

# 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
<b>Measurement Category</b>			CAT III 600V	CAT III 600V	CAT III 600V	CAT IV 600V CAT III 1000V	CAT IV 600V CAT III 1000V
<b>Functions</b>	Measure voltage in noisy environments	<b>True-rms</b>			■		■
	Electrical panels, AC outlets	<b>AC Voltage (V)</b>	600	600	600	1000	1000
	DC systems, auto/marine batteries	<b>DC Voltage (V)</b>	600	600	600	1000	1000
	AC Current - electrical panels, appliances	<b>AC Current (A)</b>	10	10	10	10	10
	DC Current - electronics, DC motors	<b>DC Current (A)</b>	10	10	10	10	10
	Specified resistance and continuity	<b>Resistance (MOhms)</b>	40	40	40	60	60
	Flame sensors	<b>Microamps</b>	■	■	■	■	■
	Diodes in ac to dc converters	<b>Diode test</b>	■	■	■	■	■
	Fuses, lightbulbs, 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 Plus™ 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	2	2	
<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>	4,000	4,000	4,000	6,000	6,000
	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>				■	■

## TECHNICAL DATA AM-500-EUR SERIES

Model	AM-510-EUR	AM-520-EUR	AM-530-EUR	AM-540-EUR	AM-550-EUR
<b>General Specifications</b>					
Display	3999 Digits	3999 Digits	3999 Digits	5999 Digits	5999 Digits
<b>Measurement ranges</b>					
AC voltage	1 mV...600V	1 mV...600V	1 mV...600V	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...600V	0.1 mV...600V	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)
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)
Continuity	R < 10 Ω	R < 10 Ω	R < 10 Ω	R < 10 Ω	R < 10 Ω
Measurement category	CAT III / 600V	CAT III / 600V	CAT III / 600V	CAT IV / 600V, CAT III / 1000V	CAT IV / 600V, CAT III / 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

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# IR-450-EUR Pocket Infrared Thermometer

## 3-in-1 Infrared Thermometer, Laser Pointer, and Flashlight

A must have tool for everyday applications, the Beha-Amprobe 3-in-1 Pocket Infrared Thermometer, Laser Pointer, and LED Flashlight offers a uniquely small and convenient form factor with professional 8:1 distance to spot ratio, a high-quality laser pointer and LED flashlight. Much more portable than traditional infrared thermometers, the IR-450-EUR can be readily available in your pocket for quick diagnostic checks in a wide variety of applications including: HVAC/R, fire safety and protection, industrial maintenance, automotive and quality control.

- IR pocket thermometer with 8:1 distance to spot ratio
- Selectable °F / °C
- Holds temperature reading for 10 seconds
- Bright laser pointer
- Built-in LED flashlight to illuminate dark areas



## IR-450-EUR DETAILED SPECIFICATIONS

Specifications	Range
Distance to Spot (D:S)	8:1 (calculated at 80% energy)
Temperature Range	-30°C to 500°C (-22°F to 932°F)
Accuracy at 23°C ±2°C, <80%RH	-30°C to 0°C (-22°F to 32°F): ±2°C (±4°F) 1°C to 10°C (34°F to 50°F): ±1.5°C (±3°F) 11°C to 40°C (52°F to 104°F): ±1°C (±2°F) 41°C to 500°C (106°F to 932°F): ±1.5°C (±3°F) or ±1.5% of reading, whichever is greater.
Best Accuracy	±2°F / ± 1°C
Best Display Resolution	0.5°F / 0.2°C
Response Time	500 ms
Emissivity	0.95
Laser Wavelength	630 nm to 670 nm
Spectral Response	6.5 µm to 18 µm
Repeatability	±1°C or ±0.5% of reading, whichever is greater.
Display Hold	10 seconds
Operating Altitude	Up to 2000 meters
Battery	One 1.5VAAA battery
Battery Life	20 hours (Alkaline typically)
Storage Temperature	-40°F to 140°F (-20°C to 60°C) (without battery) ≤ 85% RH
Dimensions (L x W x H)	100 x 20 x 29mm (3.94 x 0.79 x 1.14in)
Weight	Approximately 50g (0.11lb)
Safety Compliance	EN 61010-1, EN 60825-1
EMC Compliance	EN 61326-1
Certification	CE
Laser Safety Info	100% FDA Compliant
Laser Safety Class	Class 2

For more detailed specifications see instruction manual.