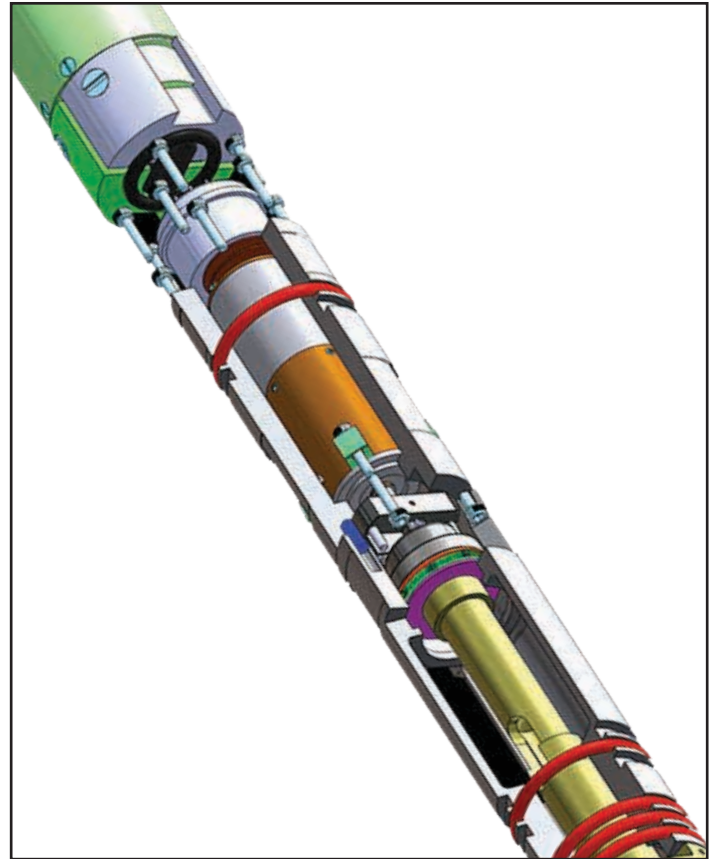


Gyrodata's new CAAT™ Surveyor, provides continuous all-attitude surveying from vertical to horizontal and beyond - offering the highest degree of wellbore trajectory definition ever provided by the company.

The new CAAT™ (Continuous All-Attitude Tool), part of Gyrodata's X-4™ rate-gyroscopic suite of tools, provides continuous surveying from vertical to horizontal while moving in or out the well. The tool runs on wireline in casing, tubing or drillpipe, and it can be pumped down to horizontal. Field runs have matched the results of controlled environment testing in the laboratory. CAAT™ X-4™ technology incorporates advancements in downhole sensors, electronics, software modeling and mechanisms to increase shock resistance, leading to significant gains in performance, speed, accuracy and reliability.

Advancements include:

- » Ruggedized rate-gyro sensor and improved housing increases reliability, performance and accuracy.
- » New 4th generation electronics mounted on a single chassis improves system reliability and provides a higher sensor performance.
- » Significant system increase in signal-to-noise ratio provides higher accuracy survey measurement.
- » The latest version of surface software processes the rate sensor data with new modeling techniques to enhance survey accuracy.
- » No rig time taken for field calibrations.



Specifications

Type: Continuous All-Attitude Tool (CAAT™)
Sensor Performance †: $\pm 0.05^\circ$ Inclination, $\pm 0.1^\circ$ Azimuth, $\pm 0.05^\circ$ Tool face (1 sigma)
Inclination Range: $0^\circ - 180^\circ$
Tool Length: 20 ft (6 m) average
Running Equipment: Mono or Multi-conductor Wireline

Max Running Speed: Up to 500 ft per minute (152 m/min) depending on well conditions
Tool Weight: 165 pounds (75 Kg.)

† All specifications listed are for guideline purposes. Upon request, the tool performance can be obtained by applying the industry approved Gyrodata performance model to the wellbore profile.