



The Metrohm E3511 high voltage insulation tester is a portable, rugged, solid-state instrument that can be operated from its own internal rechargeable battery or from the external A.C. supply.

The internal charger recharges the batteries when the instrument is connected to the external A.C. supply.

Designed to the highest standards for quality and reliability, and incorporating the most advanced technology, the Metrohm E3511 measures insulation resistance in the range $100\text{k}\Omega$ to $100\text{G}\Omega$ at test voltages of 500, 100, 2500 and 5000 volts D.C.



Product Features

Four selectable test voltages:
500, 1000, 2500 and 5000V D.C.

Rechargeable battery/Mains (A.C.)
Operation

Large analogue display

Screened/Locking test leads with
probes/crocodile clips

Easily transportable in a rugged
carry case

Latching test switch

E3511

high voltage insulation
tester

installation tester

E3511



high voltage insulation
tester

Model Range : Model Description

E3511 500/1000/2500/5000V, 100k Ω - 100G Ω

Electrical

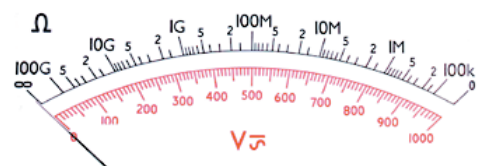
	Insulation Resistance	
	Range:	100k Ω to 100G Ω
	Insulation Range	
	Accuracy:	$\pm 1.5\%$ of scale length (class index 1.5)
	Temperature Coefficient:	$< 0.04\%$ of scale length/ $^{\circ}\text{C}$
	Voltage Range:	100V A.C. or D.C.
	Voltage Range Accuracy:	$\pm 1.5\%$ of scale length
	Test Voltages:	
	Test Voltage Accuracy:	500V, 1kV, 2.5kV, 5kV D.C.
	Break Point Current:	$\pm 5\%$ at 10M
	Short Circuit Current:	0.5mA nominal 1.2mA nominal $< 10\text{V}$ peak to peak ($R < 10\text{M}\Omega$)
	Ripple Voltage:	
	Capacitor Charging:	15 secs nominal to charge a 2mF capacitor to 5kV
	Time Capacitor Discharge:	2 secs nominal to discharge a 2mF capacitor from 5kV to 50B
	Time:	
	Hum Rejection:	2mA RMS on 5kV range
	Maximum Voltage on Measurement:	1kV across H and L terminals 1kV across H and Guard
	Internal Battery:	12V, 1.25AH, NiCd pack
	Battery Low Voltage:	10.5V nominal
	Maximum Battery Consumption:	400mA
	Battery Life:	8 hours typical
	Supply/Charger:	240V A.C., $\pm 10\%$, 50/60 Hz, 18VA Over-Voltage and over-current protection on measurement terminal, VDR on mains/A.C. input, GDT on low input
	Safety:	Complies in general with IEC1010
	Fuses:	0.2A, F, HBC, DIN fuse on mains/A.C. input 0.63A, T, HBC, DIN fuse on battery input
	Flash Test:	9kV A.C. for 1 minute

Mechanical Specification

Case Length:	330mm
Case Width:	263mm
Case Height:	144mm
Scale Length:	133mm
Case Material:	Yellow ABS and black Polycarbonate
Weight:	3.5kg (with batteries)
Bump:	To IEC 68-2-29
Vibration:	To IEC 68-2-6
Drop:	The instrument will suffer no mechanical damage or change in electrical specification after being dropped 14 times onto an on-resilient surface, falling through 0.5m onto each face and corner.
Impact:	the outer surface will withstand an impact of 2.5 joules except for the meter window which will only sustain 0.5 joules

Environmental

Operational Temperature Range:	-15 $^{\circ}\text{C}$ to +55 $^{\circ}\text{C}$
Storage Temperature Range:	-25 $^{\circ}\text{C}$ to +65 $^{\circ}\text{C}$
Relative Humidity:	80% at +40 $^{\circ}\text{C}$
Cold Temperature:	To IEC 68-2-1
Dry Heat:	To IEC 68-2-2
Damp Heat:	To IEC 68-2-3



Martindale Electric Company Ltd policy is one of continuous development and hence we reserve the right to change specifications/design without prior notice.



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installation tester