



# AM-510 Commercial / Residential Digital Multimeter

## AM-500 Digital Multimeter Series

The Amprobe AM-510 Commercial/Residential Multimeter is designed for light commercial and advanced residential applications. Re-wire electrical panels, install heated floors or new light fixtures, troubleshoot and repair home appliances, electrical sockets and automotive electrical problems with this easy-to-use multimeter. The AM-510 features a built-in flashlight to see wires and fuses in the dark, a rubber tilt stand and probe holder to give you the "third-hand" you need while taking measurements. Also offering safety features including Voltect non-contact voltage detection for quick go/no-go checks without the need for an additional tool. Compact yet tough, this multimeter is built to last through all your electrical projects.

- Voltage up to 600V ac/dc, ac/dc current and resistance
- Frequency, capacitance, duty cycle for troubleshooting applications
- Voltect™ Non-contact voltage detection
- Audible continuity
- Diode test
- Backlit LCD display
- Data hold
- Relative zero mode
- Auto and manual-ranging
- Built-in flashlight
- Built-in test leads storage and "third hand" probe holder
- Auto and manual-ranging
- Auto power off
- Low battery warning
- Safety rated: CAT III 600V

## AM-510 DETAILED SPECIFICATIONS

Specifications	Range	Best Accuracy
AC Voltage	400 mV 4.000 / 40.00 / 400.0 / 600 V	±(1.0% Rdg + 3 LSD) @ 45 Hz to 400 Hz, 4 V to 400V ranges
DC Voltage	400 mV 4.000 / 40.00 / 400.0 / 600 V	±(0.8% Rdg + 1 LSD) @ 4 V to 400 V ranges
Resistance	400.0 Ohms 4.000 / 40.00 / 400.0 kOhms 4.000 / 40.00 MOhms	±(1.0% Rdg + 2 LSD) @ 4 kOhms to 400 kOhms ranges
AC Current	400.0 / 4000 µA 40.00 / 400.0 mA 4.000 / 10.00 A	±(1.2% Rdg + 3 LSD)
DC Current	400.0 / 4000 µA 40.00 / 400.0 mA 4.000 / 10.00 A	±(1.0% Rdg + 2 LSD)
Frequency	10Hz to 10MHz	±(0.1% Rdg + 4 LSD)
Capacitance	40.00 / 400.0 nF 4.000 / 40.00 / 100.0 µF	±(3.0% Rdg + 5 LSD) @ 400 nF to 40 µF ranges
Battery Test	1.5 V, 9 V	±(1.0% Rdg + 3 LSD)
Duty Cycle		0.1% to 99.9%

For more detailed specifications see instruction manual.

## AM-500 SERIES SELECTION GUIDE

		AM-500	AM-510	AM-520	AM-530	AM-540	AM-550
MULTIMETER TYPE		Autoranging	Com / Res	HVAC	Electrical	Adv. HVAC	Industrial
<b>Application:</b>							
<b>Functions</b>	Safety Rating	<b>Safety</b>		CAT III 600V	CAT III 600V	CAT III 600V CAT II 1000V	CAT III 600V CAT II 1000V
	Measure voltage in noisy environments	<b>True-rms</b>					
	Electrical panels, AC outlets	<b>AC Voltage (V)</b>		600	600	750	750
	DC systems, auto/marine batteries	<b>DC Voltage (V)</b>		600	600	1000	1000
	AC Current - electrical panels, appliances	<b>AC Current (A)</b>		10	10	10	10
	DC Current - electronics, DC motors	<b>DC Current (A)</b>		10	10	10	10
	Specified resistance and continuity	<b>Resistance (MOhms)</b>		20	40	40	40
	Flame sensors	<b>Micro Amps</b>		■	■	■	■
	Diodes in ac to dc converters	<b>Diode test</b>		■	■	■	■
	Fuses, light bulbs, wire connections	<b>Continuity</b>		■	■	■	■
	Household batteries	<b>Battery test</b>		■	■		
	Motor startup or run capacitors	<b>Capacitance</b>			■	■	■
	Frequency verification	<b>Frequency</b>			■	■	■
	VolTect™ Non-contact voltage detection	<b>Non-contact voltage</b>			■	■	■
	Electrical load-time on vs. time off	<b>Duty cycle</b>			■		■
Temp of air vents, fuses, transformers	<b>Temperature inputs</b>				1	1	
<b>Features</b>	Automatically selects measurement range	<b>Autoranging</b>		■	■	■	■
	Manually select measurement range	<b>Manual ranging</b>			■	■	■
	Voltage on variable frequency drives	<b>Low pass filter</b>				■	■
	Detect stray voltages	<b>Low Z</b>					■
	Dimly lit areas	<b>Built-in flashlight</b>			■	■	■
<b>Display</b>	Meter resolution	<b>LCD Counts</b>		2,000	4,000	4,000	4,000
	Dimly lit areas	<b>Backlight</b>			■	■	■
	Monitoring fast changing signals	<b>Bar graph</b>				■	■
	Two relative measurements on one screen	<b>Dual display</b>				■	■
<b>Events</b>	Data memory	<b>Data hold</b>		■	■	■	■
	Difference between two measurements	<b>Relative reading</b>			■	■	■
	Max/min peak measurement	<b>Max/min hold</b>				■	■
	Specialized signal measurements	<b>Peak hold (crest)</b>				■	■

## INCLUDED ACCESSORIES

Model	Batteries (Installed)	Test Leads	Temperature Probe	Temperature Adaptor	Velcro Strap	Carrying Case	User's Manual
AM-500	AAA x2	■					■
AM-510	9V (6F22) x1	■					■
AM-520	9V (6F22) x1	■	K-type probe x1		■	■	■
AM-530	9V (6F22) x1	■	K-type probe x1		■	■	■
AM-540	9V (6F22) x1	■	K-type probe x2	■	■	■	■
AM-550	9V (6F22) x1	■	K-type probe x2	■	■	■	■

### Amprobe®

info@amprobe.com  
 Everett, WA 98203  
 Tel: 877-AMPROBE (267-7623)

### Amprobe® Europe

In den Engematten 14,  
 79286 Glottertal, Germany  
 Tel.: +49 (0) 7684 8009 - 0