

# Dual Spaced Induction Log probe DIL 38 & DIL 38G

The induction tool generates an electromagnetic field in the vicinity of the borehole and measures the response of the formations to this applied field. Both inphase and quadrature measurements are taken and digitised by the sonde electronics for transmission to the surface equipment. In this way both formation conductivity and magnetic susceptibility data can be obtained, even in dry or PVC equipped boreholes.

The relatively low operating frequency and the design of the coil array combine to minimise borehole effects and maximise both depth of investigation and vertical resolution.


An optional natural gamma detector incorporated into the tool provides lithological information and is useful for correlation purposes.

## SPECIFICATIONS :

- Diameter : 38 mm
- Length : 2150 mm
- Weight : 6.20 Kg
- Max. Temp / Pressure : 70°C / 200 bar
- Effective spacing : 510 mm (ILM) ; 810 mm (ILD)
- Operating frequency : 39.0625 KHz
- Range : 0.2 to 5.500 mS/m (about 0.22 Ohm.mFS)
- Resolution (background noise) : 0.25 mS (mmho) > resolves 4000 Ohm.m
- Accuracy / drift : 5 mS/m (5 mmho) over all temp. range

## OPTIONS ACCESSORIES :


- Gamma ray sensor
- calibration jig, transport case



Gamma ray  
Crystal position

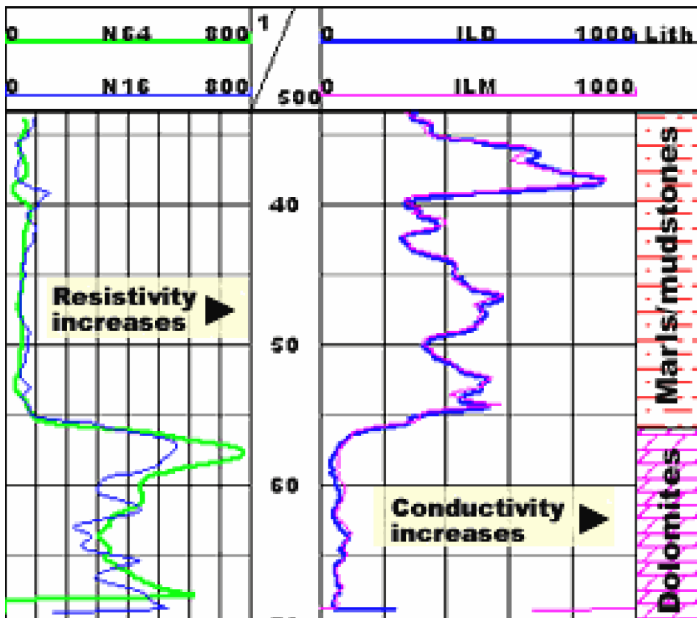
Power supplies and  
communication (optional)

Transmitter/receiver coils  
housing



Transmitter/receiver coils  
assembly (inside view)

## Examples



Logging example of resistivity and induction measurements. This example demonstrates clearly the improved resolution obtained from the induction tool in the low resistivity formations when compared to classic normal resistivity logs.

### BOREHOLE CONDITIONS :

- dry or fluid filled
- open or PVC cased borehole
- any drilling method
- low to medium resistivity formations

Natural gamma and single induction data in a 4 boreholes profile. The lithology is sandy with a variable clay fraction, the induction logs show significant lateral formation conductivity variations in the sandy layers.

