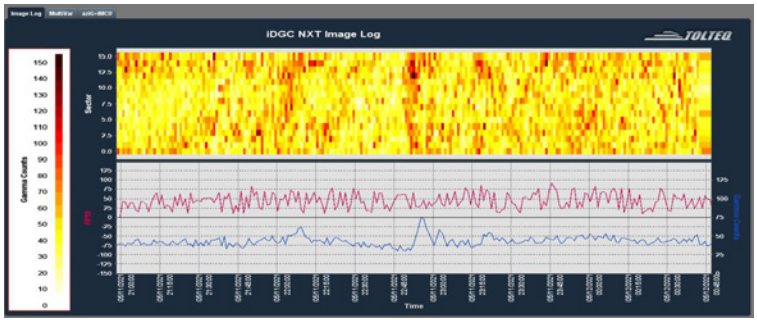
Tolteq iSeries NXT Azimuthal Gamma-ray (iAZG)

The Tolteq™ iSeries Azimuthal Gamma-ray probe provides the ability to accurately measure the naturally occurring radioactive materials to either the high-side or the low-side of the wellbore while rotating the drill string.

It allows the driller to make a rapid determination of approaching bed boundary changes and make corrections to adjust the drilling program to stay within the desired zone.

This tool provides an improved method of geosteering by adding the ability to record oriented gamma measurements while the drillstring is rotating.



Features and benefits

- Lithology identification
- Detection of shale and radioactive isotopes
- Offset logs depth correlation
- Azimuthal outputs available in real-time:
  - Bulk Gamma-ray
  - Gamma Up/Down
  - 4 configurable quadrants
  - 16 sectors
- 16 sector image logged in memory and viewable in Tool Tracker
- RPM computation available realtime
- Operational time and environment history recorded in internal memory*
- Advanced internal logging*
- Legacy compatible
- Enhanced circuit protection
- Quality Tolteq wiring inside with strain relief connectors and high-temperature mesh covering for wires

*Requires Tool Tracker to download

Mechanical and environmental specifications

Outside diameter	1.875 in. (47.6 mm)
Length (w/end caps)	50.4 in. (1.28 m)
Operating temperature	32 to 347°F (0 to 175°C)
Survival temperature	-40 to 365°F (-40 to 185°C)
Vibration, random	20 g RMS, 10 to 200 Hz
Shock	1,000 g, 0.5 mSec, half-sine
Max pressure	20,000 psi

Instrument accuracy specifications

Sensitivity	0.45 counts / API
Accuracy	+/- 3%
Count rate change	- 25C to 177C
Gamma window range	45-180 degree
Rotation speed range	0-210 RPM
Measurement	7.5 in. from end of the housing

Electrical specifications

Operating voltage range	18 to 30 V
Current at 28 V	22mA
Power usage	0.6W