°C (non-condensing). | | |
| Dust and water resistance | IP54 (when connected to a supported instrument) (Do not make measurements when wet.) | | |
| Standard compliance | Safety : EN61010 EMC : EN61326 | | |
| Maximum rated input-to-ground voltage ² | 1000 V AC (CAT III) AC 600 V AC (CATIV) | | |
| Dimensions (circuit box) and weight | Approx. 25 mm (0.98 in) Wx72 mm (2.83 in) Hx20 mm (0.78 in) D Approx. 160 g (5.64 oz) | Approx. 25 mm (0.98 in) Wx72 mm (2.83 in) Hx20 mm (0.78 in) D Approx. 174 g (6.13 oz) | Approx. 25 mm (0.98 in) Wx72 mm (2.83 in) Hx20 mm (0.78 in) D Approx. 186 g (6.56 oz) |
| Flexible loop length and cross-sectional diameter | Approx. 390 mm (15.3 in) Cross-section : Approx. ø7.4mm (0.29 in) Tip cap : Approx. ø9.9mm (0.38 in) | Approx. 630 mm (24.8 in) Cross-section : Approx. ø7.4mm (0.29 in) Tip cap : Approx. ø9.9mm (0.38 in) | Approx. 870 mm (34.2 in) Cross-section : Approx. ø7.4mm (0.29 in) Tip cap : Approx. ø9.9mm (0.38 in) |
| Cable length | Approx. 2300 mm (90.5 in) (between flexible loop and circuit box) Approx. 210 mm (8.26 in) (output cable) | | |

The CT7044, CT7045, CT7046 are a flexible current sensor for measuring large currents. There are not suitable for measuring minute current such as leakage current.

*1 : Sensor alone *2 : Anticipated transient overvoltage: 8000 V (Guaranteed accuracy period: 1 years)

| | CT7126 | CT7131 | CT7136 | CT7116 |
|--|--|---|---|--|
| |  |  |  |  |
| Frequency band | Accuracy specified to 20 kHz | | | 40 kHz to 5 kHz |
| Rated measurement current | AC 60 A | AC 100 A | AC 600 A | AC 6 A |
| Measurable conductor diameter | ø 15 mm (0.59 in) or less | | ø 46 mm (1.8 in) or less | ø 40 mm (1.57 in) or less, insulated conductor |
| Output connector | HIOKI PL14 | | | |
| Typical accuracy (continuous input) | ±0.3% rdg ±0.01% f.s. (45 to 66Hz) | ±0.3% rdg ±0.02% f.s. (45 to 66Hz) | ±0.3% rdg ±0.01% f.s. (45 to 66Hz) | ±1.0% rdg ±0.05% f.s. (45 to 66Hz) |
| Typical accuracy (phase) | ±2.0 deg. | ±1.0 deg. | ±0.5 deg. | ±3 deg. |
| Operating and storage temperature and humidity range | Operating : -10°C to 50°C (14 °F to 122 °F) 80% RH or less , Storage : -20°C to 60°C (-4 °F to 140 °F) 80% RH or less , (non-condensing) | | | -25°C to 65°C (-13 °F to 149 °F) 80% RH or less , (non-condensing) |
| Dust and water resistance | IP40 | | | |
| Standard compliance | Safety : EN61010 EMC : EN61326 | | | |
| Maximum rated input-to-ground voltage ¹ | AC300V (CATIII) | | AC1000V (CATIII) AC600V (CATIV) | insulated conductor |
| Dimensions (circuit box) and weight ² | Approx. 46 mm (1.8 in) Wx135 mm (5.31 in) Hx21 mm (0.82 in) D Approx. 190 g (6.7 oz) | | Approx. 78 mm (3.07 in) Wx152 mm (5.98 in) Hx42 mm (1.65 in) D Approx. 350 g (12.3 oz) | Approx. 74 mm (2.91 in) Wx145 mm (5.7 in) Hx42 mm (1.65 in) D Approx. 350 g (12.3 oz) |
| Cable length | Approx. 2.5 m (8.2 ft) (extendable to max. of 100 m (328 ft) with optional products; subject to limits imposed by connected device) | | | |

