

**Quickly check current, voltage, power, and power factor**

## Broad measurement ranges

Current: 60 mA to 600 A  
Active power: 5W to 360 kW

## Fast response

Shorten test times by identifying all of the necessary data on a single screen  
Automatically transfer data with Bluetooth wireless technology



Voltage



Current



Power



Power factor



Phase detection



Simple integral power consumption



Frequency



Peak



Harmonics



*\*Harmonic can be displayed with the GENNECT Cross dedicated application software.*

# Delivering a broad range of measurements at sites from manufacturing plants to households

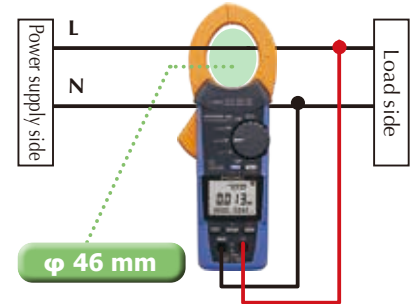
## Broad measurement range 60 mA (5 W) to 600 A (360 kW)

- Accurately measure power from 5 W at a current as low as 60 mA to 360 kW at a maximum of 600 A (single-phase power measurement).
- In addition to current, voltage, and power, measure simple integral power consumption and phase sequence.
- Obtain accurate readings with true RMS measurement.

### Measurement line

Measure power in single-phase to balanced three-phase circuits (with estimated values) (1-phase/ 2-wire, 1-phase/ 3-wire, balanced 3-phase/ 3-wire, and balanced 3-phase/ 4-wire).  
\*The instrument generates estimated power values when measuring 3-phase circuits.

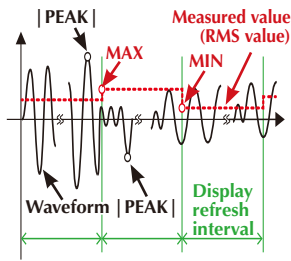
Example: Single-phase AC measurement (1P2W)



### Easily check power supply fluctuations

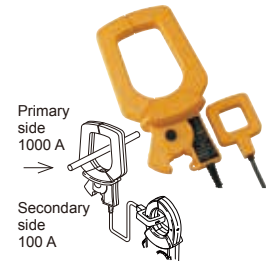
Since it can display maximum (MAX), minimum (MIN), and average (AVG) values, the CM3286 is useful when you need to ascertain the magnitude of fluctuations.

And since it can also measure crest (PEAK) values, you can use it to check fluctuations at the crest value level.



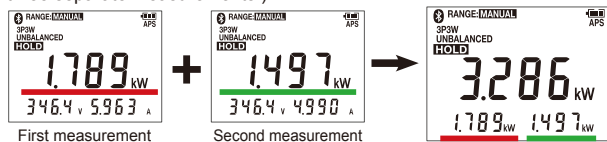
### Support for large-diameter, high-current measurement

The CM3286 can be used with the optional Clamp On Adapter 9290-10 to measure busbars of up to 55 mm in diameter or 80 × 20 mm. Measure high currents of up to 1000 A AC (or 1500 A for up to 5 min.).



### Quickly check for unbalance

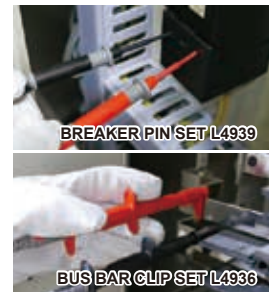
The CM3286 can measure unbalanced power in a 3-phase/ 3-wire circuit by measuring the single-phase power twice and then automatically adding the results. (The instrument can also measure 3-phase/4-wire circuits in three separate measurements.)



### Choose from an extensive selection of probe tips

Select 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.

\*Probe tips: Sold separately



## Functionality and performance that enable a broad range of measurements

### White backlight



A white backlight makes the measured values stand out, even in dim locations. Owing to wide viewing angle display, high quality screen lets you read measurements from any angle.

### Easily operate with one 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.

### CAT IV 600 V



The CM3286 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 meters also feature a safe design that can withstand a transient overvoltage of 8 kV in case of a lightning strike.

