

# Programmable LOGGER Digital Multimeter

## DM610

### ■ Fetures

- 0.05% of basic accuracy, 5,000 count of high resolution
- Data Logger Memory: 18,000 Points
- Function and ranges may be controlled from PC via USB.
- True RMS measurements for AC
- Full Auto Range
- Auto Calibration
- Auto power off and "keep on" mode
- Data holds and run mode
- Low battery indication
- Overload protection for all functions (Including 10A)
- Record (MIN, MAX, AVG), Relative (REF, DEF,ERR) mode
- Compare (GO-NOGO) Mode and Trend Plot
- All inputs protected (Including 10A)
- Clock and Date
- Multi display measurements
- Back light display
- AC, DC Voltage measurement
- 10 MHz frequency counter
- Period, Duty cycle measurement
- Pulse width measurement (mS-PULSE)
- 20M resistance and Capacitance measurement
- Continuity and Diode test
- Temperature (°C/°F) using "K" type thermocouple
- Room temperature without any temperature probe
- AC, DC Amperes measurement



### ■ Technical Specification

DC V	Range	Resolution	Accuracy		Impedance 10 MΩ	Max. Input
	500.0mV	0.1V	±(0.05%+5d)			1000 VDC or
	5.000V	0.001V				750 VAC rms
	50.00V	0.01V				
	500.0V	0.1V				
1000V	1V					
AC V	Range	Resolution	Accuracy		Impedance 10 MΩ	Max. Input
	500.0mV	0.1V	45~450Hz	450~5kHz		1000 VDC or
	5.000V	0.001V	±(0.75%+20d)			750 VAC rms
	50.00V	0.01V				
	500.0V	0.1V				
1000V	1V					
Resistance	Range	Resolution	Accuracy		Protection 1000 VDC or 750 VAC rms	
	500.0 Ω	0.1 Ω	±(0.2%+5d)			
	5.000 kΩ	0.001 kΩ				
	50.00 kΩ	0.01 kΩ				
	500.0 kΩ	0.1 kΩ				
	5.000 MΩ	0.001 MΩ				
20.0 MΩ	0.1 MΩ	±(1%+10d)				

## ■ Technical Specification - continued

Continuity	Range		Resolution	Threshold		Protection
	1 k $\Omega$		0.001 k $\Omega$	Less than 100 ohm		
Diode	Range		Resolution	Max. Test Current	Open circuit voltage	Protection
	2 V		0.01V	Approx. 2.5mA	2V	600 V DC or VAC Peak
Capacitance	Range		Resolution	Accuracy		Protection
	5.000 nF		0.001 nF	$\pm(4\%+15d)$		600 V DC or VAC Peak
	50.00 nF		0.01 nF			
	500.0 nF		0.1 nF			
	5.000 uF		0.001 uF			
	50.00 uF		0.01 uF			
	500.0 uF		0.1 uF	(30Sec)		
Frequency	Range		Resolution	Accuracy		Protection
	100Hz		0.001Hz	$\pm(0.05\%+2d)$		$\pm 250V$
	1kHz		0.01Hz			
	10kHz		0.0001kHz			
	100kHz		0.001kHz	Unspecified		
	1MHz		0.01kHz			
10MHz		0.1kHz				
Duty cycle	Range	Resolution		Accuracy	Input Frequency	Max. Input
	100%	0.10%		$\pm(0.05\%+2d)$	Less than 1kHz	
Temperature	Range	Resolution		Accuracy		Protection
	1200°C	1°C		$\pm(5\%+3d)$		600 V DC or AC Peak
	2192°F	1°F		°F = 32 + (9/5 x °C)		
Period	Range	Resolution		Accuracy		Protection
	1 uS	0.0001uS		$\pm(0.05\%+2d)$		$\pm 250V$
	10 uS	0.001uS				
	100 uS	0.01uS				
	1 mS	0.0001mS				
	10 mS	0.001mS				
	100 mS	0.01mS				
	1 S	0.0001S				
DC	Range	Resolution				
	mA	500 mA	0.001mA	$\pm(0.05\%+5d)$	400 mV	0.5A/ 600V
	A	10 A	0.0001A			10A/ 600V
AC	Range	Resolution		Accuracy	Max. Burden	Protection
	mA	500 mA	0.001mA	$\pm(0.75\%+5d)$	400 mV	0.5A/ 600V
	A	10 A	0.0001A			10A/ 600V
General	Power Requirement			1.5V x2 alkaline Battery		
	Battery Life Time			32 hrs typ. with alkaline battery.		
	Dimensions / Weight			200 x 105 x 34 mm		
	Standard Accessories			Manual, Test Leads, Battery(Installed), Carrying Case, Rubber Holster		
	Optional Accessories			USB Cable, Demonstration Software, Temperature probe & adaptor		

\*\* The specification may be changed to improve the product quality without notifying the customers.