*1: Anticipated transient overvoltage: (CT7126,CT7131) 4000V(CT7136)8000V *2: Not including dimensions of protruding parts, lever, or jaws. (Guaranteed accuracy period: 1 years)

Combined accuracy

CT7631 / CT7731 + CM7290 or CM7291

Display accuracy

| CM7290 range | Amplitude | | DC function | AC function | AC + DC function | |
|--------------|-----------|------------------|--------------------|--------------------|--------------------|--------------------|
| | DC | AC / AC+DC | DC | 45 Hz ≤ f ≤ 66Hz | DC | 45 Hz ≤ f ≤ 66Hz |
| 60.00 A | I ≤ 60 A | 3 A ≤ I ≤ 60 A | ±1.3% rdg. ±0.58 A | ±1.3% rdg. ±0.58 A | ±2.5% rdg. ±0.65 A | ±1.3% rdg. ±0.62 A |
| 100.0 A | I ≤ 100 A | 30 A ≤ I ≤ 100 A | ±1.3% rdg. ±1.3 A | ±1.3% rdg. ±1.3 A | ±2.5% rdg. ±2.0 A | ±1.3% rdg. ±1.7 A |

Output accuracy

| CM7290 range (Output rate) | Amplitude | | DC function | AC function | | |
|-------------------------------|-----------|------------------|--------------------|----------------------------|--------------------|--|
| | WAVE | RMS | WAVE output | WAVE output | RMS output | |
| | | | DC | 45 Hz ≤ f ≤ 66Hz | | |
| 60.00 A (10 mV / A) | I ≤ 60 A | 3 A ≤ I ≤ 60 A | ±1.5% rdg. ±5.8 mV | ±1.5% rdg. ±5.8 mV (±2.0°) | ±1.8% rdg. ±5.8 mV | |
| 100.0 A (1 mV / A) | I ≤ 100 A | 30 A ≤ I ≤ 100 A | ±1.5% rdg. ±1.3 mV | ±1.5% rdg. ±1.3 mV (±2.0°) | ±1.8% rdg. ±1.3 mV | |

| CM7290 range (Output rate) | Amplitude | | AC + DC function | | | |
|-------------------------------|-----------|------------------|---------------------|----------------------------|--------------------|--------------------|
| | WAVE | RMS | WAVE output (phase) | | RMS output | |
| | | | DC | 45 Hz ≤ f ≤ 66Hz | DC | 45 Hz ≤ f ≤ 66Hz |
| 60.00 A (10 mV / A) | I ≤ 60 A | 3 A ≤ I ≤ 60 A | ±2.5% rdg. ±6.2 mV | ±1.5% rdg. ±6.2 mV (±2.0°) | ±2.7% rdg. ±6.2 mV | ±1.8% rdg. ±6.2 mV |
| 100.0 A (1 mV / A) | I ≤ 100 A | 30 A ≤ I ≤ 100 A | ±2.5% rdg. ±1.7 mV | ±1.5% rdg. ±1.7 mV (±2.0°) | ±2.7% rdg. ±1.7 mV | ±1.8% rdg. ±1.7 mV |

CT7636 / CT7736 + CM7290 or CM7291

Display accuracy

| CM7290 range | Amplitude | | DC function | AC function | AC + DC function | |
|--------------|-----------|------------------|--------------------|--------------------|--------------------|--------------------|
| | DC | AC / AC+DC | DC | 45 Hz ≤ f ≤ 66Hz | DC | 45 Hz ≤ f ≤ 66Hz |
| 60.00 A | I ≤ 60 A | 3 A ≤ I ≤ 60 A | ±2.3% rdg. ±3.08 A | ±2.3% rdg. ±3.08 A | ±3.5% rdg. ±3.15 A | ±2.3% rdg. ±3.12 A |
| 600.0 A | I ≤ 600 A | 30 A ≤ I ≤ 600 A | ±2.3% rdg. ±3.8 A | ±2.3% rdg. ±3.8 A | ±3.5% rdg. ±4.5 A | ±2.3% rdg. ±4.2 A |

