



QL40,SGR Spectral Gamma Ray probe

The QL40 SGR spectral gamma tool provides insight into the mineral composition of formations. It analyses the energy of spectrum of gamma radiation from naturally occurring isotopes in the formation surrounding a borehole. The tool is offered with several sensors options depending on the field application.

The QL40-SGR is supplied as an inline sub. It can be combined with other logging tools of the QL40 (Quick Link) product line or can be operated as a standalone tool. It is compatible with Matrix, BBOX and ALTlogger acquisition systems

Application

- Mineral detection.
- Recognition of radioactive material
- Detailed well to well correlation
- Lithology characterization
- Sedimentology (definition of facies and depositional environment)
- Contamination studies.

QL40.SGR Spectral Gamma Ray probe

Principle of measurement

The QL40 SGR spectral gamma tool analyses the energy of spectrum of gamma radiation from Unlike a total count gamma –ray probe, the spectral gamma-ray probe measures the energy of each gamma ray detected. K, U, and Th emit gamma rays with characteristics energies, so estimates of the concentrations of the three radioelement can be made.

Measurement/Features

- 256 channels spectrum
- spectrum stabilized (software)
- Nuclides concentrations
- Window gamma counts
- Total gamma counts

Operating conditions

- Open or cased hole
- Water filled or dry borehole
- Compatible with Matrix, BBOX and ALTLogger 3 systems
- Can be combined with other QL subs

Technical Specifications

Tool

- Diameter: 40 mm (1.6")
- Length: 0.93 m (36.6")
- Weight: 6 kg (13.2 lbs)
- Operating Temp.: 0-70°C (32-158 F)
- Max. Pressure: 200 bar (2900 psi)

Measurement point

- 0.21 m (8.3") from bottom

Measurement range

- up to 3000 kev

Sensors

- Scintillation NaI(Tl) crystal : 1"x4"
- BGO crystal : 1"x4"

Specifications subject to change without notice