

# Multi-purpose Clamp-On Meters

Rugged • Accurate  
Dependable • Safe  
Affordable • 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® provides a solution to all your electrical measurement needs.



*Our products are backed by over 100 years of experience in test and measurement equipment, and encompass the latest international standards for quality and safety.*

Technical Hotline: (800) 343-1391  
[www.aemc.com](http://www.aemc.com)

 **AEMC**<sup>®</sup>  
INSTRUMENTS  
CHAUVIN ARNOUX GROUP

# AC CURRENT METERS WITH FLEXIBLE SENSOR

## Digital FlexProbe®

### Models 400D & 4000D

Provide a welcomed solution when accessing electrical conductors in tight places



MiniFlex:  
Model 400D-6 (6" probe)  
Model 400D-10 (10" probe)



MiniFlex:  
Model 4000D-14 (14" probe)  
Model 4000D-24 (24" probe)



AmpFlex:  
Model 400D-60 (60" probe)  
Model 400D-120 (120" probe)



### ► SPECIFICATIONS

| MODEL                       | 400D  |                |                |  |  |  |
|-----------------------------|---|----------------|----------------|--|--|--|
| <strong>ELECTRICAL</strong> |   |                |                |  |  |  |
| Display Range               | 4AAC  | 40AAC          | 400AAC         |  |  |  |
| Measurement Range           | 0.020 to 3.999A   | 4.00 to 39.99A | 40.0 to 399.9A |  |  |  |
| Resolution                  | 1mA   | 10mA           | 100mA          |  |  |  |
| Accuracy                    | ±(2% + 10cts)   | ±(1.5% + 2cts) | ±(1.5% + 2cts) |  |  |  |
| Sensor Diameter             | 400D-6: Ø 1.77" (45mm) / 400D-10: Ø 2.75" (70mm) / 400D-60: Ø 19" (483mm) / 400D-120: Ø 38" (965mm) |                |                |  |  |  |
| Sensor Length               | 400D-6: 6" (170mm) / 400D-10: 10" (250mm) / 400D-60: 60" (1524mm) / 400D-120: 120" (3048mm)         |                |                |  |  |  |
| Bandwidth                   | 10Hz to 3kHz  |                |                |  |  |  |
| <strong>MODEL</strong>      |   |                |                |  |  |  |
| 4000D                       |   |                |                |  |  |  |
| Display Range               | 40AAC   | 400AAC         | 4000AAC        |  |  |  |
| Measurement Range           | 0.20 to 39.99A  | 40.0 to 399.9A | 400 to 3999A   |  |  |  |
| Resolution                  | 10mA  | 100mA          | 1A             |  |  |  |
| Accuracy                    | ±(2% + 10cts)   | ±(1.5% + 2cts) | ±(1.5% + 2cts) |  |  |  |
| Sensor Diameter             | 4000D-14 : Ø 3.94" (100mm) / 4000D-24 : Ø 8" (190mm)  |                |                |  |  |  |
| Sensor Length               | 4000D-14: 14" (350mm) / 4000D-24: 24" (610mm)   |                |                |  |  |  |
| Bandwidth                   | 10Hz to 3kHz  |                |                |  |  |  |
| <strong>MECHANICAL</strong> |   |                |                |  |  |  |
| Power Supply                | 2 x 1.5V AAA / LR3 batteries  |                |                |  |  |  |
| Operating Temperature       | 32° to 122°F (0° to 50°C)   |                |                |  |  |  |
| Weight                      | approx. 0.29lbs (130g) MiniFlex / 1.7lbs (771g) AmpFlex   |                |                |  |  |  |
| Casing Dimensions           | 3.94 x 2.36 x 0.79" (100 x 60 x 20mm)   |                |                |  |  |  |
| Connection Cable Length     | 6ft (1.8m)  |                |                |  |  |  |
| Safety                      | IEC 61010, 600V CAT IV  |                |                |  |  |  |

| CATALOG NO.                             | DESCRIPTION  |
|---|--|
| 2153.30                                 | Digital FlexProbe® Model 400D-6 w/6' Lead (TRMS, 4AAC, 40AAC, 400AAC)        |
| 2153.31                                 | Digital FlexProbe® Model 400D-10 w/6' Lead (TRMS, 4AAC, 40AAC, 400AAC)       |
| 2153.32                                 | Digital FlexProbe® Model 4000D-14 w/6' Lead (TRMS, 40AAC, 400AAC, 4000AAC)   |
| 2153.33                                 | Digital FlexProbe® Model 400D-60 w/6' Lead (TRMS, 4AAC, 40AAC, 400AAC)       |
| 2153.34                                 | Digital FlexProbe® Model 400D-120 w/6' Lead (TRMS, 4AAC, 40AAC, 400AAC)      |
| 2153.35                                 | Digital FlexProbe® Model 4000D-24 w/6' Lead (TRMS, 40AAC, 400AAC, 4000AAC)   |
| <strong>Accessories (Optional)</strong> |  |
| 5000.44                                 | MultiFix Multi-Position Magnetic Accessory (available on website storefront) |

### ► PRODUCT INCLUDES

Digital FlexProbe®, 2 AAA batteries and user manual.