Output accuracy

| CM7290 range (Output rate) | Amplitude | | DC function | AC function | | |
|-------------------------------|-----------|------------------|---------------------|-----------------------------|---------------------|--|
| | WAVE | RMS | WAVE output | WAVE output | RMS output | |
| | | | DC | 45 Hz ≤ f ≤ 66Hz | | |
| 60.00 A (10 mV / A) | I ≤ 60 A | 3 A ≤ I ≤ 60 A | ±2.5% rdg. ±30.8 mV | ±2.5% rdg. ±30.8 mV (±2.0°) | ±2.8% rdg. ±30.8 mV | |
| 600.0 A (1 mV / A) | I ≤ 600 A | 30 A ≤ I ≤ 600 A | ±2.5% rdg. ±3.8 mV | ±2.5% rdg. ±3.8 mV (±2.0°) | ±2.8% rdg. ±3.8 mV | |

| CM7290 range (Output rate) | Amplitude | | AC + DC function | | | |
|-------------------------------|-----------|------------------|---------------------|-----------------------------|---------------------|---------------------|
| | WAVE | RMS | WAVE output (phase) | | RMS output | |
| | | | DC | 45 Hz ≤ f ≤ 66Hz | DC | 45 Hz ≤ f ≤ 66Hz |
| 60.00 A (10 mV / A) | I ≤ 60 A | 3 A ≤ I ≤ 60 A | ±3.5% rdg. ±31.2 mV | ±2.5% rdg. ±31.2 mV (±2.0°) | ±3.7% rdg. ±31.2 mV | ±2.8% rdg. ±31.2 mV |
| 600.0 A (1 mV / A) | I ≤ 600 A | 30 A ≤ I ≤ 600 A | ±3.5% rdg. ±4.2 mV | ±2.5% rdg. ±4.2 mV (±2.0°) | ±3.7% rdg. ±4.2 mV | ±2.8% rdg. ±4.2 mV |

CT7642 / CT7742 + CM7290 or CM7291

Display accuracy

| CM7290 range | Amplitude | | DC function | AC function | AC + DC function | | |
|--------------|------------|---------------------|--------------------|--------------------|--------------------|--------------------|------------------|
| | DC | AC / AC+DC | DC | 45 Hz ≤ f ≤ 66Hz | DC | 45 Hz ≤ f ≤ 66Hz | |
| 600.0 A | I ≤ 600 A | 30 A ≤ I ≤ 600 A | ±1.8% rdg. ±10.8 A | ±1.8% rdg. ±10.8 A | ±3.0% rdg. ±11.5 A | ±1.8% rdg. ±11.2 A | |
| 2000 A | I ≤ 2000 A | 300 A ≤ I ≤ 1800 A | | ±1.8% rdg. ±18 A | | ±3.0% rdg. ±25 A | ±1.8% rdg. ±22 A |
| | | 1800 A < I ≤ 2000 A | | ±2.3% rdg. ±18 A | | | ±2.3% rdg. ±22 A |

Output accuracy

| CM7290 range (Output rate) | Amplitude | | DC function | AC function | | |
|-------------------------------|-----------------------------------|---------------------|---------------------|-----------------------------|---------------------|--|
| | WAVE | RMS | WAVE output | WAVE output (phase) | RMS output | |
| | | | DC | 45 Hz ≤ f ≤ 66Hz | | |
| 600.0 A (1 mV / A) | I ≤ 600 A | 30 A ≤ I ≤ 600 A | ±2.0% rdg. ±10.8 mV | ±2.0% rdg. ±10.8 mV (±2.5°) | ±2.3% rdg. ±10.8 mV | |
| 2000 A (0.1 mV / A) | I ≤ 1800 A 1800 A < I ≤ 2000 A | 300 A ≤ I ≤ 1800 A | ±2.0% rdg. ±1.8 mV | ±2.0% rdg. ±1.8 mV (±2.5°) | ±2.3% rdg. ±1.8 mV | |
| | | 1800 A < I ≤ 2000 A | | | ±2.8% rdg. ±1.8 mV | |

