

*SD card real time data recorder  
+ Temp., 6,000 counts*

# MULTIMETER + LCR

**Model : DM-9962SD**

*ISO-9001, CE, IEC1010*

*www.yalab.com.tw*

*02-2389-0101*



**Lutron**

[www.YaLAB.com.tw](http://www.YaLAB.com.tw)

*The Art of Measurement*

SD card real time data recorder  
6000 counts, true rms

# MULTIMETER, + LCR

Model : DM-9962SD

## FEATURES

* Real time data logger, save the data into the micro SD memory card and can be downloaded to the Excel, extra software is no need.
* Real time data logger, built-in clock ( year/ month/date/hour minute/second ), sample time 2 to 3600 seconds
* Meet IEC 1010 CAT III 1000 V safety requirement.
* LCD with green light backlight, easy reading.
* 6000 counts A/D, high resolution.
* Accepts micro SD memory cards of up to 32 GB capacity.
* Multi function measurement. DCV, ACV, DCA, ACA, Resistance, Capacitance, Inductance, Frequency, Temperature, Diode, Continuity beeper.
* Max. & Min. measurement value with recall.
* Relative, Data hold.
* Auto range with manual range selection.
* Temperature measurement possibility.
* V/A/Hz button, when execute the ACV, ACA function also can measure the frequency of signal.
* Both 10 A, mA, uA current are build fuse for safety consideration.
* 10 M ohm impedance for voltage circuit.
* Operates from 9 V ( 006P, MIN1604 ) batteries.
* Built-in overload protection for most ranges.
* Photo couple RS 232 computer serial interface.
* Uses durable, long-lasting components, enclosed in strong, light weight ABS-plastic housing.
* Full line optional adapters : Clamp adapter, Tachometer adapter, Pressure adapter, Humidity Adapter, Sound level adapter, Anemometer adapter, Light adapter, EMF adapter.

## GENERAL SPECIFICATIONS

Display	60 mm x 39 mm large LCD display
Measurement	DCV, ACV, DCA, ACA, Resistance, Diode, Continuity beeper, Capacitance, Inductance, Frequency, Temperature.
Datalogger	Auto 2 second to 3600 seconds
Sampling Time	Manual Push the data logger button once will save data one time.
Setting range	@ Set the sampling time to 0 second.
Data error no.	≤ 0.1% NO. of total saved data typically.
micro SD card Capacity	1 GB to 32 GB
A/D counts no.	6000 counts.
Range selection	Auto range with manual range selecting.
Special function	Relative measurement, Data hold,
Data hold	To freeze the display reading on the LCD display.
Power On/Off management	Auto power of or manual power off.
Memory recall	Records Maximum & Minimum readings with recall.
Relative measurement	To offset the measurement value.
V/A/Hz button	When execute the voltage or current function also can measure the frequency of signal.
Data output	RS 232 PC serial interface, photo couple.
Polarity	Automatic Switching, " - " indicates negative polarity.
Zero adjustment	Automatic.
Sampling time of display	Approx. 0.5 to 1 second.
Operating Temp. & humidity	0 °C to 50 °C ( 32 °F to 122 °F ), Max. 80% RH.
Power supply	9 V ( 006P, MIN1604 ) DC 9V adapter input * AC/DC Power adapter is optional. <b>* SD card datalogger must use the optional AC/DC Power adapter power supply, otherwise the SD card datalogger can not be worked properly.</b>
Power consumption	Approx. DC 5.5 mA ( w/o SD card recorder.
Dimension	190 x 88 x 40 mm ( 7.5 x 3.5 x 1.6 inch ).
Weight	387 g/0.85 LB ( w/o battery ).
Accessories Included	Red and Black Test Leads ( CAT III 1KV Test Leads )..... 1 Set 0.63 Amp Spare Fuse..... 1 PC 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. * AC to DC 9V adapter ..... AP-9VA * Holster..... HS-03 * Type K Temperature probe..... TP-11 * Soft carrying case..... CA-05A * RS232 cable..... UPCB-06 * USB cable..... USB-11 * Micro SD card..... AC-MICROSD * Data Acquisition software ... SW-U801-WIN SW-E802