# CAT IV RATED CLAMP-ON METERS

200, 400 & 600 Series General Purpose Meters



\*Models 203 & 205 only

## Models 203/403/603 & 205/405/605

Users can be sure of working in a higher degree of safety with 1000V CAT IV rated meters (model dependent)

True *InRush*®

### ►SPECIFICATIONS

| MODELS  | 203/403/603 TRMS | 205/405/605 TRMS                   |
|---|------------------|------------------------------------|
| <b>ELECTRICAL</b>                                   |                  |                                    |
| Current AC (rms)                                    | 600/1000/2000A   | 600/1000/2000A                     |
| Current DC  | 900/1500/3000A   | 900/1500/3000A                     |
| Current AC+DC                                       | —                | 900/1500/3000A                     |
| Voltage AC (rms)                                    | 1000/1000/1000V  | 1000/1000/1000V                    |
| Voltage DC  | 1000/1000/1000V  | 1000/1000/1000V                    |
| Voltage AC+DC                                       | —                | 1000/1000/1000V                    |
| Ohms  | 60/100/100kΩ     | 60/100/100kΩ                       |
| Continuity (Buzzer)                                 | Yes (< 40Ω)      | Yes (< 40Ω)                        |
| Diode Test  | Yes              | Yes                                |
| Total Harmonic Distortion                           | —                | Yes                                |
| Single- and 3-Phase Real Power (AC, DC, AC/DC)*     | —                | 600/1000/2000kW<br>3000/6000kW     |
| Single- and 3-Phase Reactive Power (AC, DC, AC/DC)* | —                | 600/1000/2000kvar<br>3000/6000kvar |
| Single- and 3-Phase Apparent Power (AC, DC, AC/DC)* | —                | 600/1000/2000kVA<br>3000/6000kVA   |
| Temperature (int, ext, C°, F°)                      | Yes              | —                                  |
| Voltage Frequency (Hz)                              | 20kHz            | 20kHz                              |
| Current Frequency (Hz)                              | 3/2/1kHz         | 3/2/1kHz                           |
| Power Function (W, var, VA)                         | —                | Yes                                |
| Power Factor  | —                | Yes                                |
| THD-r/THD-f   | —                | Yes                                |
| Adapter (AC/DC)                                     | 0 to 6V          | —                                  |
| Phase Rotation                                      | —                | Yes (2 wire)                       |
| Auto AC/DC  | Yes (V & A)      | Yes (V & A)                        |
| Auto Power OFF                                      | Yes              | Yes                                |
| Hold Button   | Yes              | Yes                                |
| Backlight Button                                    | Yes              | Yes                                |
| Min/Max Button                                      | Yes              | Yes                                |
| True <i>InRush</i> ® Function                       | Yes              | Yes                                |
| Relative Function                                   | Yes              | Yes                                |
| Peak ± Function                                     | —                | Yes                                |
| Hz Button   | Yes              | Yes                                |

\*3-phase measurements assume balanced load

### CATALOG NO. DESCRIPTION

|         |  |
|---------|--|
| 2139.12 | Clamp-On Meter Model 203 (TRMS, 1000VAC/dc, 600AAC/900ADC, Ohms, Continuity, Temperature)                        |
| 2139.40 | Power Clamp-On Meter Model 205 (TRMS, 1000VAC/dc, 600AAC/900ADC, Ohms, Continuity, Phase Rotation, Power, THD)   |
| 2139.21 | Clamp-On Meter Model 403 (TRMS, 1000VAC/dc, 1000AAC/1500ADC, Ohms, Continuity, Temperature)                      |
| 2139.50 | Power Clamp-On Meter Model 405 (TRMS, 1000VAC/dc, 1000AAC/1500ADC, Phase Rotation, Ohms, Continuity, Power, THD) |
| 2139.31 | Clamp-On Meter Model 603 (TRMS, 1000VAC/dc, 2000AAC/3000ADC, Ohms, Continuity, Temperature)                      |
| 2139.60 | Power Clamp-On Meter Model 605 (TRMS, 1000VAC/dc, 2000AAC/3000ADC, Phase Rotation, Ohms, Continuity, Power, THD) |

# CAT IV RATED POWER CLAMP-ON METERS

400 & 600 Series *Bluetooth* Edition Power and Harmonic Meters

## Models 407 & 607

Now available with **Android™** mobile application

True *InRush*®

### ► SPECIFICATIONS

| MODELS  | 407 TRMS             | 607 TRMS             |
|---|----------------------|----------------------|
| <b>ELECTRICAL</b>                                   |                      |                      |
| Current AC (rms)                                    | 1000A                | 2000A                |
| Current DC  | 1500A                | 3000A                |
| Current AC+DC                                       | 1500A Peak           | 3000A Peak           |
| Voltage AC (rms)                                    | 1000V                | 1000V                |
| Voltage DC  | 1000V                | 1000V                |
| Voltage AC+DC                                       | 1000V                | 1000V                |
| Ohms  | 100kΩ                | 100kΩ                |
| Continuity (Buzzer)                                 | Yes (< 40Ω)          | Yes (< 40Ω)          |
| Total Harmonic Distortion                           | Yes                  | Yes                  |
| Individual Harmonics (to 25 <sup>th</sup> )         | Yes                  | Yes                  |
| Single- and 3-Phase Real Power (AC, DC, AC/DC)*     | 1000kW<br>3000kW     | 2000kW<br>6000kW     |
| Single- and 3-Phase Reactive Power (AC, DC, AC/DC)* | 1000kvar<br>3000kvar | 2000kvar<br>6000kvar |
| Single- and 3-Phase Apparent Power (AC, DC, AC/DC)* | 1000kVA<br>3000kVA   | 2000kVA<br>6000kVA   |
| Voltage Frequency (Hz)                              | 20kHz                | 20kHz                |
| Current Frequency (Hz)                              | 2kHz                 | 1kHz                 |
| Power Function (W, var, VA)                         | Yes                  | Yes                  |
| Power Factor  | Yes                  | Yes                  |
| THD-r/THD-f   | Yes                  | Yes                  |
| Auto AC/DC  | Yes (V & A)          | Yes (V & A)          |
| Auto Power OFF                                      | Yes                  | Yes                  |
| Hold Button   | Yes                  | Yes                  |
| Backlight Button                                    | Yes                  | Yes                  |
| Min/Max Button                                      | Yes                  | Yes                  |
| True <i>InRush</i> ® Function                       | Yes                  | Yes                  |
| Peak ± Function                                     | Yes                  | Yes                  |
| Harmonics Function                                  | Yes                  | Yes                  |
| Rec (Record) Function                               | Yes                  | Yes                  |
| Wireless BT ( <i>Bluetooth</i> ) Function           | Yes                  | Yes                  |
| Record (Recordings)                                 | 1000                 | 1000                 |
| Hz Button   | Yes                  | Yes                  |

