# Resistivity test / Cover measurement, half-cell potential

## RESISTIVITY TEST

**■ 58-E0062**
**Digital resistivity**
**2 probe array meter**

**■ 58-E0062/A**
**Digital resistivity**
**4 probe array meter**


58-E0062

- **Compact, durable, hand held probe unit**
- **Reads out directly in kΩ cm**
- **Less than 2 minutes per test**
- **Rebar continuity check facility**


*Detail of 58-E0062/A 4 probe array*

### General description and specifications

For assessing the possible rate of corrosion in reinforcing bars. The time at which corrosion of steel may commence and the rate at which it may proceed is dependent upon properties of the cement paste and the permeability of the concrete. Since the electrical conductivity of concrete is an electrolytic process, which takes place by ionic movement in the aqueous pore solution of the cement matrix, it follows that a highly permeable concrete will have a high conductivity and low electrical resistance. Thus knowledge of the electrical resistance of a concrete can provide a measure of the possible rate of corrosion of steel embedded in it.

### Specifications

**Probe array:** 2 probe array 5 cm spacing (58-E0062) or Wenner 4-probe array.
**Display:** 3 digit LCD display
**Response/resolution:** display resolution 0.1 kΩ cm, linear response up to 25 kΩ cm (compressed scale beyond)
**Battery operated:** approximately 100 hours active operating time
**Probe holes:** 8 mm deep, 6.5 mm diameter filled with conductive gel (template, gel and drill bit included) for 58-E0062. Not required for 58-E0062/A.

**Dimensions:** 400x270x130 mm
**Weight approx.:** 2 kg

## COVER MEASUREMENT, HALF-CELL POTENTIAL

**■ 58-E0067/A**
**SCRIBE Combined logging cover meter / Potential meter**


58-E0067/A

### General description and specifications

Scribe 58-E0067/A apparatus is a unique cover meter with inclusive additional facility to measure half-cell potential. Both are essential for conducting condition surveys of reinforced concrete structures.

### Main features

- On-screen Menu driven operation
- Pulse induction technique for stability and performance
- Automatic Zeroing
  Back-lit Measurement Display
- Embedded instrumentation computer
- Automatic sizing of single bars

### Cover role features

- Logging non-volatile capacity 30,000 results within thirty pages, each 32 lines x 32 columns.
- Logged data date and time stamped.
- Results downloaded to PC or printer
- Software and guidance provided for data presentation
- Standard head measures and detects up to 150 mm, with diameter measurement from 5 to 125 mm
- Optional deep seeking sensing head which measures cover to over 250 mm and detects to over 300 mm subject to bar size. No bar size estimation.
  See 58-E0067/A2
- Accuracy better than BS1881:204

### Half-cell potential role features

- Unique re-fillable Silver/silver chloride mapping electrode
- Measurements automatically converted and displayed as equivalent Copper/copper sulfate potentials
- Conforms to ASTM C 876
- Logging non-volatile capacity 30,000 results within thirty pages, each 32 lines x 32 columns.
- Results downloaded to PC or printer
- Software and guidance provided for data presentation

**Dimensions:** 220x110x75 mm
**Weight approx.:** 2 kg

The meter is supplied complete with standard cover head and half cell potential electrode. Other models of cover head are available. See accessories

### Accessories

**◤ 58-E0067/A1**
Mini head for detection and analysis of low spaced rebars.

**◤ 58-E0067/A2**
Maxi head for detection and analysis of deep rebars. No bar size estimation.