



Redefining
Measurements

OMEGA^{X™}
powered by SPEAR™

gyrodata

The dawn of a new era in surveying has arrived with the introduction of the **Omega^x**™ all-attitude solid-state drop gyro surveying system. Powered by Gyrodata's groundbreaking SPEAR™ technology, it's fast: only 32 seconds to measure the earth's rotation and gravity fields. And since they are collected during pipe connections, surveys are acquired seamlessly with rig operations taking no additional time. Equipped with an all new solid-state sensor that was internally developed over a ten-year period, the tool's accuracy is unmatched and does not require regular calibrations and has no mass unbalance error. Quality control is more robust and can now also be verified independently by third parties. The Omega^x solid-state sensors are rugged, ensuring accuracy and reliability in high shock, high vibration and high temperature environments.

Omega^x reduces the Ellipse of Uncertainty eliminating the need for the added complexity and cost of Wireline Gyros, In-Field Referencing and Multi-Station Analysis corrections.




FEATURES + BENEFITS

- Zero additional rig time used
- Tool reliability
- All-attitude measurements
- All-latitudes
- Geological model improvement
- Reduced error ellipses

MARKET + APPLICATIONS

- Offshore & Onshore Drilling
- Collision Avoidance
- High Latitudes
- East/West Drilling
- Extended Reach Drilling
- Survey Validation / Gross Error Detection

GYRO SYSTEM COMPARISON

	COMPETITOR ALL-ATTITUDE DROP GYRO	COMPETITOR MEMS GYRO-WHILE- DRILLING	GYRODATA OMEGA ^x
Type of Gyro Sensor	1-axis mechanical	1-axis solid-state	3-axis solid-state
Survey Sequence Time (Gyrocompassing)	180+ seconds	120 seconds	32 seconds
Recalibration Requirements	regularly	rarely	rarely
Maximum Temperature (unlimited time)	100°C	100°C	150°C
Independent Surveys	no	yes	yes
Backreaming Possible While Pulling-Out-Of-Hole	no (causes survey misrun)	yes	yes
Incremental Rig Time Usage	3+ hours	none	none
Shock and Vibration Survivability	low	high	high
Transparent Data Quality Control	no	yes	yes
Accuracy + Precision	low accuracy + low precision 	high accuracy + low precision 	highest accuracy + highest precision 
Ability to Run Tool in Hole Sizes Smaller than 12 1/4"	yes	no	yes
Ability to Run in Drop Mode	yes	no	yes