\*3-phase measurements assume balanced load

### ► PRODUCT INCLUDES

#### Models 407 & 607

Hard carrying case, set of two color-coded silicone test leads, test probes and alligator clips, *Bluetooth* USB adapter, four 1.5V AA batteries, safety information sheet, and USB drive supplied with *DataView*® software and user manual.



### ► FEATURES

- 1000V CAT IV Rated
- UL 94 VI flame retardant self-extinguishing
- IP54 Rated
- 10,000-count blue electroluminescent backlit display
- Measures up to 1000VAC (1400V peak), 1000VDC and AC+DC with resolution to 10mV
- Measures up to 2000AAC and 3000ADC (Model 607)
- Measures W, VA, var and PF for 1Φ & 3Φ balanced systems
- Measures single- and three-phase power (real, reactive and apparent) up to 3MW with resolution to 1W
- Measures frequency to 20kHz with 0.1Hz resolution
- Auto selects AC or DC measurement
- True *InRush*® current measurement with 1mS capture
- Measures harmonics up to the 25<sup>th</sup>
- Records up to 1000 measurements
- *Bluetooth* communication (communicates up to 30ft)
- Includes FREE *DataView*® software for download and report generation
- Jaw opening up to 1.89" (48mm) (400 series) and up to 2.36" (60mm) (600 series)

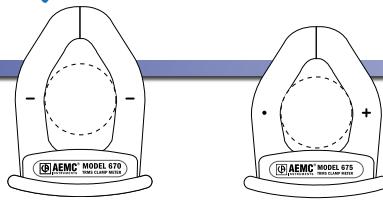
### CATALOG NO.

### DESCRIPTION

|         |   |
|---------|---|
| 2139.51 | Power Clamp-On Meter Model 407<br>(TRMS, 1000VAC/dc, 1000AAC/1500ADC, Ohms, Continuity, Energy, Harmonics, Power, THD, Recording) |
| 2139.61 | Power Clamp-On Meter Model 607<br>(TRMS, 1000VAC/dc, 2000AAC/3000ADC, Ohms, Continuity, Energy, Harmonics, Power, THD, Recording) |

# Trms DUAL DISPLAY CLAMP-ON METERS

## 670 Series



Model 670  
Jaw Opening: 1.65" (42mm)  
Conductor Size: one 750kcmil  
cable or two 350kcmil cables

Model 675  
Jaw Opening: 1.58" (40mm)  
Conductor Size: one 750kcmil  
cable or two 350kcmil cables

## Models 670 & 675

Dual display simultaneously  
measures and displays  
voltage and current!

