

*Smart, 1,000 A, economical*  
*CAT III 1,000 V, CAT IV 600 V*

# DCA/ACA CLAMP METER

Model : CM-6146

ISO-9001, CE, IEC1010



*Smart, 1,000 A, economical*  
**DCA/ACA CLAMP METER**

**Model : CM-6146**

- \* V : Smart ACV/DCV Automatically.
- \* Ω : Resistance, Diode, Continuity, Capacitance. Automatically.
- \* 600A : Smart DCA/ACA.
- \* 1000A : Smart DCA/ACA.
- \* Function keys : Select, Zero, Hz, Range, Hold.
- \* CAT III 1000V, CAT IV 600V.
- \* 32 mm measuring conductor size.
- \* Auto power off.



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**LUTRON ELECTRONIC**

*The Art of Measurement*

Smart, 1000 A, IEC1010 CAT III 1000V

# DCA/ACA CLAMP METER

Model : CM-6146

## FEATURES

* Meet IEC 1010 CAT III 1000 V safety requirement.
* 6000 counts A/D, high resolution.
* ACV, ACA, DCV, DCA, ohms, continuity, Hz, Capacitance, Diode.
* Smart function, Auto range or manual range with hold.
* Smart operation, Build in 4 intelligent function : " V ", " Ω ", " 600A ", " 1000A " .
* " V " function can select ACV, DCV automatically with auto range.
* " Ω " function can select the Resistance , Diode, Continuity beeper, Capacitance automatically with auto range.
* " 600A " & " 1000A " function can select ACA, DCA automatically.
* Data hold .
* Auto shut off is available to save battery life.
* 10 M ohm impedance for voltage circuit.
* Built-in overload protection for most ranges.
* LSI circuit provides high reliability and durability.
* Uses durable, long-lasting components, enclosed in strong, light weight ABS-plastic housing.
* Full line optional adapters : Clamp adapter, Pressure adapter, Sound level adapter, Anemometer adapter, Light adapter, EMF adapter.

## GENERAL SPECIFICATIONS

Display	39.5 mm x29.8 mm large LCD display
Measurement	DCV, ACV, DCA, ACA, Resistance, Capacitance, Frequency, Diode, Continuity beeper.
A/D counts no.	6000 counts.
Smart function	" V " function can select ACV, DCV automatically with auto range. " Ω " function can select the Resistance, Diode, Continuity beeper, Capacitance automatically with auto range. 600A " " 1000A " function can measure ACA, DCA .
Data hold	To freeze the display reading on the LCD display
Power On/Off management	Auto power of or manual power off.
Hz button	When execute the voltage or current function also can measure the frequency of signal.
Selection Range	Smart function or auto function . manual range selecting.
Polarity	Automatic Switching, " - " indicates negative polarity.
Sampling time	Approx. 0.5 to 1 second.
Operating Temperature	0 °C to 50 °C (32 °F to 122 °F)
Operating Humidity	Max. 80% R.H.
Power supply	DC 9 V battery 006P, MN1604
Power consumption	Approx. DC 9.1 mA.
Max. Conductor Size	32 mm (1.3 inch) Dia.

\* Appearance and specifications listed in this brochure are subject to change without notice.

Dimension	241 x94 x 46 mm ( 9.5 x 3.7 x 1.8 inch ).
Weight	380 g/0.83 LB ( w/o battery ).
Accessories Included	Red and Black Test Leads 1 Set Instruction Manual..... 1 PC
Optional accessories	Full line adapters : ACA/DCA current adapter, Pressure adapter, Light adapter, EMF adapter, Sound level adapter, High voltage probe.

## ELECTRICAL SPECIFICATIONS (23± 5 °C)

### DC Voltage

Range	600 mV /6 V/60 V/600 V /1000 V
Resolution	0.1 mV /0.001V /0.01V /0.1V/1 V
Accuracy	600 mV : ± ( 0.8% + 2 d ) 6 V, 60 V, 600 V, 1000 V : ± ( 0.8% + 1 d )
Input impedance	10 M ohm.
Over load protection	600 mV range : ± 500 DCV, 350 ACV other ranges : ± 1000 DCV, 1000 ACV

### AC Voltage

Range	6 V/60 V/600 V/1000 V
Resolution	0.001V /0.01V /0.1V/1 V
Accuracy	± ( 1% + 2d ) * Spec. are tested under 50/60 Hz.
Input impedance	10 M ohm.
Over load protection	600 mV range : ± 500 DCV, 350 ACV other ranges : ± 1000 DCV, 1000 ACV

### DC Current, AC Current

Range	600A/1000A
Resolution	0.1A /1A
Accuracy	600 A Range ± ( 1.5% +15d ) 1000 A Range ± ( 2% +8d )
Over load protection	AC/DC 1000A
Remark	* ACA specification be tested on sine wave 50/60 Hz. * Measurement range : 0.1A to 1000A

### Diode

Short/non conductance, good/defect test
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### Capacitance

Range	6 nF/60 nF/600 nF/6 uF/60 uF/600 uF
Resolution	0.001nF/0.01nF/0.1 nF/0.001uF/0.01uF/0.1uF
Accuracy	± ( 3 % + 5 d )
Over load protection	± 30 DCV, 30 ACV.
Remark	Discharge capacitor before testing.

### Frequency

Range	40 Hz to 1 KHz
Resolution	0.001 KHz
Accuracy	± ( 0.5% + 2d )
Over load protection	± 1000 DCV, 1000 ACV.

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