

# MultiView™ Series Digital MultiMeters

## Manual Ranging Digital MultiMeters with Adjustable Viewing Angle Display

### Features:

- Large 1" LCD display adjusts for better viewing angle
- Auto power off
- Shock resistant case with protective rubber holster
- Improper test lead position alarm alerts user if position does not match function selected
- Measurement functions include AC/DC Voltage and Current, Resistance, Diode, Continuity and Transistor
- Complete with 9V battery, test leads, protective holster and temperature probe (MV120 only)

CE CAT II-600V



### Applications:

- Tilt display adjusts 0° to 80° for best viewing angle
- Industrial electrical installation and troubleshooting
- Electronic testing and repair



#### Additional Features

##### Model MV110:

- 2000 count (3-1/2 digits)
- Basic DCV accuracy of 0.5%
- Battery check for 9V and 1.5V batteries
- 50Hz square wave output



#### Additional Features

##### Model MV120:

- 2000 count (3-1/2 digits)
- Basic DCV accuracy of 0.5%
- Capacitance measurements
- Temperature function with switchable °C/°F units



#### Additional Features

##### Model MV130:

- Highest resolution, 20000 count (4-1/2 digits) display
- Basic DCV accuracy of 0.05%
- Capacitance and Frequency measurements
- Data Hold and overload alarm

Specifications (Model)	Range	Max. Resolution	Basic Accuracy (%rdg+digits)
AC Voltage:	200mV, 2V, 20V, 200V, 750V	100µV 100µV	±(1.2% + 3d) MV110, MV120 ±(0.8% + 10d) MV130
DC Voltage:	200mV, 2V, 20V, 200V, 1000V	100µV 10µV	±(0.5% + 1d) MV110, MV120 ±(0.05% + 3d) MV130
AC/DC Current:			
(MV110)	20µA, 200µA, 2mA, 20mA, 200mA, 2A, 10A	10nA	±(0.8% + 1d) DC ±(1.8% + 3d) AC
(MV120)	20mA, 200mA, 20A	10µA	±(0.8% + 1d) DC ±(1.0% + 3d) AC
(MV130)	2mA, 20mA, 200mA, 10A	0.1µA	±(0.8% + 10d) DC ±(1.0% + 10d) AC
Resistance (Ω):	(MV110, MV120) 200, 2k, 20k, 200k, 2M, 20M, 200M (MV130) 200, 2k, 20k, 200k, 2M, 20M	0.1Ω 0.01Ω	±(0.8% + 3d) ±(0.2% + 1d)
Capacitance:	(MV120, MV130) 2nF, 20nF, 200nF, 2µF, 20µF	1pF	±(2.5% + 3d)
Frequency:	(MV130) 20kHz	1Hz	±(1.5% + 10d)
Temperature:	(MV120) -40 to 1832°F (-40 to 1000°C)	1°F/°C	±(0.75% + 3d)
Dimensions/ Weight:	3.5 x 7.5 x 1.4" (88 x 191 x 36mm) / 11oz (312g)		

### Ordering Information:

MV110.....MultiView™ Digital MultiMeter  
 MV120.....MultiView™ Digital MultiMeter w/ Temperature  
 MV130.....MultiView™ High Resolution Digital MultiMeter  
 CA899 .....Vinyl Pouch Carrying Case  
 TP870.....Spare Bead Wire Temperature Probe  
 TL805.....Spare set of CAT. III-1000V Test Leads  
 TL807.....Set of Alligator Clips (2pk) for TL805

