# 5- and 15-kV Megohmmeters



- Continuously variable test voltage
- Rugged field construction
- Circuit-breaker protection

#### **DESCRIPTION**

The 5- and 15-kV Megohm-meters are high-voltage, lineoperated instruments. They provide a continuously variable test voltage for highly sensitive insulationresistance measurements of all types of electrical equipment and power cable.

The instruments are designed to withstand harsh field conditions, and feature tough, impact-resistance casing, removable lids and adjustable carrying straps. For complete portability, there is ample room in each case to store cables and the instruction manual.

### **APPLICATIONS**

The units are suitable for dielectric absorption and step-voltage testing. Two models are available:

The 5-kV Megohmmeter measures up to 100,000 M $\Omega$ ; provides output from 250 volts to 5 kV, with direct reading up to 50,000 M $\Omega$  at 2.5 kV.

The 15-kV Megohmmeter provides direct reading measurements up to 100,000 M $\Omega$  at 5 kV and up to 200,000 M $\Omega$  at 10 kV, with a multiplying factor for all other voltages up to 15 kV.

The 15-kV model also features an internal voltage stabilizer that may be activated for improved measurement under extreme field conditions. Separate on/off controls are provided for power and high voltage, and a red light indicates when high voltage is on.

#### **FEATURES AND BENEFITS**

- Provides 2% kV and MΩ accuracy Guard terminal to eliminate surface leakage current from the measurement
- Zero-start, high-voltage interlock
- Shielded, high-voltage output cable permanently connected to the instrument
- Circuit-breaker protection
- Redundant grounding connections
- Easy-to-follow, color-coded meter scales
- Analog metering for monitoring of variable measurements
- Rugged field construction

## Megger.

#### **SPECIFICATIONS**

		DC Test	Megohm Range Multiplier					
Cat. No.	Model	Voltage	x1	x10	x100	x1000	Dimensions	Weight
		2.5 kV dc	0.5 to 50	5 to 500	50 to 5000	500 to 50,000	10 H x 10.2 W x 14 D in.	20.5 lb
210400	5-kV	5 kV dc	1 to 100	10 to 1000	100 to 10,000	1000 to 100,000	254 H x 260 W x 355 D mm	9.3 kg
		250 V to 5 kV	Multiply M $\Omega$ by factor indicated in green					
		7.5 kV dc	1.5 to 150	15 to 1500	150 to 15,000	1500 to 150,000	12.5 H x 11.5 W x 20.2 D in.	35 lb
210415	15-kV	15 kV dc	3 to 300	30 to 3000	300 to 30,000	3000 to 300,000	317 H x 292 W x 514 D mm	15.9 kg
		500 V to 15 kV	Actual kV x Range at 10 kV					

5-kV Model, Cat. No. 210400

Input Voltage 120 Vac, 60 Hz Test Voltage

0 to 5 kVdc, negative with respect to ground

**Output Current** 5 mA continuous **Short-Circuit Current** 12 mA max.

Instrumentation

Kilovoltmeter: 4.5-in. (114-mm) taut band

Three Color-Coded Scales

Red: 0 to 2.5 kV Black: 0 to 5 kV Green: 0 to 1 reference Accuracy: ±2% full scale

Megohmmeter

4.5-in. (114-mm) taut band Two Color-Coded Scales **Red:** 0.5 to 50 M $\Omega$ Black: 1 to 100 M $\Omega$ 

Accuracy:  $\pm 0.031$  in. (0.08 cm) at any marking

**Operating Temperature Range** 0 to 122° F (-17.7 to +50° C)

15-kV Model, Cat. No. 210415

Input Voltage 120 Vac, 60 Hz Test Voltage

0 to 15 kVdc, negative with respect to ground

**Output Current** 

2 mA continuous (stabilizer out) 50 µA continuous (at 15 kV, stabilizer in)

Short-Circuit Current

12 mA max

Instrumentation

Kilovoltmeter: 4.5-in. (114-mm) taut band

Three Color-Coded Scales

Red: 0 to 7.5 kV Black: 0 to 15 kV Green: 0 to 1.5 reference Accuracy: ±2% full scale

Megohmmeter

4.5-in. (114-mm) taut band **Two Color-Coded Scales Red:** 1 to 100 M $\Omega$ Black: 2 to 200 M $\Omega$ 

Accuracy: ±0.031 in. (0.08 cm) at any marking

**Operating Temperature Range** 0 to 122° F (-17.7 to +50° C)

Reptame Equipment Inc.

www.reptame.com (905) 936-6979

ORDERING INFORMATION							
Item (Qty)	Cat. No.	Item (Qty)	Cat. No.				
5 kV Megohmmeter	210400	Optional Accessories					
15 kV Megohmmeter	210415	Test record card, 0 to 1000 G $\Omega$	210959				
Included Accessories		Test report sheet for rotating equipment	210951-1				
Ground connection cable, 10 ft [3 m]	4702	Test report sheet for power transformers	210951-2				
Test record card, universal	210954	Test report sheet for power cables	210951-3				
Power cord, for Cat. No. 210415	17032	Bushing guard spring	217003				
Instruction manual for 5-kV model	AVTM21-40JA	"Lowdown on HV DC Testing" manual	AVTM22P-1				
Instruction manual for 15-kV model	AVTM21-415JA	"A Stitch in Time" manual	AVTM21-P8B				

Archcliffe Road Dover CT17 9EN England T +44 (0) 1304 502101 F +44 (0) 1304 207342

**UNITED STATES** 

F +1 214 337 3038

4271 Bronze Way Dallas TX75237-1088 USA T 800 723 2861 (USA only) T +1 214 330 3203

**OTHER TECHNICAL SALES OFFICES** 

Valley Forge USA, Toronto CANADA, Mumbai INDIA, Trappes FRANCE, Sydney AUSTRALIA, Madrid SPAIN and the Kingdom of BAHRAIN.

Registered to ISO 9001:2000 Reg no. Q 09290 Registered to ISO 14001 Reg no. EMS 61597 MEGOHMMETERS\_DS\_en\_V10

www.megger.com Megger is a registered trademark