### -25°C to +65°C



The CM3286 can be used in freezing temperatures or on the hottest summer days

# Powerful features and functions deliver fast and efficient testing

## Easy-to-see display Related parameters shown on the display at once

Related parameters and connection locations shown on the display at once (Main parameter×1, Sub-parameter×3)

**[Power display]**

Sub-parameter: Power factor  
Main parameter: Active power  
Sub-parameter: Current  
Sub-parameter: Voltage

**[Current Measurement display]**

Main parameter: Current value  
Current frequency  
no display Current peak value

**[Integrated Measurement display]**

Main parameter: Single-phase active energy  
Single-phase active energy  
Elapsed time no display

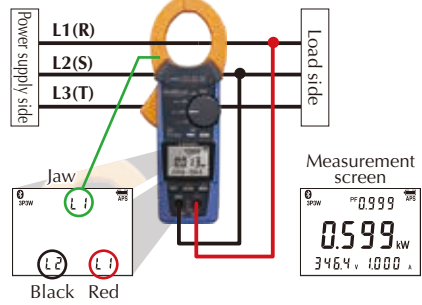
**[Phase Detection display]**

Forward phase  
Connection names light up in order

### Simple wiring guide

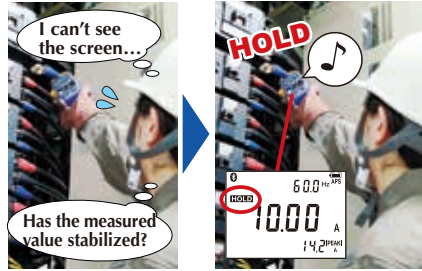
The CM3286 provides a simple on-screen guide indicating how to connect it to a 3-phase circuit.

Example: 3-phase AC measurement (3P3W, balanced)



### 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.



### Double warnings with sound and light

When the clamp power meter detects excessively over current or voltage input during a continuity check, it alerts you with a red backlight and beeping tone in order to help prevent accidents.



## Quick and easy data recording Using Bluetooth® communication with the Z3210

**Bluetooth**

**WIRELESS ADAPTER Z3210 (Option)**

Attach to enable Bluetooth® wireless technology

**Transport to the Excel® file**

Open an Excel® file and select a cell. The measured value being held on the instrument's display will be transferred to the computer and entered into the selected cell.

**Learn more Z3210**

**Transport to GENNECT Cross**

PDF Reports  
CSV Measurement data  
JPG Image data

**GENNECT Cross**, a free app designed specifically for use with Hioki measuring instruments, lets you check and manage measurement results and create reports. The software provides a range of functionality that helps manage data in the field, including photographing measurement sites, placing measurement results on photographs, and saving hand written memos.

**Learn more GENNECT Cross**

**Measuring harmonics with GENNECT Cross**

GENNECT Cross can measure the harmonic level, content percentage, and total harmonic distortion of voltage or current for the 1st through 30th orders.

# Specifications

Accuracy guaranteed for 1 year, Post-adjustment accuracy guaranteed for 1 year, Product warranty period for 3 years

|   |  |
|---|--|
| Measurement line  | Single-phase, Three-phase (should be balanced with no distortion)  |
| Measurement items   | Voltage, Current, Voltage/ current peak, Active/ reactive/ apparent power, Power factor, Phase angle*1, Frequency, Simple Active Energy Consumption (Single-phase), Voltage/ current harmonic levels   |
| AC voltage  | [Measurement range] 80.0 V to 600.0 V, Single range, Basic accuracy 45 Hz - 66 Hz: $\pm 0.7\%$ rdg. $\pm 3$ dgt. (Frequency characteristics: 45 Hz to 1 kHz, True RMS)   |
| AC current  | [Measurement range] 0.060 A to 600.0 A, 3 range, Basic accuracy 45 Hz - 66 Hz: $\pm 1.3\%$ rdg. $\pm 3$ dgt. (Frequency characteristics: 45 Hz to 1 kHz, True RMS)   |
| Power   | [Single phase] 0.005 kW to 360.0 kW<br>Basic accuracy: $\pm 2.0\%$ rdg. $\pm 7$ dgt. (50/ 60 Hz, Power factor=1)<br>[Balanced three-phase 3-wire] 0.020 kW to 623.5 kW<br>Basic accuracy: $\pm 3.0\%$ rdg. $\pm 10$ dgt. (50/ 60 Hz, Power factor=1)<br>[Balanced three-phase 4-wire] 0.040 kW to 1080 kW<br>Basic accuracy: $\pm 2.0\%$ rdg. $\pm 3$ dgt. (50/ 60 Hz, Power factor=1) |
| Harmonic*2  | Voltage/ current harmonic levels up to 30th, Content factor, Total harmonic distortion ratio   |
| Other functions   | [Phase angle *1] lead -180.0° to lag 179.9°, [Power factor] -1.000 to 1.000 [Frequency] 45.0 Hz to 999.9 Hz, PEAK, phase detection, max/min/avg value display, auto hold, electric meter comparison, unbalanced 3-phase power estimate display, etc.   |
| Maximum rated voltage to earth<br>Maximum rated voltage to terminal | 600 V AC (Measurement category IV)<br>1000 V AC (Measurement category III)   |
| Crest factor  | 6 A/ 60 A range 3 or less, 600 A/ 600 V range 1.6 or less  |
| Operating and storage temperature and humidity ranges               | -25°C to 65°C or less (-13.0°F to 149.0°F)<br>80% RH or less (no condensation, less than 40°C)   |
| Dustproof and waterproof*3  | Grip: IP50   |

