

5/10/15-KV INSULATION TEST EQUIPMENT

5/10/15-KV

Equipment with operating voltages above 1 kV requires commensurately higher test voltages. Therefore, to be fully in conformance with the most modern testing requirements, Megger offers a family of high-quality insulation testers at voltages above 1 kV. At the core of high-voltage testing, our 5/10/15 kV units afford the highest level of quality testing along with prime safety, convenience and portability.

For complete insulation testing capability of all high-capital equipment, Megger goes one step further! The universal testing standard for rotational equipment, IEEE 43-2000, increased the test voltage recommendation to 10 kV for equipment rated 12 kV and above. Full compliance with this standard can be attained with just one tester, our 10 kV models.



The **MIT515**, **MIT525**, **MIT1025** are the ideal instruments for industrial plant maintenance, commissioning and industrial/OEM use. Typical applications include insulation testing of:

- Transformers
- Cables and industrial/OEM testing
- Substation equipment
- Quality control

All models are CATIV 600 V safety rated on **all** terminals and assembled in a rugged IP65 dual case. To ensure operation in electrically noisy environments, the units have a 3 mA noise filtering capability.

In order to quickly charge capacitive loads and cables the new units not only have 3mA short circuit current but have “max power regulation technology” which provides faster charge times and ensures that correct voltage is maintained even at low load impedances outstripping the performance of many 5 mA instruments.

Test results are easily identified with the convenient and useful date and time stamp function providing essential traceability. Saved test data can be easily transferred via a 10-kV isolated USB device interface to PowerDB Lite software supplied with the MIT525 and MIT1025. New driver technology provides plug-and-play connection when connected to the internet.

Like all Megger 5/10 kV insulation testers, these units are housed in Megger’s dual case. This unique design allows for fire retardant protection without sacrificing ruggedness. They also include Megger’s industry best guard terminal.

These highly reliable and low maintenance products reduce the cost of ownership. Their unrivalled practicality performs even the most rigorous testing. For additional information and specifications, please turn to page 6.

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MIT1525

The Megger MIT1525 is a 15 kV insulation tester with a full range of DC insulation test modes and the ability to save summary readings in addition to logging results to on-board memory once every five seconds. Real-time streaming data can be captured on a laptop/tablet at a rate of once a second. The MIT1525 timer settings are set to reference timings contained in IEEE 43 and IEEE 95 standards but a user can change timer settings to suit their particular test requirement.

The MIT1525 has been designed, specified and tested to meet international requirements in the industrial and OEM market sectors. In addition to being a tough, high performance insulation tester, the MIT1525 offers the ability to perform accurate insulation resistance measurements up to 15 kV test voltage with a maximum resistance of 30 TΩ. Resistance measurement accuracy is ± 5 % from 1 MΩ to 3 TΩ!

For utilities and service companies the MIT1525 is an all-round tester with its flexibility and future proofing capability. Quite simply the Megger MIT1525 is designed to work wherever you work.

- 15 kV test voltage – increases test current, helping to avoid negative current when testing high resistance insulation.
- CATIV 1000 V safety on all test terminals to 3000 m.
- Rapid charge of capacitive loads such as HV power cables.
- Always ready to test with Li-ion fast charge battery or from an AC source.
- Designed to be durable and survive in the harshest of environments.
- High noise immunity 6 mA.
- High 3 mA short circuit current.
- Download/stream results.
- 2 year warranty



Why test at 15 kV?

- 5 kV to 15 kV will triple test current - this can prevent negative test current in the presence of high noise.
- 15 kV is specified for assets for 35,000 V to 69,000 V based on NETA ATS 2007.
- Motors above 34,500 V should be tested at 15 kV based on NETA ATS 2007.

For additional information and specifications for these products, see page 6.



MIT30

- Continuously variable test voltage, 0-30 kV.
- User selectable current trip point, 0-330 μAmp.
- Robust bright LEDs visible in direct sunlight.
- Built-in adjustable ionization indicator.
- Wide input power range.