### ► SPECIFICATIONS

| MODELS   | 670 TRMS  |   | 675 TRMS  |   |
|--|---|---|---|---|
| <b>ELECTRICAL</b>  |   |   |   |   |
| <b>AC Current</b>  |   |   |   |   |
| Measuring Range  | 0.00 to 99.99A  | 100 to 1000A  | 0.00 to 99.99A  | 100 to 1000A  |
| Resolution   | 0.01A   | 0.1A  | 0.01A   | 0.1A  |
| Accuracy   | 1.5% of Reading $\pm$ 5cts (50 to 60Hz)<br>2.0% of Reading $\pm$ 5cts (60 to 500Hz)<br>4.5% of Reading $\pm$ 5cts (500Hz to 3kHz) | 1.5% of Reading $\pm$ 5cts (50 to 60Hz)<br>2.0% of Reading $\pm$ 5cts (60 to 500Hz)<br>4.5% of Reading $\pm$ 5cts (500Hz to 3kHz) | 1.5% of Reading $\pm$ 5cts (50 to 60Hz)<br>2.0% of Reading $\pm$ 5cts (60 to 500Hz)<br>4.5% of Reading $\pm$ 5cts (500Hz to 3kHz) | 1.5% of Reading $\pm$ 5cts (50 to 60Hz)<br>2.0% of Reading $\pm$ 5cts (60 to 500Hz)<br>4.5% of Reading $\pm$ 5cts (500Hz to 3kHz) |
| <b>DC Current</b>  |   |   |   |   |
| Measuring Range  | —   | —   | 0.00 to 99.99A  | 100.0 to 999.9A   |
| Resolution   | —   | —   | 0.01A   | 0.1A  |
| Accuracy   | —   | —   | 1.2% of<br>Reading $\pm$ 5cts   | 2.5% of<br>Reading $\pm$ 5cts   |
| <b>AC Voltage</b>  |   |   |   |   |
| Measuring Range  | 0.0 to 999.9V   |   | 0.0 to 999.9V   |   |
| Resolution   | 0.1V  |   | 0.1V  |   |
| Accuracy   | 1.0% of Reading $\pm$ 5cts (50 to 60Hz)<br>1.2% of Reading $\pm$ 5cts (60 to 500Hz)<br>2.5% of Reading $\pm$ 5cts (500Hz to 3kHz) |   | 1.0% of Reading $\pm$ 5cts (50 to 60Hz)<br>1.2% of Reading $\pm$ 5cts (60 to 500Hz)<br>2.5% of Reading $\pm$ 5cts (500Hz to 3kHz) |   |
| Input Resistance   | 1M $\Omega$   |   | 1M $\Omega$   |   |
| <b>DC Voltage</b>  |   |   |   |   |
| Measuring Range  | 0.0 to 999.9V   | 1000 to 1400V   | 0.0 to 999.9V   | 1000 to 1400V   |
| Resolution   | 0.1V  | 1V  | 0.1V  | 1V  |
| Accuracy   | 1% of Reading $\pm$ 2cts  |   | 1% of Reading $\pm$ 2cts  |   |
| Input Resistance   | 1M $\Omega$   |   | 1M $\Omega$   |   |
| <b>Resistance-Ohms (<math>\Omega</math>)</b>                       |   |   |   |   |
| Measuring Range  | 0.0 to 999.9 $\Omega$   | 1000 to 9999 $\Omega$   | 0.0 to 999.9 $\Omega$   | 1000 to 9999 $\Omega$   |
| Resolution   | 0.1 $\Omega$  | 1 $\Omega$  | 0.1 $\Omega$  | 1 $\Omega$  |
| Accuracy   | 1% of Reading $\pm$ 3cts, 3.3Vdc (Vmax)   |   | 1% of Reading $\pm$ 3cts, 3.3Vdc (Vmax)   |   |
| <b>Continuity (•))</b>   |   |   |   |   |
| Beeper Activation  | < 35 $\Omega$   |   | < 35 $\Omega$   |   |
| Accuracy   | 1% of Reading $\pm$ 3cts, 3.3Vdc (Vmax)   |   | 1% of Reading $\pm$ 3cts, 3.3Vdc (Vmax)   |   |
| <b>Frequency (Hz)</b>  |   |   |   |   |
| Function   | A - Hz  | V - Hz  | A - Hz  | V - Hz  |
| Range  | 1000Hz  | 10,000Hz  | 1000Hz  | 10,000Hz  |
| Resolution   | 0.1Hz   | 1Hz   | 0.1Hz   | 1Hz   |
| Accuracy   | 1.0% of Reading $\pm$ 2cts  |   | 1.0% of Reading $\pm$ 2cts  |   |
| <b>Temperature (<math>^{\circ}</math>C/<math>^{\circ}</math>F)</b> |   |   |   |   |
| Measuring Range  | -40° to 999.5 $^{\circ}$ C  | 1000° to 1200 $^{\circ}$ C  | -40° to 2192 $^{\circ}$ F   | -40° to 999.5 $^{\circ}$ C  |
| Resolution   | 0.5 $^{\circ}$ C  | 1 $^{\circ}$ C  | 1 $^{\circ}$ F  | 0.5 $^{\circ}$ C  |
| <b>GENERAL</b>   |   |   |   |   |
| Power Supply   | One 9V, NEDA 1604 (6F22) Alkaline battery (included)  |   |   |   |
| Battery Life   | (no buzzer or backlight) 35 hours   |   | (no buzzer or backlight) 30 hours   |   |
| <b>MECHANICAL</b>  |   |   |   |   |
| Digital Display  | 3 3/4 digits LCD dual display (max reading 9999)  |   | 3 3/4 digits LCD dual display (max reading 9999)  |   |
| Jaw Opening  | 1.65" (42mm)  |   | 1.58" (40mm)  |   |
| <b>ENVIRONMENTAL</b>   |   |   |   |   |
| Operating Temperature  | *-14° to 122 $^{\circ}$ F (-25 to 50 $^{\circ}$ C), 80% RH,<br>non-condensing   |   | *-14° to 122 $^{\circ}$ F (-25 to 50 $^{\circ}$ C), 80% RH,<br>non-condensing   |   |

### ► PRODUCT INCLUDES



Soft carrying case, set of test leads (red/black with safety needle tips),  
K-type thermocouple, one 9V battery and a user manual.

\*Note: If the meter is to be used below 32°F (0°C), we suggest  
that the battery be replaced to ensure proper results.

### CATALOG NO.      DESCRIPTION

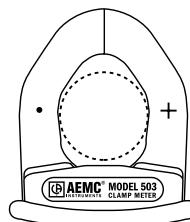
|         |   |
|---------|---|
| 2117.49 | Clamp-On Meter Model 670 (Dual Display, TRMS, AC Amps, AC/DC Volts, Ohms, Continuity, Frequency, & Temperature) |
| 2117.50 | Clamp-On Meter Model 675 (Dual Display, TRMS, AC/DC Amps & Volts, Ohms, Continuity, Frequency & Temperature)    |

