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## Product

CM3286-90 Clamp Power Meter

## Headline

Clamp Power Meter with Bluetooth, 600 A, 360 kW

## Short Description

Clamp power meter with Bluetooth communication for active, reactive and apparent power, power factor and phase angle, current 60 mA to 600 A, voltage 80 V to 600 V, single phase energy measurement, CAT IV 600 V, CAT III 1000 V

## Banner Specs

- Active, reactive and apparent power, power factor and phase angle
- Current 60 mA to 600 A, voltage 80 V to 600 V
- Power measurement 5 W to 360 kW, single phase energy measurement
- Sequential measurement of three phase systems (3P3W and 3P4W)
- Harmonic analysis via Bluetooth app (Z3210 included)

## Applications

- Load and power consumption checks on single phase circuits
- Verification of power factor and electrical load on motors and equipment
- Troubleshooting of electrical installations using power and phase measurements
- Power evaluation in balanced and unbalanced three phase systems

## Product Description

The CM3286-90 is a bundle consisting of the CM3286-50 Clamp Power Meter and the Z3210 Wireless Adapter. With the included adapter, measurement data can be transferred via Bluetooth to the free GENNECT Cross smartphone app for harmonic analysis, wireless data logging and documentation of measurement results.

Electrical power parameters are measured by combining clamp current measurement with voltage measurement via test leads. The instrument determines active, reactive and apparent power as well as power factor and phase angle. The current measurement range is 60 mA to 600 A with a clamp opening of 46 mm, while the voltage measurement range is 80 V to 600 V. In single phase systems the CM3286-90 supports power measurements from 0.005 kW to 360 kW and integrates active energy.

Unlike conventional clamp meters that approximate power by multiplying current and voltage, the CM3286-90 also measures the phase angle between both signals. This allows active power, reactive power, apparent power and power factor to be determined and enables a realistic assessment of the electrical load of a circuit during operation.

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## **Power Measurement in Three Phase Systems**

The CM3286-90 supports power evaluation in three phase systems using single phase measurements. In balanced three phase three wire systems such as motors, the instrument measures the power of one phase, which can be used as a representative value for the system. In unbalanced three phase three wire systems such as industrial loads, two measurements are required and the measured power values are added. For three phase four wire systems such as distribution circuits, three measurements are performed and combined to determine the total power.

When performing sequential measurements, the display provides wiring indications that support correct connections. Since the single phase measurements in unbalanced systems are carried out sequentially, the loads should remain as stable as possible during the measurement process to ensure reliable results.

## **Wireless Data Transfer and Harmonic Analysis**

With the included Z3210 Wireless Adapter, the CM3286-90 supports Bluetooth communication with the free GENNECT Cross smartphone app, which is available for Android and iOS. Measurement values can be transferred wirelessly to a smartphone or tablet for further analysis and documentation.

The app enables harmonic analysis of voltage and current up to the 30th order and supports wireless logging of measurement values. Results such as harmonic levels, harmonic content and total harmonic distortion (THD) can be displayed as numerical values, graphs or harmonic spectra. Logged measurement data can be exported as CSV files for further processing in other software environments. The use of the GENNECT Cross app and the export of measurement data do not require any subscription.

In addition, the CM3286-90 supports HID communication via Bluetooth. This allows measurement values to be transmitted directly to a PC and entered into spreadsheet software such as Excel or other applications.

## **Phase Check and High Current Measurements**

The CM3286-90 includes a phase detection function for checking the phase sequence of three phase systems. By comparing the phase relationship between two voltage inputs, the instrument indicates the phase order on the display.

For current measurements above the internal clamp range of 600 A, the CM3286-90 can be used with the optional 9290-10 clamp adapter. This accessory operates as a current transformer with a ratio of 10:1 and converts high primary currents into a proportionally lower secondary current that can be measured by the instrument.

The adapter supports continuous currents up to 1000 A AC and up to 1500 AAC for short durations. It also allows measurements on larger conductors and busbars that cannot be accommodated by the standard clamp opening.

## **Rugged Design for Field Use**

The CM3286-90 is designed for use in industrial and electrical environments. A bright backlight and a wide viewing angle display ensure that measurement values remain easy to read even in dim locations or inside distribution panels.

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With a safety rating of CAT IV 600 V (CAT III 1000 V), the instrument is suitable for measurements on service lines and distribution circuits and is designed to withstand transient overvoltages up to 8 kV. If excessive current or voltage is detected, the instrument alerts the user with a red backlight and an audible warning.

The specified operating temperature range of  $-25\text{ }^{\circ}\text{C}$  to  $+65\text{ }^{\circ}\text{C}$  allows reliable use in indoor and outdoor electrical installations. Developed and manufactured in Japan, the CM3286-90 reflects HIOKI's long-standing commitment to precision, reliability and controlled production quality.

## What's in the box

- CM3286-50 Clamp Power Meter
- Z3210 Wireless Adapter
- L9257 Test Lead Set
- C0203 Carrying Case
- Instruction Manual
- Operating Precautions
- 2 × LR03 (AAA) alkaline batteries

## Related Products

- CM3286-50 Clamp Power Meter
- 9290-10 Clamp Adapter
- L9300 Test Lead Set
- 9804 Magnetic Clip Set
- C0207 Carrying Case
- L4930 Safety Test Leads
- CM4371-50 Clamp Multimeter
- CM4373-50 Clamp Multimeter
- CM4375-50 Clamp Multimeter
- CM4001 Leakage Current Clamp
- CM4002 Leakage Current Clamp
- CM4003 Leakage Current Clamp

Version	Date	Author	Approved	Document changes
1.0	06.03.2026	KS	KS	First Release