SELECTION GUIDE FOR MIT30

Cat. No.	Test Voltage
MIT30	30 kV

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SELECTION GUIDE FOR 5/10/15-KV INSULATION TESTERS

		Model Number Cat. Number	MIT515-US 1001-936	MIT525-US 1001-940	MIT1025-US 1001-944	MIT1525-US 1002-909
Display	Analog/Digital		■	■	■	■
	Power Supply	Line power	■	■	■	■
	Rechargeable		■	■	■	■
Lock test voltage V_{L}			■	■	■	■
Test Voltage	15.0 kV					■
	10.0 kV			■	■	■
	5.0 kV		■	■	■	■
	2.5 kV		■	■	■	■
	1.0 kV		■	■	■	■
	500 V		■	■	■	
	250 V		■	■		
	10 V steps 40 V to 1 kV 25 V steps 1 kV to max test voltage 1 kV to 15 kV in 25 V steps for 15 kV					■
	10 V steps 100 V to 1 kV 25 V steps 1 kV to max test voltage		■	■	■	
Measurements	Max. reading		15 T Ω	15 T Ω	20 T Ω	30 T Ω
	Min. reading		10 k Ω	10 k Ω	10 k Ω	10 k Ω
	Voltage		■	■	■	■
	Capacitance and time constant		■	■	■	■
	Leakage current		■	■	■	■
Test Types	Auto IR		■	■	■	■
	Auto PI		■	■	■	■
	Auto SV			■	■	■
	Auto DD			■	■	■
	Auto DAR		■	■	■	■
	Auto ramp test			■	■	■
Other Features	Safety rating		CAT IV 600 V	CAT IV 600 V	CAT IV 600 V	CAT IV 1000 V
	Timer control		■	■	■	■
	Timer display		■	■	■	■
	3mA short circuit currents		■	■	■	■
	USB output (cable included)			■	■	■
	Calibration certificate included		■	■	■	■
	IP65 rating case closed		■	■	■	■
	Alarm limit mode		■	■	■	■
	Compatible with Power DB			■	■	■
	User programmable lock voltage range		■	■	■	■
	Real time clock			■	■	■
	Battery charge time max (hours)		2.5	2.5	2.5	2.5
	Noise rejection		3 mA	3 mA	3 mA	6 mA
	Guard terminal performance		2% error guarding 500 k Ω leakage with a 100 M Ω load			
Warranty	Warranty (Years)		2	2	2	2

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5/10/15-KV TEST LEADS

Megger provides a range of lead sets and clips of different sizes and electrical characteristics for use with Megger 5/10/15-kV insulation resistance testers, enabling the user to choose the most applicable set for the work in hand.

These leads are designed in full compliance with IEC61010-031:2008 which requires a fully insulated clip design.

For more information on our variety of test leads, visit our website us.megger.com.

ORDERING INFORMATION FOR 5/10/15 KV TEST LEADS

Cat. No.	Description
6220-861	30 ft (10 m) lead set, 10 kV screened, compact clips
6220-833	50 ft (15 m) lead set, 10 kV screened, compact clips
6220-834	10 ft (3 m) lead set, 10 kV screened, compact clips
1002-949	9.8 ft (3 m) lead set x 3, large 15 kV insulated slips for MIT1525 ONLY
1002-534	9.8 ft (3 m) lead set 10 kV insulated clips (set of 3)
1002-531	lead set 3kV medium clips (3 x 3 m) for 515/525/BM5200
6220-822	9.8 ft (3 m) control circuit lead set 1 kV for 5/10 kV ; 1 kV clips
6311-080	49 ft (15 m) 5 kV screened uninsulated small clips
210962	Set of three 10 ft. leads for 218650
1002-913	Fused 1 kV leadset for all 5/10/15kV Insulation Testers
1002-645	16.5 ft (5 m) lead set x 3, large insulated clips for 5 kV & 10 kV
1002-646	26.4 ft (8 m) lead set x 3, large insulated clips for 5 kV & 10 kV
1002-647	33 ft (10 m) lead set x 3, large insulated clips for 5 kV & 10 kV
1002-648	49 ft (15 m) lead set x 3, large insulated clips for 5 kV & 10 kV
1002-641	16.5 ft (5 m) lead set x 3, medium insulated clips for 5 kV & 10 kV
1002-642	26.4 ft (8 m) lead set x 3, medium insulated clips for 5 kV & 10 kV
1002-643	33 ft (10 m) lead set x 3, medium insulated clips for 5 kV & 10 kV
1002-644	49 ft (15 m) lead set x 3, medium insulated clips for 5 kV & 10 kV
1005-817	20 m Leadset x 10kV Screened 20m for 5 kV & 10 kV
1003-201	25 m Leadset x 3 10 kV large size insulated clips for 5 kV & 10 kV
1003-202	30 m Leadset x 3 10 kV large size insulated clips for 5 kV & 10 kV
1005-259	15 kV Leadset 15 kV Plug 3X5 m, 15kV Clip for MIT1525 only
1005-260	15 kV Leadset 15 kV Plug 3X10 m, 15kV Clip for MIT1525 only
1005-261	15 kV Leadset 15 kV Plug 3X15 m, 15kV Clip for MIT1525 only
1005-262	6 kV Leadset 15 kV Plug 3x3 m, Medium Clip for MIT1525 only
1005-263	6 kV Leadset 15 kV Plug 3x10 m, Medium Clip for MIT1525 only
1005-264	1 kV Control Leadset 15 kV Plug 2 x 3 m for MIT1525 only
1005-265	1 kV Fused Leadset 15 kV Plug 2 x 1.25 m for MIT1525 only
1005-266	15 kV Screened 3 m Leadset, 15 kV Clip for MIT1525 only
1005-267	15 kV Screened 10 m Leadset, 15 kV Clip for MIT1525 only
1005-268	15 kV Screened 15 m Leadset, 15 kV Clip for MIT1525 only
1005-269	15 kV Screened 20 m Leadset, 15 kV Clip for MIT1525 only