# COMPACT SIZE CLAMP-ON METERS

## 500 Series

### Model 503

Small compact size clamp-meter that fits comfortably in a tool bag



**Model 503**  
Jaw Opening: 1.1" (28mm)  
Conductor Size: one 500kcmil cable



### ► SPECIFICATIONS

| MODEL                     | 503                               |  |
|---------------------------|-----------------------------------|--|
| AC Current (Auto-Ranging) | 0.05 to 400A                      |  |
| Resolution                | 0.01A and 0.1A                    |  |
| Accuracy                  | 50 to 60Hz<br>60 to 500Hz         | ±1.5% of Reading ±10cts<br>±2.5% of Reading ±10cts |
| AC Voltage (Auto-Ranging) | 0.5 to 600V                       |  |
| Resolution                | 0.1V and 1V                       |  |
| Accuracy                  | 50 to 60Hz<br>60 to 500Hz         | ±0.8% of Reading ±5cts<br>±1.5% of Reading ±5cts   |
| Input Impedance           | 10MΩ                              |  |
| DC Current (Auto-Ranging) | 0.10 to 400A                      |  |
| Resolution                | 0.01A and 0.1A                    |  |
| Accuracy                  | ±2.5% of Reading ±10cts           |  |
| DC Voltage (Auto-Ranging) | 0.2 to 600V                       |  |
| Resolution                | 0.1V and 1V                       |  |
| Accuracy                  | ±1% of Reading ±2cts              |  |
| Input Impedance           | 10MΩ                              |  |
| Resistance                | 0.2 to 400Ω                       |  |
| Accuracy                  | ±1% of Reading ±2cts              |  |
| Max Test Voltage          | 1.5Vdc                            |  |
| Continuity                | <40Ω                              |  |
| Max Test Voltage          | 1.5Vdc                            |  |
| Power Source              | Two 1.5V AAA batteries (included) |  |

### ► FEATURES

- Compact size - fits into your pocket
- 400A<sub>AC</sub> or 400A<sub>AC/DC</sub> current measurements
- 600V<sub>AC/DC</sub> volts measurements
- Resistance measurements to 400Ω
- Continuity with beeper below 40Ω
- Hold function to "freeze" readings
- Push-button for easy Adc zeroing
- Large, easy-to-read 4000-count LCD display
- 42-segment analog bargraph
- Includes test leads and soft carrying pouch

### ► PRODUCT INCLUDES

Soft carrying case, set of two test leads, two 1.5V AAA batteries and user manual.



#### CATALOG NO.

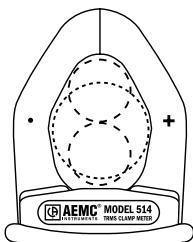
#### DESCRIPTION

2117.22

Clamp-On Meter Model 503 (AC/DC, 400A<sub>AC/DC</sub>, 600V<sub>AC/DC</sub>, Ohms, Continuity)

# COMPACT SIZE CLAMP-ON METERS

500 Series



**Models 512 & 514**  
Full ranges and compliance to international safety and quality standards ensure a professional and reliable tool



## ► FEATURES

- Standard size, full function clamp-on meter
- 1000AAC or 1000AAC/DC current measurements
- 750VAC or 1000VDC volt measurements
- TRMS measurements
- Resistance measurements to 4000Ω
- Continuity with beeper below 40Ω
- Frequency measurements from V and A
- Diode test
- 1ms peak function for fast capture of signals
- Hold function to "freeze" readings
- Push-button for easy ADC zeroing
- Large, easy-to-read, 4000-count LCD display
- 42-segment analog bargraph
- Includes test leads, soft carrying pouch and batteries

*\*Note: If Model 514 is to be used below 32°F (0°C), we suggest that the battery be replaced to ensure proper results.*

## ► SPECIFICATIONS

| MODELS                           | 512 TRMS  | 514 TRMS   |
|----------------------------------|---|--|
| <b>AC Current</b> (Auto-Ranging) | 0.05 to 1000Arms                                      | 0.05 to 1000Arms   |
| Resolution                       | 0.01A, 0.1A and 1A                                    | 0.01A, 0.1A and 1A                                       |
| Accuracy                         | 50 to 60Hz<br>60 to 500Hz                             | 1.9% of Reading ±5cts<br>1.9% of Reading ±5cts           |
| <b>AC Voltage</b> (Auto-Ranging) | 0.5 to 750Vrms  | 0.5 to 750Vrms   |
| Resolution                       | 0.1V and 1V   | 0.1V and 1Vrms   |
| Accuracy                         | 60 to 500Hz   | 1.2% of Reading ±5cts<br>1.5% of Reading ±5cts           |
| Input Impedance                  | 10MΩ  | 10MΩ   |
| <b>DC Current</b> (Auto-Ranging) | —   | 1A to 1000A  |
| Resolution                       | —   | 0.01A, 0.1A and 1A                                       |
| Accuracy                         | —   | ±2.5% of Reading ±10cts                                  |
| <b>DC Voltage</b> (Auto-Ranging) | 0.2 to 1000V  | 0.2 to 1000V   |
| Resolution                       | 0.1V and 1V   | 0.1V and 1Vrms   |
| Accuracy                         | 0.75% of Reading ±2cts                                | 1% of Reading ±2cts                                      |
| Input Impedance                  | 10MΩ  | 10MΩ   |
| <b>Resistance</b>                | 0.2 to 4000Ω  | 0.2 to 4000Ω   |
| Accuracy                         | 1% of Reading ±2cts                                   | 1% of Reading ±2cts                                      |
| Max Test Voltage                 | 3Vdc  | 3Vdc   |
| <b>Diode Test</b>                | 0.6mA   | 1.7mA  |
| Open Circuit Voltage             | 3Vdc  | 3Vdc   |
| <b>Continuity</b>                | <40Ω  | <40Ω   |
| Max Test Voltage                 | 3Vdc  | 3Vdc   |
| <b>Frequency</b> (Auto-Ranging)  |   |  |
| CURRENT INPUT<br>Range           | 4kHz  | 1Hz Resolution   |
|                                  | 10kHz   | —<br>10Hz Resolution                                     |
| Accuracy                         | 20Hz to 10kHz   | 0.1% of Reading ±1ct                                     |
| Min Input Signal<br>Range        | 4kHz  | 2Arms  |
|                                  | 10kHz   | —<br>5Arms   |
| <b>VOLTAGE INPUT</b>             |   |  |
| Range                            | 4kHz  | 1Hz Resolution   |
|                                  | 10kHz   | 10Hz Resolution  |
| Accuracy                         | 10Hz to 10kHz   | 0.1% of Reading ±1ct                                     |
| Min Input Signal<br>Range        | 4kHz  | 5Vrms  |
|                                  | 10kHz   | 5Vrms<br>10Vrms  |
| <b>Power Source</b>              |   | 9V Alkaline battery (included)                           |
| <b>ENVIRONMENTAL</b>             |   |  |
| <b>Operating Temperature</b>     | 32° to 104°F (0° to 40°C)<br>< 80% RH, non-condensing | *-14° to 122°F (-25° to 50°C),<br>80% RH, non-condensing |



