

Professional Digital Multimeter Models CA5205, CA5210, CA5220, CA5230 & CA5240



The AEMC® Instruments CA5000 Series are designed for the daily needs of professional electricians. For the safety of the user, these multimeters meet the most demanding international standards: double insulation in accordance with EN 61010-1-III-2, 600V, Cat. III.

These tough, reliable and economical Digital Multimeters (DMMs) feature a large backlit display, clear push-button

functions, large rotary range selector and dedicated push buttons. The compact, hand-held size along with the rugged, shockproof rubber holster makes this unit ideal for toolboxes and pockets.

Model CA5205 has a 2000-count display that is average sensing and provides 1% accuracy of Reading. Models CA5210, CA5220 and CA5230 have a 4000-count display are average

sensing and provide 1% accuracy (Models CA5210 and CA5220), and 0.25% accuracy (Model CA5230) of Reading.

All models include a rugged, shockproof, protective, blue holster with Multistand™ (for lead and probe storage), test leads, 9V Alkaline battery and a user manual.

Features

- Tough, reliable, economical, professional DMMs in choice of 2000-, 4000- and 40,000-count models
- Automatic AC/DC selection (Model CA5205)
- Large backlit LCD (model dependent)
- Clear pushbutton functions
- Large rotary range selector and dedicated push buttons
- Safety rated to EN 61010, 600V Cat. III for protection against spikes and over-voltage

- Accurate average sensing or TRMS models for your linear loads and distorted signals
- Complete line of accessories including leads and industry's largest selection of current probes
- Includes rugged, shockproof, protective, dirt resistant gray holster with Multistand™ (for lead and probe storage) and test leads
- Three year warranty

Applications

- Installation, repair or maintenance of industrial equipment
- Electrical field testing
- Troubleshooting failures and poor performance



Model CA5205 measuring resistance in a relay cabinet.

Specifications

MODELS	CA5205 ⁽³⁾	CA5210 ⁽⁴⁾	CA5220	CA5230	CA5240
AC CURRENT					
Measurement Range ⁽¹⁾	–	–	3 Ranges: 40mA to 10A	3 Ranges: 40mA to 10A	3 Ranges: 40mA to 10A
Resolution	–	–	10µA to 10mA	10µA to 10mA	1µA to 1mA
Basic Accuracy*	–	–	±1.5% of Reading ± 2cts	±0.8% of Reading ± 4cts	±0.9% of Reading ± 5cts
AC VOLTAGE					
Measurement Range ⁽¹⁾	5 Ranges: 200mV to 600V	5 Ranges: 400mV to 600V	5 Ranges: 400mV to 600V	5 Ranges: 400mV to 600V	5 Ranges: 400mV to 600V
Resolution	0.1mV to 1V	0.1mV to 1V	0.1mV to 1V	0.1mV to 1V	10µV to 100mV
Basic Accuracy*	±1% of Reading ± 5cts	±1.5% of Reading ± 1ct	±1.5% of Reading ± 1ct	±1% of Reading ± 3cts	±1.5% of Reading ± 20cts
Input Impedance ⁽²⁾	3MΩ	10MΩ	10MΩ	10MΩ	3MΩ
DC CURRENT					
Measurement Range ⁽¹⁾	–	–	3 Ranges: 40mA to 10A	3 Ranges: 40mA to 10A	3 Ranges: 40mA to 10A
Resolution	–	–	10µA to 10mA	10µA to 10mA	1µA to 1mA
Basic Accuracy*	–	–	±1.5% of Reading ± 2cts	±1.2% of Reading ± 5cts	±0.5% of Reading ± 10cts
DC VOLTAGE					
Measurement Range ⁽¹⁾	5 Ranges: 200mV to 600V	5 Ranges: 400mV to 600V	5 Ranges: 400mV to 600V	5 Ranges: 400mV to 600V	5 Ranges: 400mV to 600V
Resolution	0.1mV to 1V	0.1mV to 1V	0.1mV to 1V	0.1mV to 1V	10µV to 100mV
Basic Accuracy*	±1% of Reading ± 1ct	±1% of Reading ± 1ct	±1% of Reading ± 1ct	±0.25% of Reading ± 1ct	±0.1% of Reading ± 3cts
Input Impedance ⁽²⁾	3MΩ	10MΩ	10MΩ	10MΩ	3MΩ
RESISTANCE					
Measurement Range	6 Ranges: 200Ω to 20MΩ	6 Ranges: 400Ω to 40MΩ	6 Ranges: 400Ω to 40MΩ	6 Ranges: 400Ω to 40MΩ	6 Ranges: 400Ω to 40MΩ
Resolution	0.1Ω to 10kΩ	0.1Ω to 10kΩ	0.1Ω to 10kΩ	0.1Ω to 10kΩ	0.1Ω to 10kΩ
Basic Accuracy*	±1.5% of Reading ± 5cts	±1.5% of Reading ± 3cts	±1.5% of Reading ± 3cts	±0.5% of Reading ± 3cts	±0.2% of Reading ± 3cts
CONTINUITY					
Beeper Activation	≤700Ω	≤40Ω	<40Ω	<40Ω	<40Ω
DIODE TEST					
Resolution	1mV	1mV	1mV	1mV	1mV
Basic Accuracy*	±2% of Reading ± 15mV	±2% of Reading ± 15mV	±2% of Reading ± 15mV	±1% of Reading ± 2cts	±1% of Reading ± 10cts
CAPACITANCE					
Measurement Range	–	5 ranges: 4nF to 40µF	5 ranges: 4nF to 40µF	5 ranges: 4nF to 40µF	5 ranges: 4nF to 40µF
Basic Accuracy*	–	±5% of Reading ± 10cts	±5% of Reading ± 10cts	±1.5% of Reading ± 4cts	±1.5% of Reading ± 5cts
FREQUENCY					
Measurement Range	–	–	5 Ranges: 10Hz to 400kHz	5 Ranges: 100Hz to 400kHz	5 Ranges: 100Hz to 400kHz
Basic Accuracy*	–	–	±0.1% of Reading ± 2cts	±0.1% of Reading ± 20cts	±0.1% of Reading ± 10cts
GENERAL					
Digital Display	2000-count	4000-count	4000-count	4000-count	40,000-count
Analog Bargraph	–	40-segment	40-segment	40-segment	40-segment
Power Source	Two AA Alkaline batteries 1.5V			Alkaline 9V battery	
Dimensions	7.0 x 2.5 x 1.7" (177 x 64 x 42mm)				
Weight	0.7 lb (350g)				
ENVIRONMENTAL					
Operating Temperature	32° to 122°F (-10° to 60°C)				
Storage Temperature	-4° to 140°F (-40° to 70°C)				
SAFETY					
Safety Rating	EN 61010, 600V, Cat III				
Double Insulation 	Yes				
CE Mark	Yes				

