

MultiLog™ Series Datalogging MultiMeters

Log and view up to 43,000 data points at capture rates as fast as 20 times per second

Features:

- 10 selectable datalogging sample rates from 0.05 second (50ms) to 480 seconds (8 minutes) per sample for high speed data collection or long time studies
- View stored data directly on LCD display with quick min/max and trend displays
- Optically isolated RS-232 PC interface with Windows® 95/98 compatible software (included) allows user to collect, display, plot, save or export data or graphs
- Rugged design with protective holster and water resistant housing
- High basic DC Voltage accuracy of 0.08%
- True RMS measurements for AC Voltage and Current
- Wide AC Voltage bandwidth of 40Hz to 20kHz
- Smart auto power off is disabled if signal is present at test leads
- Temperature function with selectable °F/°C units
- Backlit 5000 count LCD display for high resolution (0.01mV, 0.1µA, 0.01Ω, 0.01nF, 0.001Hz)
- Hold and low resistance auto-lead zero
- 10 measurement functions including AC/DC Voltage and Current, Resistance, Temperature, Frequency, Capacitance, Diode and Continuity
- Complete system includes multimeter with built-in stand, CAT. III test leads, Temperature probe, Windows® 95/98 compatible Data Acquisition software, RS-232 cable, protective holster and 9V battery



Additional Features Model ML710:

- 5400 data point memory



Additional Features Model ML720:

- 43,000 data point memory



All models include Double injection molded CAT. III - 1000V Test Leads for safety, better grip and added durability.



CAT III - 600V,
CAT II - 1000V

Specifications	Range	Max. Resolution	Basic Accuracy (%rdg+digits)
DC/AC Voltage:	50mV, 500mV, 5V, 50V, 500V, 1000V	0.01mV	±(0.08%+2d) DC ±(0.5%+3d) AC
DC/AC Current:	500µA, 5000µA, 50mA, 500mA, 5A, 10A	0.1µA	±(0.2%+4d) DC ±(0.6%+3d) AC
Resistance (Ω):	50, 500k, 5k, 50k, 500k, 5M, 50M	0.01Ω	±(0.1%+2d)
Capacitance:	50nF, 500nF, 5µF, 50µF, 500µF, 9999µF	0.01nF	±(0.8%+3d)
Frequency:	0.001Hz to 125kHz	0.001Hz	±(0.01%+2d)
Temperature:	-58F to 1832°F (-50 to 1000°C)	0.1°	±(0.3%+3d)
Dimensions/ Wt:	7.32 x 3.42 x 1.39" (186 x 87x 35.5mm) / 0.75lb (340g)		

Applications:

- Use logged data collected in the field to generate reports
- Monitor and analyze electrical parameters over time
- Use with multimeter adaptors to perform studies on Airflow, Humidity, Light Level, Large Currents and InfraRed Temperature

Ordering Information:

ML710MultiLog™ Datalogger MultiMeter
ML720MultiLog™ Datalogger MultiMeter
TP872Spare bead wire Temperature Probe
TL805Spare set of CAT. III - 1000V Test Leads
TL807Set of Alligator Clips (2pk)
CA899Vinyl Pouch Carrying Case
FS880Spare Fuse

