

## MICRORESISTIVITY PROBE

The microresistivity probe provides a pad resistivity measurement with high vertical resolution combined with a caliper and natural gamma.

### PRINCIPLE OF MEASUREMENT:

The resistivity measurement is based on the guard method where a ring electrode maintained at the same potential as the central measurement electrode focuses the measure current into a narrow beam. The electrodes are contained within a flexible pad mounted on a motor-driven arm and maintained in contact with the borehole wall during logging by spring pressure. The same arm also operates the caliper mechanism.

A natural-gamma measurement is included to aid correlation with other logs.

### FEATURES

Small electrode spacing for high resolution  
Pad design minimises borehole effects

### MEASUREMENTS

Focussed microresistivity  
Caliper  
Natural gamma

### APPLICATIONS

**Minerals/Water/ Engineering**  
High-precision bed boundary and thickness determination  
Resolution of seam partings  
Invasion profile (in combination with other resistivity methods)

### OPERATING CONDITIONS

**Borehole type:** open-hole, water-filled  
**Centralisation:** excentralised with caliper arm.

### SPECIFICATIONS

**Diameter:** 58mm  
**Length:** 3.20m  
**Weight:** 23kg  
**Max. temperature:** 70°C  
(extended range available)  
**Max. pressure:** 20MPa  
(extended range available)  
**Resistivity range:** 0.2 to 2000 ohm-m  
**Caliper range:** 58mm to 400mm  
**Natural-gamma detector:** 50mm x 25mm NaI(TL) scintillation crystal  
(larger sizes available)

### SALES INFORMATION

**Probe:**  
25 059 000 Microresistivity probe including natural gamma and caliper calibrator  
**Accessories:**  
20 074 000 Natural-gamma API calibrator without source  
30 010 000 3.7MBq <sup>137</sup>Cs source for natural-gamma calibrator

