Micro-Resistivity Imager (GMI)

The Micro-Resisitivity Imager module provides a high-resolution spatially oriented image of features on the borehole walls.

The tool includes 4 pads each containing twelve button electrodes mounted on 2 pairs of powered arms. The current emitted by each electrode is focused into a narrow beam and returns to a remote part of the tool body. The current from each electrode is measured and digitised in each pad and transmitted to the surface by a separate telemetry module using a proprietary high-speed communications system. The tool may be run on 7-core cables and is compatible with the standard Robertson Geo oilfield surface system running Warrior™ software.

SPECIFICATION:

Features

48 button electrodes (12 on each pad)

Data sampling interval 60ms with real-time transmission of all data

Exchangeable pads for hole sizes between 110mm and 220mm

40% wall coverage in 146mm borehole

Measurements

Micro-resistivity

Borehole diameter (XY caliper)

Applications

Identification of faults and folding

Location/characterisation of fractures

Determination of structural dips

Analysis of sedimentary structures and cross-bedding

Core orientation

Operating Conditions

Borehole type: open-hole, mud/water filled Ø:102mm (4") to 257mm (10.1")

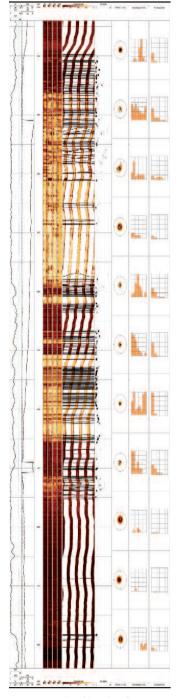
Centralisation required

Specifications

Diameter:	94mm (3.7") (with 8.5" pad)
Length:	3.36m (132")
Weight:	47kg (103.5lb)
Max. temperature:	125°C
Max. pressure:	86MPa (12,500psi)
Caliper accuracy:	+/- 5mm
Inclination accuracy:	+/- 0,1 deg
Azimuth accuracy:	+/- 5 deg
Button current precision:	16-bit (48 button electrodes - 12 on each pad)
Resolution (radial & vertical):	7mm (46% wall coverage in 146mm borehole)
Logging speed:	300m/hr
Borehole range:	114mm (4.5") to 250mm (10")

Part Numbers

1015579 Micro-Resisitivity Imager module



Example of logging data



3.36m



Imaging

Micro-Resisitivity Imager Module