

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

MULTIMETER + LCR

Model : DM-9962SD

ISO-9001, CE, IEC1010



LUTRON ELECTRONIC

The Art of Measurement

SD card real time data recorder
6000 counts, 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 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. * SD card datalogger must use the optional AC/DC Power adapter power supply, otherwise the SD card datalogger can not be worked properly. |
| 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 |

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)

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

Capacitance

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|----------------------|--|
| 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 ± (2.5% + 5d) |
| Over load protection | ± 30 DCV, 30 ACV. |
| Test frequency | 100Hz /1KHz /10KHz * Auto frequency configuration |
| Remark | Discharge capacitor before testing. |

Inductance

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|----------------------|---|
| 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

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|-------------|--|
| 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

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|----------------------|--|
| 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

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| Beeper will sound if measured resistance less than 20 ohm. |
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Max. & Min. Measurement

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| During the operation can memorize the maximum and the minimum measurement value. |
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Temperature

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|-----------------------|--|-----------------|
| 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.

1608-DM9962SD