NIST CERTIFICATES WITH DATA AVAILABLE FOR ALL MODELS. ADD "-NIST" TO END OF PART NUMBER



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FUNCTION	RANGE	ACCURACY (%rdg + digits)	NOTES
DC Voltage:	50.00mV	±(0.12% + 2d)	Input Impedance: 10MΩ Input protection; V;1050Vrms, mV; 600VDC/AC
	500.0mV	±(0.06% + 2d)	
	5.000V	±(0.08% + 2d)	
	50.00V	±(0.08% + 2d)	
	500.0V	±(0.08% + 2d)	
	1000V	±(0.08% + 2d)	
AC Voltage:	50.00mV	±(0.5% + 3d)	Input Impedance: 10MΩ Stated specification @ 50/60Hz (wider specs at 40Hz to 20kHz) True RMS Input protection; V;1050Vrms, mV; 600VDC/AC
	500.0mV	±(0.5% + 3d)	
	5.000V	±(0.5% + 3d)	
	50.00V	±(0.5% + 3d)	
	500.0V	±(0.5% + 3d)	
	1000V	±(0.5% + 3d)	
DC Current:	500.0µA	±(0.2% + 4d)	Burden voltage; 0.15mV/µA, 3.3mV/mA, 0.03V/A On 10A range, 20A for 30 seconds with 5 minute cool down Input protection; µA/mA 1A/240V fuse, A 13A/240V fuse
	5000µA	±(0.2% + 4d)	
	50.00mA	±(0.2% + 4d)	
	500.0mA	±(0.2% + 4d)	
	5.000A	±(0.2% + 4d)	
	10.00A	±(0.2% + 4d)	
AC Current:	500.0µA	±(0.6% + 3d)	Stated specification at 50/60Hz (wider specs at 40Hz to 1kHz) On 10A range, 20A for 30 seconds with 5 minute cool down True RMS Input protection; µA/mA 1A/240V fuse, A 13A/240V fuse
	5000µA	±(0.6% + 3d)	
	50.00mA	±(0.6% + 3d)	
	500.0mA	±(0.6% + 3d)	
	5.000A	±(0.6% + 3d)	
	10.00A	±(0.6% + 3d)	
Resistance:	50.00Ω	±(0.2% + 6d)	Open circuit voltage;<1.3VDC (<3VDC on 50Ω & 500Ω ranges) Input protection; 600VDC/AC
	500.0Ω	±(0.1% + 3d)	
	5.000kΩ	±(0.1% + 2d)	
	50.00kΩ	±(0.1% + 2d)	
	500.0kΩ	±(0.1% + 2d)	
	5.00MΩ	±(0.4% + 3d)	
	50.00MΩ	±(1.5% + 5d)	
Capacitance:	50.00nF	±(0.8% + 3d)	Accuracies stated for film capacitors or better Input protection; 600VDC/AC
	500.0nF	±(0.8% + 3d)	
	5.000µF	±(1.0% + 3d)	
	50.00µF	±(2.0% + 3d)	
	500.0µF	±(3.5% + 5d)	
	9999µF	±(5.0% + 5d)	
Temperature:	-58F to 1832°F	±(0.3% + 5d)	Thermocouple range and accuracy not included
	-50 to 1000°C	±(0.3% + 3d)	

Frequency:	Function	Range	Sensitivity	Accuracy (%rdg + digits)
	mV	5Hz to 125kHz	300mV	±(0.01% + 2d)
	5V	5Hz to 125kHz	2V	±(0.01% + 2d)
	50V	5Hz to 20kHz	20V	±(0.01% + 2d)
	500V	5Hz to 1kHz	80V	±(0.01% + 2d)
	1000V	5Hz to 1kHz	300V	±(0.01% + 2d)
	Ω, Cx, diode	5Hz to 125kHz	300mV	±(0.01% + 2d)
	µA, mA, A	5Hz to 125kHz	10%FS	±(0.01% + 2d)

Diode test:	2.000V ±(1% + 1digit) Open circuit voltage <3.5V, 0.8mA typical test current
Continuity:	Buzzer sounds between 20Ω and 200Ω, Response time <100µs
Display:	5000 count LCD with backlighting and bargraph
Update Rate:	5 per second, Bargraph; 60 per second
Auto Power Off:	After 17 minutes inactive
Standards:	IEC 1010, CAT. III- 600V
Data Storage:	ML710: 5400 measurements, ML720: 43,000 measurements
Sampling Time:	0.05 (0.2 for Temp and Ω, 0.4 for Hz, 1 for C), 1, 20, 40, 60, 120, 240 and 480 seconds
Operating Temperature:	32 to 122°F (0 to 50°C)
Storage Temperature:	-4 to 176°F (-20 to 60°C)
Relative Humidity:	80% (32 to 95°F/ 0 to 35°C), 70% (95 to 122°F/ 35 to 50°C)
Power Supply:	9V alkaline battery
Power consumption:	2.7mA typical
Dimensions:	7.32 x 3.42 x 1.39" (186 x 87 x 36mm)
Weight:	0.75lb (340g)



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