

Linear Polarization Resistance (LPR) Meter



MS1500 LPR meter is a hand-held, 9 volts battery-powered, intrinsically safe corrosion meter capable of measuring and storing data from linear polarization resistance (LPR) corrosion rate probes. The instrument is light weight, 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 linear polarization resistance technique. From the polarization potential and the measured current, polarization resistance can be calculated. Then, using Faraday's law, the instantaneous corrosion rate can be calculated from polarization resistance.

The MS1500 LPR incorporates a high-precision zero-resistance ammeter (ZRA) for measuring galvanic current between electrodes. It also offers a high-precision voltmeter for measuring the open-circuit potential between electrodes.

Stored data can be uploaded to a PC as a comma-delimited ASCII text file. The test results can be also viewed on the instrument's LCD display for manual recording.

Specification

Measurement Type	Range	Resolution
Corrosion Rate	0 – 150 mil/year (0 to 3.8 mm/year)	0.01 mil/year (0.0025 mm/year)
Galvanic Current (Zero Resistance Ammeter)	999 mA	1 mA
Potential	999 mV	1 mV
Operating Temperature	0 -50° C	

Sizes and Weight

Meter Weight:	0.64 kg
Dimensions:	194 mm x 105 mm x 50 mm
Storage Temperature:	-20 to 70° C