## ► PRODUCT INCLUDES

Soft carrying case, set of two test leads, 9V battery and user manual.

### CATALOG NO.

### DESCRIPTION

2117.68

Clamp-On Meter Model 512 (TRMS, 1000AAC, 750VAC/1000VDC, Ohms, Continuity, Hz)

2117.70

Clamp-On Meter Model 514 (AC/DC, TRMS, 1000AAC/DC, 750VAC/1000VDC, Ohms, Continuity, Hz)

# GENERAL INDUSTRIAL GRADE CLAMP-ON METERS

100AAC/DC Low Current

## Model CM605

For general industrial monitoring  
and troubleshooting

### ► SPECIFICATIONS

| MODEL                             | CM605   |
|-----------------------------------|---|
| <b>ELECTRICAL</b>                 |   |
| <b>AC Current</b>                 |   |
| Measurement Ranges                | 2 Ranges: 10A, 100A   |
| Accuracy & Resolution             | 10A: 2.0% of Reading $\pm$ 10cts - 1mA Resolution<br>80A: 2.0% of Reading $\pm$ 10cts - 10mA Resolution<br>$>$ 80A: 3.5% of Reading $\pm$ 10cts - 10mA Resolution |
| Frequency Range                   | 2 Ranges: 50 to 500Hz   |
| <b>DC Current (positive only)</b> |   |
| Measurement Ranges                | 2 Ranges: 10A, 100A   |
| Accuracy & Resolution             | 10A: 2.5% of Reading $\pm$ 10cts - 1mA Resolution<br>80A: 2.5% of Reading $\pm$ 10cts - 10mA Resolution<br>$>$ 80A: 4.5% of Reading $\pm$ 10cts - 10mA Resolution |
| <b>AC Volts</b>                   |   |
| Measurement Ranges                | 600Vrms   |
| Accuracy & Resolution             | 1.5% of Reading $\pm$ 5cts - 100mV Resolution   |
| Frequency                         | 40 to 500Hz   |
| Input Impedance                   | 10M $\Omega$ , $<$ 50pF   |
| <b>DC Volts (positive only)*</b>  |   |
| Measurement Ranges                | 600V  |
| Accuracy & Resolution             | 1.0% of Reading $\pm$ 2cts - 100mV Resolution   |
| Input Impedance                   | 10M $\Omega$  |
| <b>Resistance (Ohms)</b>          |   |
| Measurement Ranges                | 10k $\Omega$ (9999 $\Omega$ )   |
| Accuracy & Resolution             | 1.0% of Reading $\pm$ 3cts - 1 $\Omega$ Resolution  |
| Test Voltage                      | $<$ 3.0Vdc  |
| <b>Continuity</b>                 |   |
| Measurement Ranges                | Buzzer $<$ 100 $\Omega$ $\pm$ 25 $\Omega$   |
| Resolution                        | 1 $\Omega$  |
| Test Voltage                      | $<$ 3.0Vdc  |
| <b>Analog Output</b>              |   |
| Output                            | 10mV/AAC & Adc through front banana jacks   |
| Frequency                         | 0 to 20kHz $\pm$ 3db  |
| Output Impedance                  | 3k $\Omega$ , $<$ 50pF  |
| <b>Other Functions</b>            |   |
| Adc Zero & Relative Function      | One touch push button ( $\Delta$ ZERO Button) to Zero Adc, or other readings.<br>Relative function also used in the other ranges to compare two measurements.     |
| HOLD Function                     | Holds A & V measurements when pressed (HOLD button)   |
| PEAK Function                     | Captures PEAK (1ms) V or A measurement when activated (PEAK Button)   |
| Auto-Ranging                      | "AUTO" displayed on LCD   |
| Over Range                        | "OL" displayed on LCD for all measurements  |
| Auto Power OFF                    | Auto Power OFF after approx 10 minute with Over-Ride  |
| Low Battery                       | Low Battery indication on LCD   |
| <b>MECHANICAL</b>                 |   |
| Max. Cable Diameter               | $\varnothing$ 0.45" (12mm)  |
| Max. Jaw Opening                  | $\varnothing$ 0.60" (15mm)  |
| Power Source                      | Two 1.5V AAA (LR03) batteries (included)  |
| Dimensions & Weight               | 7.95 x 2.76 x 1.33" (202 x 70 x 34mm) - 6.5oz (180g)  |
| Safety Standards                  | IEC/EN 61010-1 and 2-032 - 600V CAT II and 300V CAT III - Pollution Degree 2<br>Class 2 - Double or reinforced insulation, CE mark                                |

\*For negative measurement, add 2cts to the accuracy

### ► PRODUCT INCLUDES



Soft carrying case, set of two test leads,  
two 1.5V AAA batteries and user manual.

