CLAMP-ON METERS

Complete Line of Multi-Purpose Clamp-On Meters



Dependable • Accurate Rugged • Affordable Safe • Easy to Use

Rugged and professional, our complete line of Clamp-On meters are designed and manufactured to the highest safety standards offering the most comprehensive set of measurement parameters available including:

AC and DC Voltage, AC and DC Current, Resistance, Continuity, Frequency, Diode Testing, InRush Current, Power Measurement (Real, Reactive and Apparent), THD, Crest Factor, Min/Max and Peak Capture, Phase Rotation, Temperature and more.

Data logging and wireless communication to a PC or Android™ application are available on several models. AEMC® Instruments provides a solution to all your electrical measurement needs!

Our products are backed by over 130 years of experience in test and measurement equipment, and encompass the latest international standards for quality and safety.

Clamp-On Meters **200, 400, and 600 Series**

Feature Rich Clamp-On Meters

A clamp-on meter is the ideal tool for any work in the field. It is simple to use and groups all the necessary functions in a single, compact solution. AEMC® Instruments proudly presents advanced, dependable, and safe clamp-on meters. Leveraging cutting-edge technology, these meters guarantee top-notch quality while ensuring user-friendly simplicity.

Performance

All the clamps in the 200, 400, 600 Series benefit from a fast 12-bit TRMS digital acquisition system offering high measurement accuracy. Thanks to their large bandwidth and high crest factor, these clamps provide accurate measurements whatever the signal type.

Ergonomics

The entire range is designed for one-handed use, even when wearing safety gloves. For maximum efficiency, each measurement corresponds to a specific switch position. The 1 key, 1 function concept makes it even easier to use. In addition, all the clamps are equipped with automatic detenction of the type of signal (AC or DC) on currents, voltages, and power values.

New Standard for Safety

Safety rated at 1000 V CAT IV / 1500 V CAT III (model dependent), our clamp-on meters are safe to operate in all electrical environments. Rated at IP54 (model dependent), our meters are rugged enough for the most demanding work environments and will withstand both dust and water spray, guaranteeing its safety level over time.

True InRush® Function

A feature exclusive to AEMC® Instruments, True InRush® function provides the unique ability to measure power-up events from devices on a network that is already energized. Unlike other instruments which only measure the inrush when the installation is first powered up, our power clamp-on meters measure all types of inrush, even those due to load increases on an installation which is already up and running.

Power Measurements

Power measurements are available for Watts, VARs and VA, including Min and Max tracking. The Power Clamp-On Models, 205, 407, 606 and 607 all have the unique capability to display single- and threephase power measurements.

Harmonic Analysis

Harmonic analysis on individual harmonics is available up to the 25th harmonic of either 50 or 60 Hz fundamental and up to the 7th harmonic on a 400 Hz fundamental (model dependent).

Data Logging

Data logging is a standard feature in Models 407 and 607. Up to 1000 measurements can be stored from any of the function positions. Max, Min and present values are stored each time. Storage rate is programmable from 1 per second to 1 every 600 seconds. Communication to the PC is wireless via Bluetooth. Graphing and analysis of the data is accomplished by a comprehensive software package called DataView®.

CONSTRUCTION

Jaw assembly 200 Series:

1.3 in (34 mm) 400 Series:

1.9 in (48 mm) 600 Series:

2.4 in (60 mm) Lever for jaw

opening/closing

Function buttons:

- Hold
- **Harmonics**
- Backlight
- Min/Max
- Frequency
- Record*

COM (Black) input jack



Shockproof protective band, casing offers excellent resistance to falls

Rotary range selector switch molded for excellent handling even when wearing safety gloves

Backlit LCD display

200 Series: (1.1 x 1.7) in (28 x 48) mm

400 & 600 series: (1.6 x 1.9) in (41 x 43.5) mm

Postive (Red) + input jack

*Note: Record/Bluetooth communication available with Models 407 and 607 only.



Dimension: (8.7 x 3 x 1.6) in (222 x 78 x 42) mm

0.86 lb (340 g) with batteries



400 Series

Dimension: (10.7 x 3.6 x 1.6) in (272 x 92 x 41) mm

Weight: 1.32 lb (600 g) with batteries



600 Series

Dimension: (11.6 x 4.4 x 1.6) in (296 x 111 x 41 mm

Weight: 1.4 lb (640 g) with batteries



Clamp-On Meters **Model 404**



1000 V CAT IV 1500 V CAT III ϵ



Functionality for solar/photovoltaic (PV) applications with an exceptional AC voltage and DC voltage capability of up to 1200 Vac/1700 Vac

The Clamp-On Meter Model 404 is a reliable and versatile meter that combines a range of functions for efficient and professional measurements. This powerful tool can measure temperature, current, voltage, frequency, continuity with a buzzer, resistance, and perform a diode test.

With an adapter function, you can easily use it with external transducers or measurement devices. This function makes it possible to connect any adapter or sensor that converts a measured electrical or physical quantity into a voltage (either DC or AC). The meter is also equipped with True InRush® technology, allowing you to measure inrush current and overcurrent with utmost precision.

Additionally, with the advanced capability of handling up to $1200 \, \text{Vac}/1700 \, \text{Vbc}$, the Model 606 is an ideal choice for solar/photovoltaic (PV) applications.

The Clamp-On Meter Model 404 offers fast and accurate electrical measurements. It is user-friendly and efficient, making it the perfect choice for any commercial or residential project.



MODELS 404 **ELECTRICAL** Current AC (rms) 1000 A **Current DC** 1500 A Voltage AC (rms) 1200 V **Voltage DC** 1700 V 0hms $0.1~\Omega$ to $99.99~k\Omega$ Continuity (Buzzer) Yes ($< 40 \Omega$) **Diode Test** Yes **Temperature** Yes (int., ext., °C, °F) 20 kHz **Voltage Frequency** 1.000 Hz **Current Frequency Current Probe Adapter** Yes Function (AC / DC) Yes (V & A) Auto AC / DC **Auto Power OFF** Yes **Hold Button** Yes **Backlight Button** Yes Min / Max Button Yes **True InRush® Function** Yes **Relative Function Hz Button** Yes

APPLICATIONS

- Photovoltaic (PV)
- Solar panel and inverter testing
- Solar comissioning
- Low and medium power low voltage locations
- ► Electrical maintenance
- Automotive test troubleshooting
- Railways
- ► Lift/elevator technicians
- Other lift or transport equipment specialists

FEATURES

- ► 1000 V CAT IV / 1500 V CAT III safety rated
- ► UL94 V1 flame retardant selfextinguishing
- ► Large, 10,000-count blue electroluminescent backlit display
- ► 1700 VDC / 1200 VAC measurements
- Temperature measurement
- K-thermocouple with 4 mm integrated adapter
- Adapter function
- Auto selects AC or DC measurement voltage
- True InRush® current measurement with 100 mS capture
- ► Jaw opening up to: 1.90 in (48 mm)

PRODUCT INCLUDES

Model 404: Set of (2) color-coded silicone insulated test leads, test probes and alligator clips, K-thermocouple with 4 mm integrated adapter, soft carrying case, (4) 1.5 V AA batteries, and user manual.

ORDERING INFORMATION

Clamp-On Meter Model 404

(TRMS, 1200 Vac / 1700 Vbc, 1000 Aac/1500 Abc, Ohms, Continuity, Temperature)

CAT. #2139.22

