

AVO210

Digital multimeter



- 2000 count digital display
- 1000 V DC / 750 V AC ranges
- 10 A AC / DC ranges
- Resistance, frequency and capacitance ranges
- Non-contact voltage sense feature
- CAT III 600 V

DESCRIPTION

The AVO210 is a general purpose multimeter suitable for electricians, heating engineers and alarm technicians. The additional features make the instrument useful for a wide range of applications.

The instrument offers AC and DC voltage and current measurements as well as resistance, frequency and capacitance ranges. The AVO210 has simplified functions that avoid continuous reference to the user guide. The testleads included with the AVO210 have GS38 compliant shrouded tips.

AUTO-RANGING

When first selected, all functions are auto-ranging. A range button on the AVO210 allows multiple manual range selection on each function.

Minimum / Maximum measurements

The instrument has a MIN MAX function that allows the user to switch between minimum and maximum measurements. The display does not have to be continually monitored to capture a momentary increase or fall in readings.

DATA HOLD

This function allows a displayed result to be frozen which avoids having to remember a measurement value. The hold function can be nested within the MIN MAX feature which stops the AVO210 continuously updating the minimum and maximum values.

VOLTAGE MEASUREMENTS

Both AC and DC voltage measurements up to 750 V and 1000 V respectively are possible with the AVO210.

CURRENT MEASUREMENTS

A separate fused terminal is provided for current measurements up to 10 A for both AC and DC.

CONTINUITY / DIODE TESTING

The continuity function features a buzzer and provides the user both optical and audible indication of identifying and confirming continuity between two points. This function also allows forward and reverse bias testing of diode and semiconductor junctions.

VOLTSense FUNCTION

The AVO210 has a built in non-contact voltage sensor fitted in the top of the instrument that is activated by the Voltsense button.

RESISTANCE, CAPACITANCE AND FREQUENCY

Resistance can be measured directly on the ohms range from 0 to 20 M Ω with capacitance measurements from 0 to 2.000 mF. In addition, frequency measurements from 0 to 20 MHz are possible.

SPECIFICATIONS

Display	2000 counts
Polarity	Automatic, positive implied, negative indicated
Over-range indication	"OL" or "-OL"
Battery indicator	"<" is displayed when the batteries voltage drops below operating voltage
Auto power down	Approx 10 minutes
Operating ambient	Non-condensing ≤10 °C, 11 °C ~ 30 °C (≤80% R.H) 31°C ~ 40 °C (≤75% R.H), 41 °C ~ 50 °C (≤45% R.H)
Storage temperature range and humidity	-20 °C to 60 °C, 0 to 80% R.H. when battery removed from meter
Temperature co-efficient	0.15 x (Spec. Accy.) / °C, < 18 °C or > 28 °C
Sample rate	Samples 2 times per second nominal
Maximum altitude	6561.7 ft (2000 m)
Safety	Complies with EN61010-1, UL61010-1, IEC 61010-1, V/Ω CAT III 600 V, CATII 1000 V A CAT III 500 V
Pollution degree	2
Power supply	1.5 V x 2 LR03 or AAA size
Battery life	Alkaline 250 hours
Dimensions	74 mm x 156 mm x 44 mm
Weight	320 g

ELECTRICAL

Accuracy is ± (% reading + number of digits) at 23°C ± 5°C < 80%RH.

AC/DC volts	
Range	200.0 mV 2.000 V * 20.00 V ~ 200.0 V * 750 V AC / 1000 V DC
AC Accuracy	Unspecified ±(1.5%+5 dgts) 50 Hz ~ 300 Hz ±(1.5%+5 dgts) 50 Hz ~ 500 Hz * ±(1.5%+5 dgts) 50 Hz ~ 500 Hz *
DC Accuracy	±(0.5% + 2 dgts)
Over voltage protection	1000 V DC or 750 V AC rms.
Input Impedance	10 MΩ // less than 100 pF.

* CMRR / NMRR : (Common Mode Rejection Ratio) (Normal Mode Rejection Ratio)

VAC	CMRR > 60 dB at DC, 50 Hz / 60 Hz
VDC	CMRR > 100 dB at DC, 50 Hz / 60 Hz
NMRR	> 50 dB at DC, 50 Hz / 60 Hz

AC CONVERSION TYPE

Average sensing rms indication

AC conversions are ac-coupled, true rms responding, calibrated to the sine wave input.

* The minimum LCD reading is 1400 count in Auto Ranging Mode.

