

AM-500-EUR Series Digital Multimeters

AM-510-EUR, AM-520-EUR, AM-530-EUR, AM-540-EUR and AM-550-EUR

Announcing the Amprobe AM-500-EUR Digital Multimeter Series, a full line of digital multimeters that offer functions for every application. These tough meters are designed to be a reliable, feature-rich, and rugged solution for taking critical measurements in residential, HVAC, electrical and industrial settings at breakthrough affordability.



AM-550-EUR



AM-510-EUR



AM-520-EUR



AM-530-EUR



AM-540-EUR

AM-500-EUR SERIES SELECTION GUIDE

			AM-510-EUR	AM-520-EUR	AM-530-EUR	AM-540-EUR	AM-550-EUR
Measurement Category			CAT III 600V	CAT III 600V CAT II 1000V	CAT III 600V CAT II 1000V	CAT IV 600V CAT III 1000V	CAT IV 600V CAT III 1000V
Functions	Measure voltage in noisy environments	True-rms			■		■
	Electrical panels, AC outlets	AC Voltage (V)	600	750	750	1000	1000
	DC systems, auto/marine batteries	DC Voltage (V)	600	1000	1000	1000	1000
	AC Current - electrical panels, appliances	AC Current (A)	10	10	10	10	10
	DC Current - electronics, DC motors	DC Current (A)	10	10	10	10	10
	Specified resistance and continuity	Resistance (MOhms)	40	40	40	60	60
	Flame sensors	Microamps	■	■	■	■	■
	Diodes in ac to dc converters	Diode test	■	■	■	■	■
	Fuses, lightbulbs, wire connections	Continuity	■	■	■	■	■
	Household batteries	Battery test	■				
	Motor startup or run capacitors	Capacitance	■	■	■	■	■
	Frequency verification	Frequency	■	■	■	■	■
	VolTect Plus™ Non-contact voltage detection	Non-contact voltage	■	■	■	■	■
	Electrical load-time on vs. time off	Duty cycle	■			■	■
	Temp of air vents, fuses, transformers	Temperature inputs		1	1	2	2
Features	Automatically selects measurement range	Autoranging	■	■	■	■	■
	Manually select measurement range	Manual ranging	■	■	■	■	■
	Voltage on variable frequency drives	Low pass filter				■	■
	Detect stray voltages	Low Z				■	■
	Dimly lit areas	Built-in flashlight	■	■	■	■	■
Display	Meter resolution	LCD Counts	4,000	4,000	4,000	6,000	6,000
	Dimly lit areas	Backlight	■	■	■	■	■
	Monitoring fast changing signals	Bar graph		■	■	■	■
	Two relative measurements on one screen	Dual display				■	■
Events	Data memory	Data hold	■	■	■	■	■
	Difference between two measurements	Relative reading	■	■	■	■	■
	Max/min peak measurement	Max/min hold		■	■	■	■
	Specialized signal measurements	Peak hold (crest)				■	■

