

QL40-DEN-1000

Compensated Dual Density-Caliper Probe

The QL40-DEN Compensated Density & Caliper probe is a versatile wireline tool that can be used in a wide variety of logging applications. Measurements include SSD (short-spaced density), LSD (long-spaced density), Compensated density (dual density), and Caliper. The tool section is designed for operation in 2 to 12 inch (5 – 30 cm) boreholes.

This dual detector, high resolution density tool is fully characterized, producing accurate near and far density measurements transformed into compensated density by use of stand-off / compensation algorithms. These algorithms produce effective data even when borehole rugosity and fractures adversely affect accuracy of uncompensated logs.

Applications

- Quantitative In-situ Density
- Petrophysical Properties
- Coal Quality and Delineation
- Density Porosity
- Caliper Borehole Volume

Features & Benefits

- Real-time Quantitative Density
- Improved thin bed resolution
- Advanced compensation algorithms produce accurate density data even when borehole rugosity and fractures are obstacles
- Easy to calibrate with Nylon and Aluminum calibration blocks.
- Cesium-137 or Cobalt-60 source
- Operates on any standard wireline (Mono, 4, 7 conductor, or Coax)
- Can be combined with other logging tools of the QL product line or operated as a standalone tool.

Specifications:

- Diameter: 50.8 mm (2")
- Length: 1.85m (73")
- Weight: 19.2 Kg (42 lbs.)
- Max. Temperature: 85°C (185°F)
- Max. Pressure: 206 bar (3000 psi)

Short Spaced Source Detector (SSD): 20 cm (7.87")
Long Spaced Source Detector (LSD): 35 cm (13.77")
Density Range: 1 – 4 g/cc (depends on source)
Source: 100 – 250 mCurie Cs-137 or Co-60
Density Accuracy: 0.1 g/cc (100 mC Cs-137)
Density Resolution: 0.05 g/cc (100 mC Cs-137)

Caliper Maximum: 30 cm (12")
Caliper Accuracy: 2.54 mm (0.1")
Caliper Resolution: 0.64 mm (0.025")

