

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 III 600V | 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 | 600 | 600 | 1000 | 1000 |
| | DC systems, auto/marine batteries | DC Voltage (V) | 600 | 600 | 600 | 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 | |
| | 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...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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