Portable Instrument

Electrical Resistance (ER) Meter





MUI-MS1500E meter is a hand-held, battery-powered, corrosion meter capable of measuring and storing data from all types of electrical resistance (ER) corrosion probes. The instrument is lightweight, microprocessor-based, and features a simple, menu-driven interface using a 12-key keypad and a 4-line LCD display.

Corrosion rate measurements are made using the electrical resistance method. Essentially, the instrument measures the resistance of the probe element which changes over time, as a metal loss occurs. The rate of change is directly proportional to the corrosion rate. This method finds a wide variety of applications since it can be used in conductive and nonconductive environments such as soil, concrete, petroleum, chemical, water, soil, or even atmosphere.

After taking a reading, the instrument displays metal loss in mils and corrosion rate in mils per year (mpy). The reading can then be stored in memory or discarded. All stored readings are automatically time and date stamped and are protected by a lithium back-up battery. The instrument can store a maximum of 3,100 readings on up to 150 different probes.

SPECIFICATIONS

Measurement Type	ER measurement using any standard ER probe types	
Measurement	Range: $0 - 1,000$ digits representing $0 - 100\%$ of probe life	Resolution: 1 digit
Operating Temperature	0 - 50° C	

PHYSICAL DATA

Meter Weight:	0.64 kg	
Dimensions:	194 mm x 105 mm x 50 mm	
Storage Temperature:	-20 to 70° C	
Power Requirement	Three 1.5V AA batteries	