



ohmic instruments co.

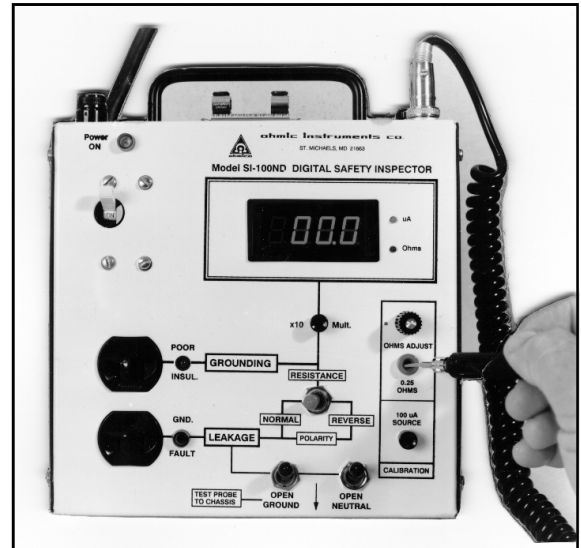
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INDUSTRIAL & ENVIRONMENTAL SENSORS, INSTRUMENTS & CONTROLS SINCE 1969

DIGITAL ELECTRICAL SAFETY INSPECTOR - SI-100ND TEST ELECTRICAL EQUIPMENT TO AAMI, UL & NFPA CODES

- 3-1/2 DIGIT LED DISPLAY
- CURRENT LEAKAGE: 0-199.9 μ A or 0-1999 μ A
- GROUNDING RESISTANCE: 0-1.999 or 0-19.99 Ω
- DIFFERENTIAL VOLTAGE RANGE: 0-199.9 mV or 0-1.99 VOLTS
- NORMAL/REVERSE POLARITY TEST SWITCH
- OPEN NEUTRAL SWITCH
- POOR INSULATION INDICATOR
- TEST RECEPTACLES FOR LEAKAGE & GROUNDING
- MEETS AAMI, NFPA-99, & UL-544 STANDARDS
- 15 AMP BREAKER PROTECTION



INSURE ELECTRICAL EQUIPMENT MEETS ACCEPTABLE CODES

OHMIC Instruments' SI-100ND is a portable electrical test set widely used in the medical and electrical industry to insure that instruments, apparatus and electrical power supplies meet safety codes. SI-100NDs quickly test the leakage current and grounding continuity of 120 Volt AC line operated equipment to the latest AAMI, UL-544 and NFPA-99 standards for "non-patient connected electrical apparatus". A 15 Amp circuit breaker protects the line test circuit against overloads.

Leakage currents to 1999 μ A with 1 μ A resolution and grounding resistance to 20 Ω with 0.001 Ω resolution are displayed on a highly visible 3-1/2 digit LED readout. The equipment under test is simply plugged into one of two front panel test receptacles which are used for either the grounding resistance/poor insulation or current leakage test. The current leakage can be conducted in either normal or reverse polarity using a heavy-duty toggle switch. An open neutral switch is a standard feature. A dual function test probe with a four foot coiled

cable allows the user to make external leakage, differential voltage and resistance test on electrical equipment that cannot be plugged into the front panel.

The current leakage test is performed with the AAMI standard test load. It provides a -3dB response from DC to 1KHz and -20dB per decade >1 KHz and a -40 dB attenuation above 100kHz. The unit is also equipped with a built in 100 μ A reference current source and a 0.25 Ω resistance standard to verify operation and calibration of the unit.

Model SI-100ND is assembled in a sturdy metal case, equipped with a carrying handle and probe storage holder for portability. A durable storage case is included.

SI-100NDs provide the standard electrical safety testing required for maintenance and biomedical departments in health care facilities. Each unit is supplied with a certificate of calibration and backed by OHMIC's engineers.

WARRANTY: All products manufactured by OHMIC Co. are warranted to be free of defects in material and workmanship for one year after delivery. Any equipment found to be defective within this period will be repaired or replaced free of charge.

SPECIFICATIONS

LEAKAGE CURRENT TEST

RANGES	0 to 199.9 μ A (X1), DC or RMS 0 to 1999 μ A (X10), DC or RMS
RESOLUTION	0.1 μ A (X1); 1.0 μ A (X10)
ACCURACY	\pm 3% of Full Scale

GROUNDING RESISTANCE TEST

RANGES	0 to 1.999 Ω (X1); 0 to 19.99 Ω (X10)
RESOLUTION	0.001 Ω (X1); 0.01 Ω (X10)
ACCURACY	\pm 5% of Full Scale
TEST CURRENT	30 mA
CALIBRATION TEST	0.25 Ω , \pm 3%, Panel Test Jack with Ohms Adjust
CIRCUIT PROTECTION	1/16 A, 250V Fast Acting

POOR INSULATION TEST

INDICATOR	Red LED
POOR INSULATION LEVEL	Below 1M Ω , Ground to HOT/NEUTRAL
TEST VOLTAGE	100 Vdc, \pm 5%
TEST CURRENT	250 μ A Max

DIFFERENTIAL VOLTAGE TEST

RANGE	0 to 199.9 mV (X1), DC or RMS 0 to 1.99 V (X10), DC or RMS
RESOLUTION	0.1mV (X1); 1mV (X10)
LOAD RESISTANCE	1 K Ω

ELECTRICAL and MECHANICAL

TEST RECEPTACLES	Heavy Duty NEMA Duplex, Hospital Grade
LOAD CURRENT	10 Amps Max
OVERLOAD PROTECTION	15 Amp, 2 Pole Circuit Breaker
DISPLAY	3-1/2 Digit LED, 0.5" High
UNITS DISPLAY	LED Indicators, μ A, Ω
TEST SWITCHES	Normal/Reverse Polarity & Resistance Toggle Switch, Momentary Open Neutral and Open Ground Switches, X10 Display Push-button, 100 μ A Calibration Test
EXTERNAL TEST PROBE	Removable Hand-held 4 Ft Coil Cord Ohms Push-button
STANDBY POWER	120V, 60Hz, 5 Watts
POWER CORD	6 Ft 14/3 Type S/J
CASE DIMENSIONS	8" x 8" x 4", Equipped with a High-Impact Plastic Carrying Case

ENGINEERING SUPPORT: OHMIC Instruments Co. designs and manufactures a full line of environmental and bio-medical sensors, instruments and controls. Many of our products are custom designed to meet specific requirements. Our engineers will be pleased to discuss your application.



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