



LUMETRON LC-2R Touch (Leakage) Current Meter



The test for leakage current in mains operated equipment is one of the most primary & important tests to verify the quality & electrical safety characteristics of products as required by national & international regulatory agencies such as BIS, IEC, UL, CSA, VDE, DIN, BSI, etc. The **LUMETRON LC-2R** from **LUMETRONICS** is designed to measure leakage current in products operating at 200~250 V upto 16 A. The **LC-2R** is used to test domestic electrical appliances, luminaires, motors & other mains operated equipment. Its true RMS circuit accurately measures both sinusoidal and non-sinusoidal waveshapes. This is essential when products are motor operated or use a switch mode power supply (SMPS) which can generate non-sinusoidal leakage currents. An Input Network (simulating body circuit impedance) consisting of a 2k resistor shunted by a 150 nF capacitor is included in the meter. The meter reference terminal can be set to Line or Neutral. Alternatively, a separate set of add on, modular, Measuring Networks can be provided. These allow the leakage current meter to be used for various present and evolving standards. Networks are available for 'Unweighted Touch Current', 'Weighted Touch Current for Perception/Reaction', 'Weighted Touch Current for Let-Go'. A Voltage measure mode checks for faults in wiring connections and allows corrective action before testing. An electronic over current sensing circuit will disconnect the meter inputs from the test sample in case of excessive leakage current. The meter is compact, robust & is housed in a bench top case. It has numerous safety & operational features which make it a truly versatile instrument. The meter is supplied with a calibration report traceable to NPL & a detailed users manual.

Features

- * Totally self contained unit requiring 230 V, 50 Hz AC single phase supply
- * Indicates True RMS values within the specified frequency range (20 Hz to 5 kHz).
- * Accurate & stable digital meter with bright 3 1/2 digit LED display.
- * Current & Voltage, dual mode indication with Mode selector switch & indicators.
- * 4 mm test jacks on front panel with test leads for connecting Unit Under Test to the instrument.
- * Selector switch to connect either supply pole (Live / Neutral) of Unit Under Test to the instrument reference terminal.
- * Electronic over current sensor with automatic cut off at approx.2.5 mA & visual/audio Overload indication for safety.
- * Additionally protected by 0.1 A fuse.
- * Body circuit impedance consisting of a 2k resistor shunted by a (switchable) 150 nF capacitor. Optionally available - Measuring Networks (can be ordered separately).

Specifications

Range	: Current = 0 to 2.000 mA	Voltage = 100 to 300 V
Resolution	: Current = 0.001 mA	Voltage = 1 V
Accuracy	: Current = $\pm(0.5\% \text{ of rdg} + 2 \text{ dgt})$	Voltage = $\pm(2\% \text{ of rdg} + 2 \text{ dgt})$
Input Network	: 2 k in parallel with 150 nF, Low Pass Response. Other Input Networks available OPTIONALLY	
Controls	: Mains ON/OFF	Overload RESET
	: INPUT Select - LIVE / NEUTRAL	MODE Select - mA / V
Indicators	: Digital, 3 1/2 digit LED display	Mains ON
	: OVERLOAD (Audio / Visual)	MODE, mA / V
Protection	: Electronic Current Sensing / Tripping Circuit, @ 2.5 mA	INPUT Fuse, 0.1 A
		MAINS Fuse, 0.1 A
Supply	: 230 V AC, 50 Hz, single phase	
Size (mm)	: 210 W x 230 D x 95 H (approximate)	
Weight	: 1.6 kg (approximate)	