true rms, double insulation coil, smart, auto range FLEXIBILE CLAMP METER


## true rms, double insulation coil, smart, auto range FLEXI BLE CLAMP METER

## Model : CMF-3200

## FEATURES

| * Meet IEC 1010, CAT III 1000 V safety requirement. |
| :--- |
| * 6000 counts A/D, high resolution. |
| * True RMS |
| * Double insulation coil. |
| * ACA, DCV, ACV, ohms, continuity. Capacitance, Diode. |
| * Smart function, Auto range. |
| * Smart operation, Build in 3 intelligent function : |
| " V ", " $\Omega$ "," A ". |
| * " V " function can select DCV, ACV automatically with |
| auto range. |
| * " $\Omega$ " function can select the Resistance , Diode, Continuity |
| beeper, Capacitance automatically with auto range. |
| * " ACA " 600A " \& " 3000A " 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. |

## GENERAL SPECI FI CATI ONS

| Display | $33.5 \mathrm{~mm} \times 18.7 \mathrm{~mm}$, LCD display. |
| :---: | :---: |
| Measurement | DCV, ACV, ACA, Resistance,Capacitance, Diode, Continuity beeper. |
| A/D counts no. | 6000 counts. |
| Smart function | * " V " function can select ACV, DCV automatically with auto range. <br> * " $\Omega$ " function can select the Resistance,Diode, Continuity beeper,Capacitance automatically with auto range. <br> * ACA " 600A ", " 3000A " automatically with auto range. |
| Data hold | To freeze the display reading on the LCD display. |
| Power On/Off management | Auto power of or manual power off. |
| Selection | Smart function or auto function . |
| Polarity | Automatic Switching, " - " indicates negative polarity. |
| Sampling time | Approx. 0.5 to 1 second. |
| Operating Temp. | $0^{\circ} \mathrm{C}$ to $50{ }^{\circ} \mathrm{C}\left(32{ }^{\circ} \mathrm{F}\right.$ to $\left.122^{\circ} \mathrm{F}\right)$ |
| Operating humidity | Max. 80\% RH. |
| Power supply | DC 1.5 V battery ( UM-4, AAA ) x 2. |
| Power consumption | Approx. DC 16.1 mA . |
| Flexible cable length | 300 mm . |
| Flexible Cable Diameter | 8 mm . |
| Dimension | $290 \times 138.3 \times 26.5 \mathrm{~mm}$ ( $11.4 \times 5.4 \times 1.0$ inch ). |
| Weight | $197 \mathrm{~g} / 0.435 \mathrm{LB}$ ( w.o battery ). |
| Accessories included | Operation manual............................. 1 PC Test leads ( CATIII 1000 V )........... 1 pair |
| Optional accessory | Soft carrying case |

## ELECTRI CAL SPECI FI CATI ONS $\left(23 \pm 5{ }^{\circ} \mathrm{C}\right)$

## AC Current

Range

| Resolution | $0.1 \mathrm{~A} / 1 \mathrm{~A}$ |
| :--- | :--- |


| AC Current | true rms |
| :---: | :---: |
| Accuracy | 600 A Range $\pm$ ( $1 \%+8 \mathrm{~d})$. |
|  | 3000 A Range $\pm$ ( $1 \%+10 \mathrm{~d})$. |
| Linearity | $\pm 0.2 \%$ of reading value from $10 \%$ to $100 \%$ of range value. |
| Conductor position sensitivity | $\pm 2 \%$ of reading value <br> * The measured conductor distance from center $>25 \mathrm{~mm}\left(1^{\prime \prime}\right)$. |
| External field influence | Increase $\pm 1.5 \%$ of range value max. <br> * Recommend the distance between different " Flexibel current probe " should > 200 mm . |
| Remark | * Accuracy is specified that the measured conductor's position is on the center of " Flexible current probe ". <br> * ACA specification be tested on sine wave $50 / 60 \mathrm{~Hz}$. <br> * Measurement range : 0.1 A to 3000 A |

## DC Voltage

| Range | $6 \mathrm{~V} / 60 \mathrm{~V} / 600 \mathrm{~V} / 1000 \mathrm{~V}$ |
| :--- | :--- |
| Resolution | $0.001 \mathrm{~V} / 0.01 \mathrm{~V} / 0.1 \mathrm{~V} / 1 \mathrm{~V}$ |
| Accuracy | $\pm(0.8 \%+5 \mathrm{~d})$ |
| Input impedance | 10 M ohm. |
| Over load <br> protection | $\pm 1000 \mathrm{DCV}, 1000 \mathrm{ACV}$ |


| AC Voltage | true rms |
| :--- | :--- |
| Range | $6 \mathrm{~V} / 60 \mathrm{~V} / 600 \mathrm{~V} / 1000 \mathrm{~V}$ |
| Resolution | $0.001 \mathrm{~V} / 0.01 \mathrm{~V} / 0.1 \mathrm{~V} / 1 \mathrm{~V}$ |
| Accuracy | $\pm(1 \%+8 \mathrm{c})$ <br> $*$ Spec. are tested under $50 / 60 \mathrm{~Hz}$. |
| Input impedance | 10 M ohm. |
| Over load <br> protection | $\pm 1000 \mathrm{DCV}, 1000 \mathrm{ACV}$ |
| Smart function <br> test | It must be $>300 \mathrm{mV} \mathrm{AC}$. |

## Diode

Short/non conductance, good/defect test

| Capacitance |  |
| :--- | :--- |
| Range | $6 \mathrm{nF} / 60 \mathrm{nF} / 600 \mathrm{nF} / 6 \mathrm{uF} / 60 \mathrm{uF} / 600 \mathrm{uF}$ |
| Resolution | $0.001 \mathrm{nF} / 0.01 \mathrm{nF} / 0.1 \mathrm{nF} / 0.001 \mathrm{uF} / 0.01 \mathrm{uF} / 0.1 \mathrm{uF}$ |
| Accuracy | $\pm(3 \%+10 \mathrm{~d})$ |
| Over load <br> protection | $\pm 30 \mathrm{DCV}, 30 \mathrm{ACV}$. |
| Remark | * Discharge capacitor before testing. <br>  <br>  Smart function must be $>0.4 \mathrm{nF}$. |


| OHMS | $600 \Omega / 6 \mathrm{~K} \Omega / 60 \mathrm{~K} \Omega / 600 \mathrm{~K} \Omega / 6 \mathrm{M} \Omega / 60 \mathrm{M} \Omega$ |
| :--- | :--- |
| Range | $0.1 \Omega / 0.001 \mathrm{~K} \Omega / 0.01 \mathrm{~K} \Omega / 0.1 \mathrm{~K} \Omega / 0.001 \mathrm{M} \Omega$ <br> $0.01 \mathrm{M} \Omega$ |
| Resolution | $600 \mathrm{ohm}: \pm(1 \%+5 \mathrm{~d})$ <br> $6 \mathrm{~K} / 60 \mathrm{~K} / 600 \mathrm{~K} / 6 \mathrm{M} / 60 \mathrm{M}: \pm(1.5 \%+5 \mathrm{~d})$ |
| Accuracy | $\pm 350 \mathrm{DCV}, 350 \mathrm{ACV}$. |
| Over load <br> protection | $60 \mathrm{M} \Omega$ measurements must be operated in the <br> automatic shift mode |
| Remark |  |

## Continuity Beeper

Beeper will sound if measured resistance less than 20 ohm.

[^0]'1511-CMF-3200


[^0]:    * Appearance and specifications listed in this brochure are subject to change without notice.