| CM7290 range (Output rate) | Amplitude | | AC + DC function | | | |
|-------------------------------|-----------------------------------|---------------------|---------------------|-----------------------------|---------------------|---------------------|
| | WAVE | RMS | WAVE output (phase) | | RMS output | |
| | | | DC | 45 Hz ≤ f ≤ 66Hz | DC | 45 Hz ≤ f ≤ 66Hz |
| 600.0 A (1 mV / A) | I ≤ 600 A | 30 A ≤ I ≤ 600 A | ±3.0% rdg. ±11.2 mV | ±2.0% rdg. ±11.2 mV (±2.5°) | ±3.2% rdg. ±11.2 mV | ±2.3% rdg. ±11.2 mV |
| 2000 A (0.1 mV / A) | I ≤ 1800 A 1800 A < I ≤ 2000 A | 300 A ≤ I ≤ 1800 A | ±3.0% rdg. ±2.2 mV | ±2.5% rdg. ±2.2 mV (±2.5°) | ±3.2% rdg. ±2.2 mV | ±2.3% rdg. ±2.2 mV |
| | | 1800 A < I ≤ 2000 A | | | | ±2.8% rdg. ±2.2 mV |

CT7044 / CT7045 / CT7046 + CM7290 (CM7291)

Display accuracy

| CM7290 range | Amplitude | AC function |
|--------------|--------------------|--------------------|
| | | 45 Hz ≤ f ≤ 66Hz |
| 60.00 A | 3 A ≤ I ≤ 60 A | ±1.8% rdg. ±1.58 A |
| 600.0 A | 30 A ≤ I ≤ 600 A | ±1.8% rdg. ±2.3 A |
| 6000 A | 300 A ≤ I ≤ 6000 A | ±2.3% rdg. ±23 A |

Output accuracy

| CM7290 range (Output rate) | Amplitude | | AC function | |
|-------------------------------|------------|--------------------|-----------------------------|--|
| | WAVE | RMS | WAVE output (phase) | |
| | | | 45 Hz ≤ f ≤ 66Hz | |
| 60.00 A (10 mV / A) | I ≤ 60 A | 3 A ≤ I ≤ 60 A | ±2.0% rdg. ±15.8 mV (±1.2°) | |
| 600.0 A (1 mV / A) | I ≤ 600 A | 30 A ≤ I ≤ 600 A | ±2.0% rdg. ±2.3 mV (±1.2°) | |
| 6000 A (0.1 mV / A) | I ≤ 6000 A | 300 A ≤ I ≤ 6000 A | ±2.0% rdg. ±2.3 mV (±1.2°) | |

*For full combination accuracy tables, Details of each sensor, see the product page on the Hioki website

CT7126 + CM7290 (CM7291)**Display accuracy**

| CM7290 range | Amplitude | AC function |
|--------------|-----------------------|---------------------|
| | | 45 Hz ≤ f ≤ 66Hz |
| 600.0 mA | 40 mA ≤ I ≤ 600 mA | ±1.6% rdg. ±7.3 A |
| 6.000 A | 0.300 A ≤ I ≤ 6.000 A | ±0.6% rdg. ±0.014 A |
| 60.00 A | 3.00 A < I ≤ 60.00 A | ±0.6% rdg. ±0.09 A |

Output accuracy

| CM7290 range (Output rate) | Amplitude | | AC function | |
|-------------------------------|-----------------------|-----------------------|---------------------|---------------------|
| | | | WAVE output (phase) | RMS output |
| | WAVE | RMS | 45 Hz ≤ f ≤ 66Hz | |
| 600.0 mA (1 mV / A) | 40 mA ≤ I ≤ 600 mA | 40 mA ≤ I ≤ 600 mA | ±1.8% rdg. ±7.3 mV | ±1.8% rdg. ±7.3 mV |
| 6.000 A (100 mV / A) | 0.000 A ≤ I ≤ 6.000 A | 0.300 A ≤ I ≤ 6.000 A | ±0.8% rdg. ±1.4 mV | ±1.1% rdg. ±1.4 mV |
| 60.00 A (10 mV / A) | 0.00 A ≤ I ≤ 60.00 A | 3.00 A < I ≤ 60.00 A | ±0.8% rdg. ±0.86 mV | ±1.1% rdg. ±0.86 mV |