TECHNICAL DATA AM-500-EUR SERIES

Model	AM-510-EUR	AM-520-EUR	AM-530-EUR	AM-540-EUR	AM-550-EUR
General Specifications					
Display	3999 Digits	3999 Digits	3999 Digits	5999 Digits	5999 Digits
Measurement ranges					
AC voltage	1 mV...600V	1 mV...750V	1 mV...750V	1 mV...1000 V	1 mV...1000 V
Basic accuracy *	± (1.0 % rgd. + 3 digits)	± (1.0 % rgd. + 3 digits)	± (1.0 % rgd. + 3 digits)	± (1.0 % rgd. + 3 digits)	± (1.0 % rgd. + 3 digits)
Frequency range	45 Hz...400 Hz	45 Hz...400 Hz	45 Hz...400 Hz	45 Hz...1 kHz	45 Hz...1 kHz
DC voltage	1 mV...600V	0.1 mV...1000 V	0.1 mV...1000 V	0.1 mV...1000 V	0.1 mV...1000 V
Basic accuracy *	± (0.8 % rgd. + 1 digits)	± (0.8 % rgd. + 1 digits)	± (0.8 % rgd. + 1 digits)	± (0.5 % rgd. + 2 digits)	± (0.5 % rgd. + 2 digits)
Input resistance	10 MΩ	10 MΩ	10 MΩ	10 MΩ	10 MΩ
Current AC	0.1 μA...10A	0.1 μA...10A	0.1 μA...10A	0.1 μA...10A	0.1 μA...10A
Basic accuracy *	± (1.2 % rgd. + 2 digits)	± (1.2 % rgd. + 2 digits)	± (1.2 % rgd. + 2 digits)	± (1.2 % rgd. + 2 digits)	± (1.2 % rgd. + 2 digits)
Frequency range	45 Hz...400 Hz	45 Hz...400 Hz	45 Hz...400 Hz	45 Hz...1 kHz	45 Hz...1 kHz
Current DC	0.1 μA...10A	0.1 μA...10A	0.1 μA...10A	0.1 μA...10A	0.1 μA...10A
Basic accuracy *	± (1.0 % rgd + 2 digits)	± (1.0 % rgd + 2 digits)	± (1.0 % rgd + 2 digits)	± (1.0 % rgd + 2 digits)	± (1.0 % rgd + 2 digits)
Resistance	0.1 Ω...40 MΩ	0.1 Ω...40 MΩ	0.1 Ω...40 MΩ	0.1 Ω...60 MΩ	0.1 Ω...60 MΩ
Basic accuracy *	± (1.2 % rgd. + 2 digits)	± (1.2 % rgd. + 2 digits)	± (1.2 % rgd. + 2 digits)	± (1.2 % rgd. + 2 digits)	± (1.2 % rgd. + 2 digits)
Continuity	R < 10 Ω	R < 10 Ω	R < 10 Ω	R < 10 Ω	R < 10 Ω
Capacitance	10 pF...100.0 μF	10 pF...4000 μF	10 pF...4000 μF	60.00 nF...60 mF	60.00 nF...60 mF
Basic accuracy *	± (3 % rgd. + 5 digits)	± (3 % rgd. + 5 digits)	± (3 % rgd. + 5 digits)	± (3 % rgd. + 5 digits)	± (3 % rgd. + 5 digits)
Frequenz	1,00 Hz...10 MHz	1,00 Hz...10 MHz	1,00 Hz...10 MHz	1,00 Hz...60 MHz	1,00 Hz...60 MHz
Basic accuracy *	± (0.1 % rgd. + 4 digits)	± (0.1 % rgd. + 4 digits)	± (0.1 % rgd. + 4 digits)	± (0.1 % rgd. + 3 digits)	± (0.1 % rgd. + 3 digits)
Temperature	-	-40...1000 °C	-40...1000 °C	-40...1000 °C	-40...1000 °C
Basic accuracy *	-	± (1.0 % rgd. + 8 digits)	± (1.0 % rgd. + 8 digits)	± (1.0 % rgd. + 8 digits)	± (1.0 % rgd. + 8 digits)
Measurement category	CAT III / 600V	CAT III / 600V, CAT II / 1000V	CAT III / 600V, CAT II / 1000V	CAT III / 600V, CAT II / 1000V	CAT III / 600V, CAT II / 1000V
Pollution degree	2				
Safety	EN 61010, IEC 61010				
Power supply	9 V (6F22)				
Dimensions	182 x 90 x 45 mm				
Weight	approx. 354 g (incl. battery)				
Scope of supply	2 x test leads, 1 x 9 V battery, 1 x user manual	2 x test leads, 1 x temperature probe, 1 x strap, 1 x 9 V battery, 1 x user manual	2 x test leads, 1 x temperature probe, 1 x strap, 1 x 9 V battery, 1 x user manual	2 x test leads, 2 x temperature probe, 1 x temperature adaptor 1 x strap, 1 x 9 V battery, 1 x user manual	2 x test leads, 2 x temperature probe, 1 x temperature adaptor 1 x strap, 1 x 9 V battery, 1 x user manual

* Basic accuracy refers to the best accuracy in the respective function

ORDER INFORMATION

Order number	Description
AM-510-EUR	Digital Multimeter
AM-520-EUR	Digital Multimeter
AM-530-EUR	Digital Multimeter TRMS
AM-540-EUR	Digital Multimeter
AM-550-EUR	Digital Multimeter TRMS