SD Card real time data recorder, true rms

DCA/ACA CLAMP METER

Model : CM-6010SD   *ISO-9001, CE, IEC1010*

LUTRON ELECTRONIC

The Art of Measurement

SD card data recorder, true rms
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FEATURES

* Real time data logger, save the data into the micro SD memory card and can be downloaded to the Excel, extra software is noneed.	
* Real time data logger, built-in clock (year/month/date/hour minute/second), sampling time can be set from 2 to 7200seconds.	
* Measurement functions : ACA. DCA. ACV, DCV. Resistance, Diode, Continuity, Capacitance, Temp. (optional Temp. probe)	
* ACA range : 0 to 2000 ACA, auto range.	
* DCA range : 0 to 2000 DCA, auto range.	
* ACV range : 0 to 1000 ACV, auto range.	
* DCV range : 0 to 1000 DCV, auto range.	
* Resistance range : 0 to 60 Megohm, auto range.	
* True rms measurement for ACV, ACA.	
* CAT III 1000V, CAT IV 600V.	
* DCA zero button.	
* Hold, Peak (Max., Min. measuring value).	
* 50 mm measuring conductor size.	
* ACV, DCV input impedance is 10 Megohm.	
* LCD with backlight.	
* Micro SD memory card capacity : 1 GB to 32 GB, micro SD card.	
* Powered by DC 1.5V (UM-3/AA) x 2 PCs batteries (Alkaline type) or DC 9V adapter. SD card data record function is available when the power supply is to use the DC 9V adapter.	
* RS232/USB computer interface.	
* Carrying case is included.	
* Optional USB cable, USB-01.	
* Optional data acquisition softwares, SW-U801-WIN, SW-E802.	
* Optional type K Temp. probe, TP-11.	

Display sampling time	Approx. 1 second.
Data Output USB/RS232 *Computer interface	RS232 computer serial interface : * Connect the optional USB cable USB-01 will get the USB plug. * Connect the optional RS232 cable UPCB-02 will get the RS232 plug.
Operating Temp.	0 to 50℃ (32 to 122℉).
Operating Humidity	80% Relative Humidity max.
Power Supply	* DC 1.5V, AA (UM-3) Battery x 2 PCs (Alkaline or heavy-duty battery). * AC to DC 9V power adapter (Linear type).
Power Consumption	34 mA DC.
Max. Conductor size	Clamp can accommodate up to 2.0" (50 mm) diameter.
Dimensions	11.0 x 4.2 x 1.9" (280 x 106 x 47mm)
Accessories Included	Instruction manual.....................................1 PC Test Leads...1 Set (2 pieces) Alligator clips... 1 Set (2 pieces) Carrying case...1 PC Micro SD card(8 GB)..................................1 PC AC to DC 9V adapter (Linear type, 110 V or 220 V).........1 PC
Optional accessories	* Type K Temp. probe, TP-11. * USB cable,USB-01. * RS232 cable,UPCB-02. * Data Acquisition software,SW-U801-WIN.

GENERAL SPECIFICATIONS:

Circuit	Custom single-chip microprocessor LSI circuit.
Display	LCD Size: 3.2 X 2.4" (60 X 44.4 mm). Dot Matrix backlight LCD (128 X 64 pixels).
Measurements	DCV/ACV DCA/ACA Resistance/DIODE/Continuity Beeper Capacitance Frequency Temperature
A/D counts no.	6000 counts.
Voltage ranges	0.5 mV to 1000 V (DCV/ACV, Auto or Manual Range).
Current ranges	0.5 ACA to 2000 ACA (DCA/ACA, Auto or Manual Range).
Safety standard	IEC1010 CAT III 1000 V.
ACV input impedance	10M ohms.
Clamp frequency response	40 Hz to 1 KHz.
Over-load protection	DCV/ACV 1000 DCV / 1000 ACV RMS. DCA/ACA 2100 DCA/ACA with clamp probe.
Over-range	* LCD display show " OL ". * The data save into the SD card will show " 9999 " or " 999 " (overleap the decimal point).
Data Hold	Freezes displayed reading.
Data Recording	Micro SD memory card (1 GB to 32 GB).
Relative measure.	To offset the measurement value.
Peak to Peak	DCV/ACV,DCA/ACA peak to peak measurement value.
DCA zero adj.	DCA zero adjustment.
Range selection	Auto range with manual range selecting.
Polarity	Automatic Switching, " - " indicates negative polarity.
Data logger	* Real time data logger, saved the data into miro SD memory card and down load the all the measured value with the information (year/month/data/ hour/minute/second) down load to the Excel. * Sampling time for data logger : 2 seconds to 7200 seconds. * When the system detects micro SD format does not match with the Machine that will be mandatory for reformatting to ensure that data records can be normal. * Data error no. : ≦ 0.1% no. of total saved data typically.

ELECTRICAL SPECIFICATIONS (23± 5 ℃):

DCV

Range	Resolution	Accuracy	
600 mV /6 V/60 V/600 V /1000 V	0.1 mV /0.001V /0.01V /0.1V/1 V	600 mV	± (0.8%+2d)
		6V to 1000V	± (0.8%+1d)
Peak to Peak			± (5%+30d)

ACV

Range	Resolution	Accuracy
600 mV /6 V/60 V/600 V /1000 V	0.1 mV /0.001V /0.01V /0.1V/1 V	± (1%+2d)
Peak to Peak		± (5%+30d)

DCA,ACA

Range	Resolution	Accuracy	
0.5A to 2000A	0.1A/1 A	600A	± (1%+12d)
		2000A	± (1%+8d)
Peak to Peak			± (5%+30d)

OHMS

Range	Resolution	Accuracy	
600/6K/60K/600K/6M/60M	0.1Ω /0.001K/0.01K/0.1K/0.001M /0.01M	600 ohm	± (1%+2d)
		6K to 60M	± (1.5%+2d)

DIODE

Short/non conductance, good/defect test

Continuity Beeper

Beeper will sound if measured resistance less than 5 ohm

Capacitance

Range	Resolution	Accuracy
6 nF/60 nF/600 nF/6 uF/60 uF/600 uF	0.001nF/0.01nF/0.1 nF/ 0.001uF/0.01uF/0.1uF	± (3%+5d)

Frequency(ACV > 6.5V,ACA > 15A)

Range	Resolution	Accuracy
40Hz to 999.9Hz	0.1Hz	± (0.5%+2d)

Type K Temperature

Range	Resolution	Accuracy
-100.0℃ to 199.9℃	0.1℃	± (1%+1℃)
200℃ to 1300℃	1℃	± (1%+2℃)
-148.0℉ to 391.8℉	0.1℉	± (1%+1.8℉)
392℉ to 2372℉	1℉	± (1%+3.6℉)

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

1702-CM6010SD