## ELECTRICAL SPECIFICATIONS (23± 5 °C)

### DC Voltage

Range	600.0 mV /6 V/60 V/600 V /1000 V
Resolution	0.1 mV /0.001V /0.01V /0.1V/1 V
Accuracy	± ( 0.5% + 2d ) 600 mV ± ( 0.8% + 1d ) 6 V, 60 V, 600 V, 1000 V
Input impedance	10 M ohm.
Over load protection	600 mV range ± 380 DCV, 380 ACV other ranges ± 1000 DCV, 1000 ACV

### AC Voltage ( True RMS )

Range	600.0 mV /6 V/60 V/600 V /1000 V
Resolution	0.1 mV /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 ± 380 DCV, 380 ACV other ranges ± 1000 DCV, 1000 ACV

### DC Current, AC Current ( True RMS )

Range	10 A/6 A/600 mA/60 mA/6000 uA/600 uA
Resolution	0.01 A/0.001 A/0.1 mA/0.01 mA/1 uA/0.1 uA
Accuracy	DCA ACA 600 uA ± ( 0.5% + 2d ) ± ( 1% + 7d ) 6000 uA ± ( 0.5% + 2d ) ± ( 1% + 7d ) 60 mA ± ( 0.5% + 2d ) ± ( 1% + 7d ) 600 mA ± ( 0.5% + 2d ) ± ( 1% + 7d ) 6 A ± ( 1.5% + 5d ) ± ( 1.5% + 5d ) 10 A ± ( 1.5% + 2d ) ± ( 1.5% + 2d ) * ACA spec. are tested under 50/60 Hz.
Over load protection	10A range : 10A fuse. uA, mA range : 630 mA fuse.

### Diode ( Forward voltage, VF )

Range	2.9 V DC.
Accuracy	± ( 0.5% + 2d )

### Capacitance

Auto Range	600 pF/6 nF/60 nF/600 nF/6 uF/60 uF/100 uF/600 uF
Resolution	0.1 pF/0.001 nF/0.01nF/0.1 nF/0.001 uF/ 0.01 uF/0.1 uF/1 uF
Accuracy	600 pF ± ( 2.5% + 5d ) 6 nF/60 nF/600 nF/6 uF/60 uF ± ( 1.5% + 5d ) 600 uF/100 uF ± ( 5% + 5d )
Over load protection	± 30 DCV, 30 ACV.
Test frequency	100Hz /1KHz /10KHz * Auto frequency configuration
Remark	Discharge capacitor before testing.

### Inductance

Auto Range	600 uH/6 mH/60 mH/600 mH/6 H/60 H/100 H
Resolution	0.1uH/0.001mH/0.01 mH/0.1 mH/0.001 H/ 0.01 H/0.1 H
Test frequency	100Hz /1KHz /10KHz * Auto frequency configuration
Accuracy	600 uH ± ( 5% + 5d ) 6 mH/60 mH/600 mH/6 H ± ( 1.5% + 5d ) 60 H/100 H ± ( 2.5% + 5d )
Over load protection	± 30 DCV, 30 ACV.

### Frequency

Range	600 Hz/6 KHz/60 KHz/600 KHz/6 MHz/20 MHz
Resolution	0.1 Hz/0.001 KHz/0.01 KHz/0.1 KHz/ 0.001 MHz/0.01 MHz
Accuracy	± ( 0.5% + 2d )
Sensitivity	Min. 1 V rms, Max. 5 V rms.

### OHMS

Range	600 Ω /6 KΩ /60 KΩ /600 KΩ /6 MΩ /60 MΩ
Resolution	0.1Ω /0.001 KΩ /0.01 KΩ /0.1 KΩ /0.001 MΩ / 0.01 MΩ
Accuracy	600 ohm : ± ( 1% + 2d ) 6K/60K/600K/6 M : ± ( 1.5% + 2d ) 60 M : ± ( 3% + 5d )
Over load protection	± 350 DCV, 350 ACV.

### Continuity Beeper

Beeper will sound if measured resistance less than 20 ohm.
--

### Max. & Min. Measurement

During the operation can memorize the maximum and the minimum measurement value.
--

### Temperature

Auto Range	Resolution	Accuracy
-100.0 °C to 199.9 °C	0.1 °C	± ( 1% + 1 °C )
200 °C to 1000 °C	1 °C	
-148 °F to 391.9 °F	0.1 °F	± ( 1% + 2 °F )
392 °F to 1832 °F	1 °F	
Temp. probe	The temperature probe ( TP-11 ) is the optional accessory.	

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

1709-DM9962SD