1mA  
Resolution



### ► FEATURES

- 10,000-count LCD display - excellent resolution
- 100AAC/DC Ammeter with low 10A range (1mA resolution)
- Tapered jaws for crowded wiring areas:  
Jaw opening:  $\varnothing$  0.60" - 15mm  
Cable diameter:  $\varnothing$  0.45" - 12mm
- 600VAC/DC voltmeter
- Analog output in AAC/DC to data loggers, etc
- Auto-ranging & Adc zero push-button
- Data HOLD & PEAK functions
- Relative function to compare two measurements
- Ohm range & continuity test with beeper
- Auto Power OFF and low battery indicator
- IEC/EN 61010 safety rated & CE mark
- 600Vrms overload protection

#### CATALOG NO.

#### DESCRIPTION

7000.02

Clamp-On Meter Model CM605 (100AAC/DC, Low Current)



10mA  
Resolution

# LEAKAGE CURRENT METER

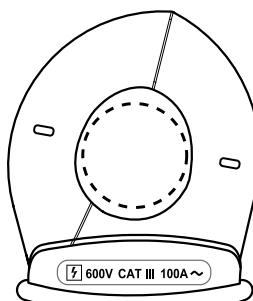
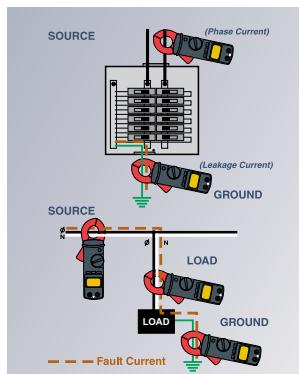
TRMS Clamp-On Leakage Current Meter

**Model 565**

Designed to measure low AC currents, which are typically leakage currents in ground conductors

## ►SPECIFICATIONS

| MODEL                                     | 565 TRMS                                      |                                  |
|---|---|----------------------------------|
| <b>mA AC Current (TRMS, Auto-Ranging)</b> |   | 0 to 600mA                       |
| Resolution                                | 60mA  | 0.01mA (10µA)                    |
|   | 600mA   | 0.1mA (100µA)                    |
| Accuracy                                  | 50 to 60Hz                                    | 1.2% of Reading ±5cts            |
|   | 50 to 500Hz                                   | 2.5% of Reading ±5cts            |
|   | 500Hz to 3kHz                                 | 3.5% of Reading ±10cts           |
| <b>AC Current (TRMS, Auto-Ranging)</b>    |   | 10 to 100A                       |
| Resolution                                | 10A   | 0.001A (1mA)                     |
|   | 100A  | 0.01A (10mA)                     |
| Accuracy                                  | 50 to 60Hz                                    | 1.0% of Reading ±5cts            |
|   | 50 to 500Hz                                   | 1.2% of Reading ±5cts            |
|   | 500Hz to 3kHz                                 | 2.5% of Reading ±10cts           |
| <b>AC Voltage (TRMS)</b>                  |   | 0 to 600V                        |
| Accuracy                                  | 50 to 60Hz                                    | 1.0% of Reading ±5cts            |
|   | 50 to 500Hz                                   | 1.2% of Reading ±5cts            |
|   | 500Hz to 3kHz                                 | 2.5% of Reading ±10cts           |
| <b>DC Voltage</b>                         |   | 0 to 600V                        |
| Resolution                                |   | 0.1V                             |
| Accuracy                                  |   | 1.0% of Reading ±3cts            |
| <b>Resistance</b>                         |   | 0 to 1kΩ                         |
| Accuracy                                  |   | 1.0% of Reading ±3cts            |
| <b>Continuity</b>                         |   | Buzzer activates <35Ω (0 to 1kΩ) |
| <b>Frequency (Auto-Ranging)</b>           |   |                                  |
| Function                                  | A-Hz  | V-Hz                             |
| Resolution                                | 0 to 100Hz                                    | 0.1Hz                            |
|   | 100Hz to 1kHz                                 | 1Hz                              |
| Sensitivity                               |   | 10mArms min                      |
| Accuracy                                  |   | 0.5% of Reading ±2cts            |
| <b>Filter</b>                             | On (50/60Hz only); Off (Full frequency range) |                                  |
| <b>In-Rush</b>                            | Max 100mS sample time                         |                                  |
| <b>Power Source</b>                       | Two 1.5V AAA batteries (included)             |                                  |



Jaw Opening: 1.10" (28mm)  
Conductor Size: 1" (26mm)



## ►PRODUCT INCLUDES

Two color-coded 5ft test leads, carrying case, batteries and user manual.

### CATALOG NO.

### DESCRIPTION

2117.56

Clamp-On Leakage Current Meter Model 565 (TRMS, 60mA, 600mA, 10A, 100A, 600VAC/DC, Hz, Ohms, Continuity)