(1) Use on frequency: 0 to 60Hz

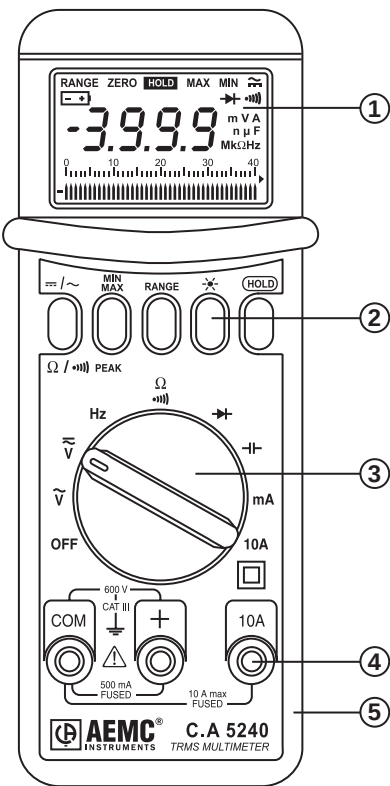
(2) For the CA5210/CA5220, on position V elec: base impedance 270kΩ

(3) Automatic recognition of DC or AC

(4) Additional function "ADP": input 0 to 400mVdc for accessories

* Accuracy dependent on range

Construction



Model CA5240

- 1. LCD display
- 2. Control buttons
- 3. Rotary range selector switch
- 4. Safety terminals (4mm)
- 5. Shockproof rubber holster



Test Leads included with CA5000 Series

ORDERING INFORMATION		CATALOG NO.
DMM Model CA5205 (2000-count, Average Sensing, 1% Accuracy)		Cat. #2116.73
DMM Model CA5210 (4000-count, Average Sensing, 1% Accuracy)		Cat. #2116.74
DMM Model CA5220 (4000-count, Average Sensing, 1% Accuracy)		Cat. #2116.75
DMM Model CA5230 (4000-count, TRMS, 0.25% Accuracy)		Cat. #2116.76
DMM Model CA5240 (40,000-count, TRMS, 0.1% Accuracy)		Cat. #2116.77

Contact Us

United States & Canada:

Chauvin Arnoux[®], Inc.
d.b.a. AEMC[®] Instruments
200 Foxborough Blvd.
Foxborough, MA 02035 USA
(508) 698-2115 • Fax (508) 698-2118
www.aemc.com

Customer Support – for placing an order, obtaining price & delivery:
customerservice@aemc.com

Sales Department – for general sales information:
sales@aemc.com

Repair and Calibration Service – for information on repair & calibration, obtaining a user manual:
repair@aemc.com

Technical and Product Application Support – for technical and application support:
techinfo@aemc.com

Webmaster – for information regarding www.aemc.com:
webmaster@aemc.com

South America, Central America, Mexico, Caribbean, Australia & New Zealand:

Chauvin Arnoux[®], Inc.
d.b.a. AEMC[®] Instruments
15 Faraday Drive
Dover, NH 03820 USA
(978) 526-7667 • Fax (978) 526-7605
export@aemc.com
www.aemc.com

All other countries:

Chauvin Arnoux SCA
190, rue Championnet
75876 Paris Cedex 18, France
33 1 44 85 45 28 • Fax 33 1 46 27 73 89
info@chauvin-arnoux.com
www.chauvin-arnoux.com