|                           |   |
|---------------------------|---|
| Bluetooth® communication  | Available<br>When WIRELESS ADAPTER Z3210 (Option) is attached                                       |
| Standards                 | Safety: EN61010, EMC: EN61326   |
| Power supply              | LR03 Alkaline battery x2  |
| Continuous operating time | Approx. 25 hours (Backlight OFF, Bluetooth® OFF)<br>Approx. 18 hours (Backlight OFF, Bluetooth® ON) |
| Core jaw diameter         | φ 46 mm (1.81 in)   |
| Dimensions and Mass       | 65 mm (2.56in) W x 241 mm (9.49in) H x 35 mm (1.38in) D,<br>450 g (15.9 oz)                         |

\*1) Phase angle obtained from zero cross of current / voltage.

\*2) Harmonic can be displayed by dedicated application software (Gnect Cross).

WIRELESS ADAPTER Z3210 (Option) is required

\*3) While in storage, or when measuring an insulated conductor. Do not use when wet.

\*The indicated value for three-phase power is based on the assumption of a balanced condition and sine wave without distortion at 50/60 Hz. Accurate measurement is not possible on an unbalanced or inverter controlled three-phase line. Also, if the phase (zero cross) cannot be detected due to significant waveform distortion, it cannot be measured nor displayed.

\*The power factor / phase angle are values obtained from the zero cross of the current and voltage. If the phase (zero cross) cannot be detected due to significant waveform distortion, it cannot be measured nor displayed.

## Order code/ Options

|                        |                                 |
|------------------------|---------------------------------|
| Model No. (Order Code) |                                 |
| CM3286-50              |                                 |
| CM3286-90              | Includes WIRELESS ADAPTER Z3210 |

### Accessories

- CONNECTION CORD L9257 x1
- CARRYING CASE C0203 x1
- LR03 Alkaline battery x2
- Instruction manual x1



L9257



C0203

**WIRELESS ADAPTER Z3210**  
Model CM3286-90 Includes WIRELESS ADAPTER Z3210 as a set

### Options (Test leads)

CONNECTION CABLE SET L4930 (1.2m)

EXTENSION CABLE SET L4931 (1.5m, Expands the length of the L4930)

### Options (for L9257, L4930, L4931)

Tip options (Red/ Black: 1 each). Attaches to the tip of the banana plug cable.

|                       |                          |                        |                            |
|-----------------------|--------------------------|------------------------|----------------------------|
| TEST PIN SET L4938    | ALLIGATOR CLIP SET L4935 | BUS BAR CLIP SET L4936 | MAGNETIC ADAPTER SET L4937 |
| BREAKER PIN SET L4939 | TEST PIN SET L4932       | GRABBER CLIP L49243    | MAGNETIC ADAPTER 9804      |

### Options (Clamp adapter)

CLAMP ON ADAPTER 9290-10 (1000 A AC, φ55 mm, CT ratio of 10:1)

### Options (Test leads)

TEST LEAD L9207-10

TEST LEAD L9300

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