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



# MultiView™ Series Digital MultiMeters

## Manual Ranging MultiMeters with Adjustable Viewing Angle Display

FUNCTION (Model)	RANGE	ACCURACY (% rdg. + digits)	RESOLUTION	INPUT PROTECTION	COMMENTS	
DC Voltage: (110, 120)  (130)	200mV	±(0.5% + 1d)	100µV	250V rms	Input impedance > 10MΩ	
	2, 20, 200V	±(0.5% + 1d)	1, 10, 100mV	1000VDC/750VAC		
	1000V	±(0.8% + 2d)	1V	1000VDC/750VAC		
	200mV	±(0.05% + 3d)	10µV	250V rms		
	2, 20, 200V	±(0.05% + 3d)	0.1, 1, 10mV	1000VDC/750VAC		
	1000V	±(0.1% + 5d)	100mV	1000VDC/750VAC		
AC Voltage: (110, 120)  (130)	200mV	±(1.2% + 3d)	100µV	1000VDC/750VAC	Input impedance > 10MΩ Frequency range: <200V: 40 to 400Hz < 750V: 40 to 200Hz	
	2, 20, 200V	±(0.8% + 3d)	1, 10, 100mV	1000VDC/750VAC		
	750V	±(1.2% + 3d)	1V	1000VDC/750VAC		
	2, 20, 200V	±(0.8% + 10d)	0.1, 1, 10mV	1000VDC/750VAC		
	750V	±(1.0% + 15d)	100mV	1000VDC/750VAC		
DC Current: (110)  (120)  (130)	20µA	±(2.0% + 5d)	10nA	2A, 250V fuse	15 sec. max @ 20A	
	200µA, 2, 20mA	±(0.8% + 1d)	0.1, 1, 10µA	2A, 250V fuse		
	200mA, 2A	±(1.2% + 1d)	100µA, 1mA	2A, 250V fuse		
	10A	±(2.0% + 5d)	10mA	not fused		
	20, 200mA	±(0.8% + 1d)	0.01, 0.1mA	0.2A, 250V fuse		
	20A	±(2.0% + 5d)	10mA	not fused		
	2, 20, 200mA	±(0.8% + 10d)	0.1, 1, 10µA	0.2A, 250V fuse		
	10A	±(2.0% + 10d)	1mA	not fused		
	20µA	±(3.0% + 7d)	10nA	2A, 250V fuse		Frequency: 40 to 400Hz Maximum input: 10A (110, 130), 20A (120) Average responding 15 sec. max @ 20A
	200µA	±(1.8% + 3d)	0.1µA	2A, 250V fuse		
2, 20mA	±(1.0% + 3d)	1, 10µA	2A, 250V fuse			
200mA, 2A	±(1.8% + 3d)	0.1, 1mA	2A, 250V fuse			
10A	±(3.0% + 7d)	10mA	not fused			
20, 200mA	±(1.0% + 3d)	0.01, 0.1mA	0.2A, 250V fuse			
20A	±(3.0% + 7d)	10mA	not fused			
2, 20, 200mA	±(1.0% + 10d)	0.1, 1, 10µA	0.2A, 250V fuse			
10A	±(2.0% + 10d)	1mA	not fused			
Resistance: (110, 120)  (130)	200Ω	±(0.8% + 3d)	0.1Ω	250V DC or ACrms	Open circuit voltage <0.7V RH 200MΩ range: <75% RH other ranges: <90% On the 200MΩ range a 1.0MΩ offset exists. Subtract 1.0MΩ from all readings.	
	2, 20, 200kΩ, 2MΩ	±(0.8% + 1d)	1, 10, 100Ω, 1kΩ			
	20MΩ	±(1.0% + 2d)	10kΩ			
	200MΩ	±(5.0%(rdg-10d)+ 10d)]	100kΩ			
	200Ω	±(0.2% + 5d)	0.01Ω			
	2, 20, 200kΩ, 2MΩ	±(0.2% + 1d)	0.1, 1, 10, 100Ω			
	20MΩ	±(0.5% + 5d)	1kΩ			
Capacitance: (120)  (130)	2, 20, 200nF	±(2.5% + 3d)	1, 10, 100pF	250VAC/VDC	Test Freq: 400Hz Test V: 40mV	
	2, 20µF	±(2.5% + 3d)	1nF, 10nF			
	2, 20, 200nF	±(2.5% + 10d)	0.1, 1, 10, 100pF			
	2, 20µF	±(2.5% + 10d)	1nF			
Temperature: (120)	-18 to 400°C	±(0.75% + 4d)	1°C		Type K Thermocouple	
	0 to 752°F	±(0.75% + 4d)	1°F			
	-40 to 1000°C	±(1.6% + 15d)	1°C			
	-40 to 1832°F	±(1.6% + 15d)	1°F			
Frequency: (130)	20kHz	±(1.5% + 10d)	1Hz	250VAC/VDC	Sensitivity: 100mV	
Diode test:	Forward DC current approx. 1mA, Reverse DC voltage approx. 3V					
Transistor hFE:	0 to 1000 Base current approx. 10µA, Vce approx 2.8V					
Continuity:	Buzzer sounds when R < 30Ω					
Battery check:(110)	1.5V 30Ω Internal resistance 9.0V 1.8kΩ Internal resistance					
Square Wave: (110)	Approx. 50Hz, 4 to 6V					
Display:	1999 count 3 1/2 digit, adjustable angle (110, 120) 19999 count 4 1/2 digit, adjustable display (130)					
Sample Rate:	Approximately 2 to 3 per second					
Input warning:	Alarm sounds with test leads in the A or 10A socket with wrong function selected					
Fuse Protection:	2A (A socket), 0.2A (mA socket), 10A or 20A range not fused					
Power Supply:	9V battery					
Range selection:	Manual					
Over-range Indication:	"1"					
Auto Off:	Unit switches off after 15 minutes of inactivity					
Low Battery Indication:	Battery symbol					
Operating Temp/ Humidity:	32°F to 104°F (0°C to 40°C) / < 75% RH					
Storage Temperature:	14°F to 122°F (-10°C to 50°C)					
Dimension:	7.3 x 3.5 x 1.3" (185 x 89 x 32mm)					
Weight:	Approx. 9.7oz (300g)					

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