CT7131 + CM7290 (CM7291)**Display accuracy**

| CM7290 range | Amplitude | AC function |
|--------------|----------------------|--------------------|
| | | 45 Hz ≤ f ≤ 66Hz |
| 60.00 A | 3.00 A ≤ I ≤ 60.00 A | ±0.6% rdg. ±0.1 A |
| 100.0 A | 30.0 A ≤ I ≤ 100.0 A | ±0.6% rdg. ±0.82 A |

Output accuracy

| CM7290 range (Output rate) | Amplitude | | AC function | |
|-------------------------------|----------------------|----------------------|---------------------|---------------------|
| | | | WAVE output | RMS output |
| | WAVE | RMS | 45 Hz ≤ f ≤ 66Hz | |
| 60.00 mA (10 mV / A) | 0.00 A ≤ I ≤ 60.00 A | 3.00 A ≤ I ≤ 60.00 A | ±0.8% rdg. ±1 mV | ±1.1% rdg. ±1 mV |
| 100.0 A (1 mV / A) | 0.0 A ≤ I ≤ 100.0 A | 30.0 A ≤ I ≤ 100.0 A | ±0.8% rdg. ±0.82 mV | ±1.1% rdg. ±0.82 mV |

CT7136 + CM7290 (CM7291)**Display accuracy**

| CM7290 range | Amplitude | AC function |
|--------------|-----------------------|---------------------|
| | | 45 Hz ≤ f ≤ 66Hz |
| 6.000 A | 0.400 A ≤ I ≤ 6.000 A | ±1.6% rdg. ±0.073 A |
| 60.00 A | 3.00 A ≤ I ≤ 60.00 A | ±0.6% rdg. ±0.14 A |
| 600.0 A | 30.0 A < I ≤ 600.0 A | ±0.6% rdg. ±0.86 A |

Output accuracy

| CM7290 range (Output rate) | Amplitude | | AC function | |
|-------------------------------|-----------------------|-----------------------|---------------------|---------------------|
| | | | WAVE output | RMS output |
| | WAVE | RMS | 45 Hz ≤ f ≤ 66Hz | |
| 6.000 A (100 mV / A) | 0.400 A ≤ I ≤ 6.000 A | 0.400 A ≤ I ≤ 6.000 A | ±1.8% rdg. ±7.3 mV | ±1.8% rdg. ±7.3 mV |
| 60.00 A (10 mV / A) | 0.000 A ≤ I ≤ 60.00 A | 3.00 A ≤ I ≤ 60.00 A | ±0.8% rdg. ±1.4 mV | ±1.1% rdg. ±1.4 mV |
| 600.0 A (1 mV / A) | 0.0 A < I ≤ 600.0 A | 30.0 A ≤ I ≤ 600.0 A | ±0.8% rdg. ±0.86 mV | ±1.1% rdg. ±0.86 mV |

CT7116 + CM7290 (CM7291)**Display accuracy**

| CM7290 range | Amplitude | AC function |
|--------------|----------------------|-------------------|
| | | 45 Hz ≤ f ≤ 66Hz |
| 60.00 mA | 4.00mA ≤ I ≤ 60.00mA | ±2.3%rdg. ±3.13mA |
| 600.0 mA | 30.0mA ≤ I ≤ 600.0mA | ±1.3%rdg. ±3.8mA |
| 6.000 A | 0.300A ≤ I ≤ 6.000A | ±1.3%rdg. ±0.011A |

