

MultiTec™ Series Digital MultiMeters

Autoranging Digital MultiMeters with RS-232 PC interface

Features:

- Unique display prompts indicate correct test probe connections, blown fuses, and to disconnect power for passive functions
- Oversized high contrast 4000 count LCD display
- Optically isolated PC interface— optional RS-232 cable and Windows® 95/98 compatible software allows user to collect, display, plot and save data
- Data Hold and Relative functions
- Auto power off
- Measurement functions include AC/DC Voltage and Current, Resistance, Frequency, Duty Cycle, Capacitance, Diode and Continuity
- Complete with multimeter and built-in stand, test leads, protective holster, 9V battery and temperature probe (model dependent)



Additional Features

Model MT310:

- Basic DCV accuracy 0.5%



Additional Features

Model MT320:

- Basic DCV accuracy 0.3%
- Temperature function with switchable °C/°F units



Additional Features

Model MT330:

- Basic DCV accuracy 0.1%
- Temperature function with switchable °C/°F units
- True RMS measurements for AC voltage and current
- Backlit display



CAT II - 1000V



Applications:

- Large display, multiple connection and voltage warnings, plus PC interface are ideal for training and technical schools
- Capacitance and diode functions useful for appliance installation and repair technicians
- DC functions, Duty Cycle and Capacitance for automotive and marine applications

Specifications	Range	Max. Resolution	Basic Accuracy (%rdg+digits)
AC Voltage:	100mV to 400mV, 4V, 40V, 700V	0.1mV	±(1.0% + 5d)
DC Voltage:	400mV, 4V, 40V, 400V, 1000V	0.1mV	±(0.5% + 5d) MT310 ±(0.3% + 5d) MT320 ±(0.1% + 5d) MT330
DC/AC Current:	400µA, 4000µA, 40mA, 400mA, 20A	0.1µA	±(1.2% + 10d) DC ±(1.5% + 10d) AC
Resistance (Ω):	400, 4k, 40k, 400k, 4M, 40M	0.1Ω	±(0.5% + 10d)
Capacitance:	40nF, 400nF, 4µF, 40µF, 100µF	0.01nF	±(2% + 10d)
Frequency (Hz):	500m, 5, 50, 500, 5k, 50k, 500k, 5M, 10M	0.1mHz	±(0.1% + 2d)
Temperature: (MT320, MT330)	0 to 2000°F (-20 to 1370°C)	0.1°F/°C	±(3% + 5d)
Dimensions/Weight:	3.5 x 7 x 1.3" (88 x 178 x 33mm)/ 0.7lb (315g)		

Ordering Information:

- MT310.....MultiTec™ Digital MultiMeter
- MT320.....MultiTec™ Digital MultiMeter w/Temperature
- MT330.....MultiTec™ True RMS MultiMeter w/Temperature
- SW805.....MultiTec™ Software Diskette and RS-232 Cable
- CA899Vinyl Pouch Carrying Case
- TP870.....Spare bead wire Temperature Probe
- TL805.....Spare set of CAT. III-1000V Test Leads
- TL807Set of Alligator Clips (2pk) for TL805

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



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FUNCTION	RANGE	RESOLUTION	ACCURACY (%rdg + digits)	NOTES
DC Voltage:	400mV	0.1mV	±(0.5% + 5d)	Input protection; 1000V DC or AC Peak, less than 10sec Input Impedance 10MΩ
	4V / 40V / 400V	1mV / 10mV / 100mV	±(0.5% + 5d) (MT310) ±(0.3% + 5d) (MT320) ±(0.1% + 5d) (MT330)	
	1000V	1V	±(0.5% + 5d)	
AC Voltage:	100 to 400mV	0.1mV	±(1.5% + 5d)	40Hz to 500Hz Input protection: 1000V DC or AC Peak, less than 10sec Input Impedance 10MΩ Acc. Unspecified <100mV
	4V	1mV	±(1.0% + 5d)	
	40V	10mV	±(1.0% + 5d)	
	400V	100mV	±(1.0% + 5d)	
	700V	1V	±(1.5% + 5d)	
DC Current:	400µA	0.1µA	±(1.2% + 10d)	Fused 250V, 0.5A
	4000µA	1µA	±(1.2% + 10d)	
	40mA	10µA	±(1.2% + 10d)	
	400mA	100µA	±(1.2% + 10d)	
	20A	10mA	±(2% + 10d)	
AC Current:	400µA	0.1µA	±(1.5% + 10d)	Fused 250V, 20A 40Hz to 500Hz
	4000µA	1µA	±(1.5% + 10d)	
	40mA	10µA	±(1.5% + 10d)	
	400mA	100µA	±(1.5% + 10d)	
	20A	10mA	±(2% + 10d)	
Resistance:	400Ω	0.1Ω	±(0.5% + 10d)	Input protection: 250V DC or AC peak
	4kΩ	1Ω	±(0.5% + 10d)	
	40kΩ	10Ω	±(0.5% + 10d)	
	400kΩ	100Ω	±(0.5% + 10d)	
	4000kΩ	1kΩ	±(0.5% + 10d)	
	40MΩ	10kΩ	±(1% + 5d)	
Frequency:	500mHz	0.1mHz	Not specified	Input protection: 250V DC or AC peak Sensitivity: 250VAC
	5Hz	0.001Hz	±(0.1% + 2d)	
	50Hz	0.01Hz	±(0.1% + 2d)	
	500Hz	0.1Hz	±(0.1% + 2d)	
	5kHz	1Hz	±(0.1% + 2d)	
	50kHz	10Hz	±(0.1% + 2d)	
	500kHz	100Hz	±(0.1% + 2d)	
	5MHz	1kHz	±(0.1% + 2d)	
	10MHz	10kHz	±(0.1% + 2d)	
Capacitance:	40nF	0.01nF	±(2% + 10d)	Input protection: 250V DC or AC peak
	400nF	0.1nF	±(2% + 10d)	
	4µF	1nF	±(2% + 10d)	
	40µF	10nF	±(2% + 10d)	
	100µF	100nF	±(2% + 10d)	
Temperature °F: (MT320, MT330 only)	0 to 212°F	0.1°F	±(3° + 5d)	
	212 to 400°F	0.1°F	±(3% + 5d)	
	400 to 2000°F	1°F	±(3% + 5d)	
Temperature °C: (MT320, MT330 only)	-20 to 100°C	0.1°C	±(3° + 5d)	
	100 to 400°C	0.1°C	±(3% + 5d)	
	400 to 1370°C	1°C	±(3% + 5d)	
Duty Cycle:	0.1% to 99.9%			
Diode Test:	Test voltage of 1.5V (max).			
Continuity Check:	Audible signal will sound if the resistance is less than 60Ω			
Display:	4000 count 3 3/4 digit LCD			
Overrange indication:	"OL"			
Polarity:	Automatic (no indication for positive polarity); Minus (-) sign for negative polarity			
Low Battery Indication:	Battery symbol indicates low battery condition			
Battery:	9V battery			
Fuses:	µA, mA ranges, 500mA/250V fast blow, 20A range, 20A/250V fast blow			
Operating Temperature:	32°F to 104°F (0°C to 40°C)			
Storage Temperature:	-4°F to 140°F (-20°C to 60°C)			
Relative Humidity:	<80% operating, (<70% storage)			
Dimensions:	3.5 x 7 x 1.3" (88 x 178 x 33mm)			
Weight:	0.7lb (315g)			