# SELECTION CHART

| MODELS | Type       | AC Current                | AC Voltage  | DC Current   | DC Voltage    | Resistance ( $\Omega$ ) |
|--------|------------|---------------------------|-------------|--------------|---------------|-------------------------|
| 203    | AC/DC TRMS | 600A                      | 1000V       | 900A         | 1000V         | 60k $\Omega$            |
| 205    | AC/DC TRMS | 600A                      | 1000V       | 900A         | 1000V         | 60k $\Omega$            |
| 403    | AC/DC TRMS | 1000A                     | 1000V       | 1500A        | 1000V         | 100k $\Omega$           |
| 405    | AC/DC TRMS | 1000A                     | 1000V       | 1500A        | 1000V         | 100k $\Omega$           |
| 407    | AC/DC TRMS | 1000A                     | 1000V       | 1500A        | 1000V         | 100k $\Omega$           |
| 603    | AC/DC TRMS | 2000A                     | 1000V       | 3000A        | 1000V         | 100k $\Omega$           |
| 605    | AC/DC TRMS | 2000A                     | 1000V       | 3000A        | 1000V         | 100k $\Omega$           |
| 607    | AC/DC TRMS | 2000A                     | 1000V       | 3000A        | 1000V         | 100k $\Omega$           |
| 400D   | AC         | 0.020 to 400A             | -           | -            | -             | -                       |
| 4000D  | AC         | 0.20 to 4000A             | -           | -            | -             | -                       |
| 503    | AC/DC      | 0.05 to 400A              | 0.5 to 600V | 0.10 to 400A | 0.2 to 600V   | 400 $\Omega$            |
| 512    | AC TRMS    | 0.05 to 1000A             | 0.5 to 750V | -            | 0.2 to 1000V  | 4000 $\Omega$           |
| 514    | AC/DC TRMS | 0.05 to 1000A             | 0.5 to 750V | 1 to 1000A   | 0.2 to 1000V  | 4000 $\Omega$           |
| 565    | AC TRMS    | 0 to 600mA;<br>10 to 100A | 0 to 600V   | -            | 0 to 600V     | 0 to 1k $\Omega$        |
| CM605  | AC/DC      | 1mA to 100A               | 600Vrms     | 1mA to 100A  | 600V          | 0 to 9999 $\Omega$      |
| 670    | AC TRMS    | 0 to 1000A                | 0 to 1000V  | -            | 1000 to 1400V | 1000 to 10,000 $\Omega$ |
| 675    | AC/DC TRMS | 0 to 1000A                | 0 to 1000V  | 0 to 1400A   | 0 to 1400V    | 0 to 9999 $\Omega$      |

| Models | Continuity            | Frequency (Hz) |               | True RMS | Jaw Size   | Dimensions           | Catalog No.                              |
|--------|-----------------------|----------------|---------------|----------|--|----------------------|--|
|        |                       | Current        | Voltage       |          |  |                      |  |
| 203    | <40Ω                  | 3kHz           | 20kHz         | ✓        | 1.33" (34mm)   | 8.7 x 3.1 x 1.65"    | 2139.12                                  |
| 205    | <40Ω                  | 3kHz           | 20kHz         | ✓        | 1.33" (34mm)   | 8.7 x 3.1 x 1.65"    | 2139.40                                  |
| 403    | <40Ω                  | 2kHz           | 20kHz         | ✓        | 1.89" (48mm)   | 10.7 x 3.6 x 1.6"    | 2139.21                                  |
| 405    | <40Ω                  | 2kHz           | 20kHz         | ✓        | 1.89" (48mm)   | 10.7 x 3.6 x 1.6"    | 2139.50                                  |
| 407    | <40Ω                  | 2kHz           | 20kHz         | ✓        | 1.89" (48mm)   | 10.7 x 3.6 x 1.6"    | 2139.51                                  |
| 603    | <40Ω                  | 1kHz           | 20kHz         | ✓        | 2.36" (60mm)   | 11.65 x 4.37 x 1.61" | 2139.31                                  |
| 605    | <40Ω                  | 1kHz           | 20kHz         | ✓        | 2.36" (60mm)   | 11.65 x 4.37 x 1.61" | 2139.60                                  |
| 607    | <40Ω                  | 1kHz           | 20kHz         | ✓        | 2.36" (60mm)   | 11.65 x 4.37 x 1.61" | 2139.61                                  |
| 400D   | -                     | 10Hz to 3kHz   | -             | ✓        | 400D-6: 1.77" (45mm)<br>400D-10: 2.75" (70mm)<br>400D-60: 19" (483mm)<br>400D-120: 38" (965mm) | 3.94 x 2.36 x 0.79"  | 2153.30<br>2153.31<br>2153.33<br>2153.34 |
| 4000D  | -                     | 10Hz to 3kHz   | -             | ✓        | 4000D-14: 3.94" (100mm)<br>4000D-24: 8" (190mm)  | 3.94 x 2.36 x 0.79"  | 2153.32<br>2153.35                       |
| 503    | <40Ω                  | -              | -             | -        | 1.1" (28mm)  | 7.60 x 1.97 x 1.1"   | 2117.22                                  |
| 512    | <40Ω                  | 20Hz to 10kHz  | 10Hz to 10kHz | ✓        | 1.58" (40mm)   | 9.53 x 2.60 x 1.42"  | 2117.68                                  |
| 514    | <40Ω                  | 20Hz to 10kHz  | 10Hz to 10kHz | ✓        | 1.58" (40mm)   | 9.53 x 2.60 x 1.42"  | 2117.70                                  |
| 565    | 0 to 1kΩ              | 0 to 1kHz      | 0 to 1kHz     | ✓        | 1.1" (28mm)  | 8.5 x 2.5 x 1.18"    | 2117.56                                  |
| CM605  | Buzzer<br><100Ω ± 25Ω | 50 to 500Hz    | 40 to 500Hz   | -        | 0.60" (15mm)   | 7.95 x 2.76 x 1.33"  | 7000.02                                  |
| 670    | <35Ω                  | 1000Hz         | 10,000Hz      | ✓        | 1.65" (42mm)   | 10.71 x 3.15 x 1.69" | 2117.49                                  |
| 675    | <35Ω                  | 1000Hz         | 10,000Hz      | ✓        | 1.58" (40mm)   | 10.12 x 3.15 x 1.69" | 2117.50                                  |

