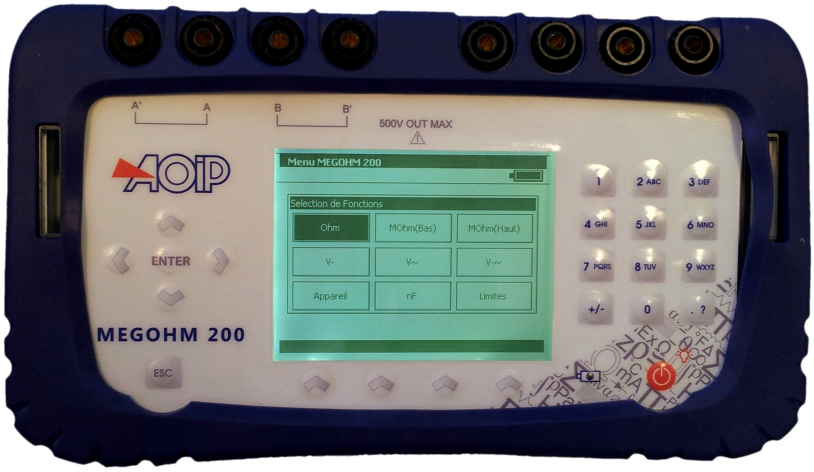

MEGOHM 200

Telecom megohmmeter – ohmmeter

The MEGOHM 200 is a multi-purpose electronic resistance measurement instrument particularly suited for maintenance, verification and reception of telephone lines, and more generally of all low voltage cables.

It measures insulation resistance, loop resistance, AC and DC voltage and detects threshold crossings.

- Analogue and digital megohmmeter
- Analogue and digital continuity ohmmeter
- Adjustable test voltage from 50 to 500 V
- Rugged, lightweight and IP54 for onsite use

Description

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MEGOHM 200 has dual analogue / digital display:

- analogue, to display the trend and a threshold crossing eventually (programmable limit)
- digital, for an improved accuracy

Designed for onsite use, the instrument features a rugged protective sheath, uses latest generation Li-Ion batteries with short recharging time, and has a large graphical display showing all information about the test performed.

Specifications

Specifications and performances @23°C ±1°C

Insulation resistance measurement at test voltage of 50 to 300 V adjustable by steps of 25 V

Analogue range	**Digital range**			**Analogue accuracy**	**Digital accuracy / 1 year**
	Range	Measured resistance	Resolution		
0.01 MΩ to 1 GΩ	0.00 MΩ to 99.50 MΩ	0 to 10 MΩ	0.01 MΩ	±1 segment	5% RDG + 0.01 MΩ
		10 to 30 MΩ	0.05 MΩ		
		30 to 50 MΩ	0.10 MΩ		10% RDG
		50 to 100 MΩ	0.5 MΩ		
	100.0 MΩ to 1000.0 MΩ	100 to 200 MΩ	1.0 MΩ		
		200 to 400 MΩ	5.0 MΩ		
		400 to 700 MΩ	10.0 MΩ		
		700 to 1000 MΩ	20.0 MΩ		

Insulation resistance measurement at test voltage of 300 to 500 V adjustable by steps of 50 V

Analogue range	**Digital range**			**Analogue accuracy**	**Digital accuracy / 1 year**
	Range	Measured resistance	Resolution		
0.03 MΩ to 10 GΩ	0.00 MΩ to 995.0 MΩ	0 to 100 MΩ	0.01 MΩ	±1 segment	5% RDG + 0.01 MΩ
		100 to 300 MΩ	0.05 MΩ		
		300 to 500 MΩ	0.10 MΩ		10% RDG
		500 to 995 MΩ	0.5 MΩ		
	1000 MΩ to 10000 MΩ	1000 to 2000 MΩ	1.0 MΩ		
		2000 to 4000 MΩ	5.0 MΩ		
		4000 to 7000 MΩ	10.0 MΩ		
		7000 to 10000 MΩ	20.0 MΩ		

500 V constant voltage for insulation > 5 MΩ

Continuity resistance, loop resistance measurement

Analogue range	**Digital range**			**Analogue accuracy**	**Digital accuracy / 1 year**
	Range	Measured resistance	Resolution		
0.03 Ω to 10 kΩ	0.0 Ω to 995.5 Ω	0 to 100 Ω	0.1 Ω	±1 segment	0.5% RDG + 0.02 Ω
		100 to 500 Ω	0.2 Ω		
		500 to 995,5 Ω	0.5 Ω		
	1000 Ω to 10000 Ω	1000 to 2000 Ω	1 Ω		
		2000 to 3000 Ω	2 Ω		
		3000 to 5000 Ω	5 Ω		
		5000 to 10000 Ω	10 Ω		

Measuring current: < 1 mA

Visual and sound signal on continuity threshold crossing

DC voltage measurement

Measurement range	**Resolution**	**Accuracy / 1 year**
0 to 100 V	0.1 V	±1% RDG + 0.5 V
100 to 300 V	1 V	±1% RDG + 1 V

Input impedance: 200 kΩ

Digital display: 3 digits

AC voltage measurement

Measurement range	**Resolution**	**Accuracy / 1 year**
0 to 100 V	0.1 V	±1% RDG + 0.5 V
100 to 300 V	1 V	±1% RDG + 1 V

Input impedance: 200 kΩ

Digital display: 3 digits

Bandwidth: 40 à 400 Hz

Additional specifications

Measurement stabilization time	< 2 seconds for line capacitance of 1 µF
Auto-discharge feature	Auto-discharge feature for line capacitance at the

	end of a measurement
Threshold detection	Threshold detection for resistance and insulation measurements with sound and visual signal when crossed

General specifications

Size	210 x 110 x 50 mm
Weight	900 g
Display	240 x 320 pixel liquid crystal graphical display with backlite and contrast control Analogue display: bargraph 67 segments with 5-decade logarithmic scale Digital display: 4 digits
Connexion	2 safety 4 mm plugs
Power supply	230 V ±10% (50/60 Hz)
Automatic switch off	Automatic switch off of the instrument after 30 minutes without action
Battery	Type: Li/Ion Charging time: 4 h Lifetime: 4,500 tests of 5 s at 500 V with a resistance ≥ 0.5 mΩ

Environmental specifications

Reference range	23°C ±1°C (RH: 45 to 75% w/o condensing)
Operating reference range	-10 to 50°C (RH: 20 to 80% w/o condensing)
Limit operating range	-15°C to +55°C (RH: 10 to 80% w/o condensing) (70% at 55°C)
Storage temperature limits	-30°C to +60°C
Maximum height	0 to 2000 m
IP protection	IP54 according to EN60529

Safety specifications

Protection	When using insulation measurement function at 50 V and 500 V, measuring voltage is applied on line only while measuring key is pressed. When the key is released, the cable is automatically unloaded within 1sec.Overload protection up to 380 V
Class	In accordance with EN 61010-1Category II, pollution 2

Chocks and vibrations	EN 61010-1
EMC conformity	

Models and accessories

Instrument:

MEGOHM 200 Cable fault locator

Delivered in standard with:

- Set of testing leads and crocodile clips
- User manual
- Transport case, shoulder strap and stand

Packing information:

Size	210 x 110 x 50 mm
Weight	900 g