Output accuracy

| CM7290 range (Output rate) | Amplitude | | AC function | |
|-------------------------------|----------------------|----------------------|-------------------|-------------------|
| | | | WAVE output | RMS output |
| | WAVE | RMS | 45 Hz ≤ f ≤ 66Hz | |
| 60.00 mA (10mV / mA) | 4.00mA ≤ I ≤ 60.00mA | 4.00mA ≤ I ≤ 60.00mA | ±2.5%rdg. ±31.3mV | ±2.5%rdg. ±31.3mV |
| 600.0 mA (1 mV / mA) | 0.0mA ≤ I ≤ 600.0mA | 30.0mA ≤ I ≤ 600.0mA | ±1.5%rdg. ±3.8mV | ±1.8%rdg. ±3.8mV |
| 6.000 A (100 mV / A) | 0.000A ≤ I ≤ 6.000A | 0.300A ≤ I ≤ 6.000A | ±1.5%rdg. ±1.1mV | ±1.8%rdg. ±1.1mV |

Lineup

DISPLAY UNIT



CM7290



CM7291



Model : DISPLAY UNIT CM7290

Model No. (Order Code) (Note)

CM7290

CM7291 (with built-in Bluetooth® wireless technology)

Accessories: LR6 alkaline batteries ×2, Protector (attached to unit) ×1, Instruction manual ×1

AC/DC AUTO-ZERO CURRENT SENSOR Frequency band: DC to 5 kHz (-3 dB)



CT7731
100 A AC/DC
ø33 mm
(1.3 in)



CT7736
600 A AC/DC
ø33 mm
(1.3 in)



CT7742
2000 A AC/DC
ø55 mm
(2.17 in)

AC/DC CURRENT SENSOR Frequency band: DC to 10 kHz (-3 dB)



CT7631
100 A AC/DC
ø33 mm
(1.3 in)



CT7636
600 A AC/DC
ø33 mm
(1.3 in)



CT7642
2000 A AC/DC
ø55 mm
(2.17 in)

AC CURRENT SENSOR Frequency band: 40 Hz to 20 kHz



CT7126
60 A AC
ø15 mm
(0.59 in)



CT7131
100 A AC
ø15 mm
(0.59 in)



CT7136
600 A AC
ø46 mm
(1.81 in)



CT7116
6 A AC
ø40 mm
(1.57 in)

AC LEAKAGE CURRENT SENSOR
Frequency band: 40 Hz to 20 kHz

AC FLEXIBLE CURRENT SENSOR

Frequency band: 10 Hz to 50 kHz (within ±3 dB)



Ideal for use in confined locations.



CT7044
600 A/6000 A AC
ø100 mm (3.9 in)
cable diameter ø7.4 mm (0.29 in)



CT7045
600 A/6000 A AC
ø180 mm (7.0 in)
cable diameter ø7.4 mm (0.29 in)



CT7046
600 A/6000 A AC
ø254 mm (10 in)
cable diameter ø7.4 mm (0.29 in)

Use an AC/DC Auto-zero Current Sensor or AC/DC Current Sensor with the Display Unit and Output Cord to generate output for a Memory HiCorder, data logger, or other instrument.

OUTPUT CORD

For use with the Display Unit

PL14 EXTENSION CABLE

For extending the sensor cable to the Display Unit



OUTPUT CORD L9094
φ 3.5 mm (0.14 in) dia. mini plug
to banana, 1.5 m (4.92 ft) length



OUTPUT CORD L9095
Connect to BNC terminal, 1.5 m
(4.92 ft) length



OUTPUT CORD L9096
Connect to terminal block, 1.5 m
(4.92 ft) length



L0220-01 2 m (6.6 ft)
L0220-02 5 m (16.4 ft)
L0220-03 10 m (32.8 ft)
L0220-04 20 m (65.6 ft)
L0220-05 30 m (98.4 ft)
L0220-06 50 m (164 ft)
L0220-07 100 m (328 ft)

Other options



AC ADAPTER 9445-02
100 to 240 V AC



CARRYING CASE C0220
For storing sensor ×1, CM7290 ×1,
AC adapter ×1, and output cord



CARRYING CASE C0221
For storing sensor ×3, CM7290 ×1,
AC adapter ×1, output cord, and 30 m
extension cable



MAGNETIC STRAP Z5004

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