Crest Factor	C.F. = Peak / Rms + 1.5% addition error for C.F. from 1.4 to 3 + 3% addition error for C.F. from 3 to 4
---------------------	--

DC/AC current

Range	2.000 A 10.00 A **
--------------	-----------------------

DC Accuracy	±(1.0% + 3 dgts) ±(1.0% + 3 dgts)
--------------------	--------------------------------------

AC Accuracy	±(1.5% + 5 dgts) 50 Hz ~ 500 Hz*
--------------------	-------------------------------------

Voltage Burden	2 V max 2 V max
-----------------------	--------------------

OVERLOAD PROTECTION

A input: 0 A (500 V) fast blow fuse
*** AC Conversion Type** Conversion type and additional specification are same as DC/AC voltage

** Ampere Testing Duty Ratio Table

Ampere	Testing Time	Rest Time
10 A	1 min	10 min
9 A	2 min	10 min
8 A	3 min	10 min
7 A	4 min	10 min
6 A	5 min	10 min
5 A	Continually	N/A

RESISTANCE MEASUREMENTS

Range	Accuracy	Voltage Burden
200.0 ~ 200.0 K Ω **	$\pm(0.7\% + 3 \text{ dgts})$	2 V max
2.000 M Ω **	$\pm(1.0\% + 3 \text{ dgts})$	2 V max
20.00 M Ω *	$\pm(1.5\% + 3 \text{ dgts})$	2 V max

* <100 dgt rolling

** The minimum LCD reading is 1400 count in Auto Ranging Mode.

Open circuit voltage -1.3 V approx.

DIODE CHECK

Range (Diode symbol)
Resolution 10 mV
Accuracy $\pm(1.5\% + 5 \text{ dgts})^*$

FREQUENCY

Range 2000 Hz ~ 200.0 KHz
 2.000 MHz ~ 20.00 MHz
Sensitivity >1.5 Vac rms, <5 Vac rms
 >2 Vac rms, <5 Vac rms
Accuracy Frequency: 0.01% \pm 1 digit
 Frequency: 0.01% \pm 1 digit

CAPACITANCE

Range 2.000 nF ~ 200.0 μ F -
 2.000 mF *
Accuracy $\pm(1.9\% + 8 \text{ dgts})$
 $\pm(1.9\% + 8 \text{ dgts})$
Overload Protection 600 V rms
 600 V rms
Input impedance 10 M Ω // less than 100 pF.

"ORDERING INFORMATION"

Description	Order Code
AVO210 digital multimeter CAT III 600 V	1006-969
Included accessories	
Test leads	
Optional accessories	
Pouch	2007-366

SALES OFFICE

Megger Limited
 Archcliffe Road Dover
 CT17 9EN England
 T +44 (0) 1304 502101
 E UKsales@megger.com

AVO210_DS_en_V01a

www.megger.com
 ISO 9001
 The word 'Megger' is a registered trademark

Megger[®]

Diensten van EURO-INDEX

EURO-INDEX is fabrikant, importeur en distributeur van diverse A-merken op het gebied van test- en meetinstrumenten. Daarnaast leveren wij een groot aantal diensten om het gebruik van deze instrumenten in uw bedrijfsvoering te optimaliseren. Dit omvat uiteraard onderhoud, reparatie en kalibratie van de instrumenten, maar ook kennisdeling via de EURO-INDEX Academy en verhuur van instrumenten.

Geautoriseerd Service Centrum

EURO-INDEX b.v. is van alle vertegenwoordigde merken een Geautoriseerd Service Centrum. Dit betekent dat uw instrumenten worden behandeld door technici die zijn opgeleid door de fabrikant en beschikken over de juiste gereedschappen en software. Er worden uitsluitend originele onderdelen toegepast en de garantie van uw instrument, evenals de certificering (ATEX, EN50379, etc.) blijven intact.

Kalibratielaboratorium

Ons moderne service- en kalibratielaboratorium beschikt over een RvA accreditatie naar NEN-EN-ISO/IEC 17025. Deze accreditatie geldt voor grootheden, zoals gespecificeerd in de scope bij accreditatienummer K105.



Kijk voor een overzicht van al onze diensten op euro-index.nl/diensten



Mobiele Service

Naast de vaste kalibratielaboratoria in Capelle aan den IJssel en Zaventem beschikken wij ook over een laboratorium op wielen met de naam "Mobiele Service". Dit biedt vertrouwde service en kwaliteit, bij u voor de deur!

KWS®

KWS® is een uniek servicesysteem voor uw meetinstrumenten met periodiek onderhoud en kalibratie tegen vaste, lage kosten. Via een gratis webportal (mijnkws.nl) heeft u altijd en overal beschikking over uw kalibratiecertificaten.

Verhuur van meetinstrumenten

- Uitgebreid assortiment
- Nauwkeurigheid aantoonbaar door actueel kalibratiecertificaat
- Deskundig advies
- Complete levering inclusief accessoires

EURO-INDEX Academy

- Trainingen (individueel en klassikaal)
- Cursussen en workshops
- Demonstratie- en instructievideo's
- Whitepapers



Servicebalie



Onderhoud, reparatie en kalibratie



Cursussen en workshops



Mobiele Service

Wijzigingen voorbehouden EURO-INDEX® NL 21004



NETHERLAND
Rivium 2e straat 12
2909 LG Capelle a/d IJssel
T: 010 - 2 888 000
F: 010 - 2 888 010
verkoop@euro-index.nl
www.euro-index.nl



BELGIË
Leuvensesteenweg 607
1930 Zaventem
T: +32 - (0)2 - 757 92 44
F: +32 - (0)2 - 757 92 64
info@euro-index.be
www.euro-index.be