#### PRODUCT SPEC SHEET

# QUEST™ GWD - MODULAR

powered by SPEAR™

All-Attitude, High-Accuracy, Solid-State Gyro While Drilling

## **MECHANICAL SPECS**

Probe Length	9.9 - 10.4 ft	3.02 - 3.17 m
Probe OD (Standard probe)	1.875 in	47.625 mm
Probe Weight	55 lbs	24.95 kg
Host Collar Size#	4.75 - 9.5 in	120.65 - 241.3 mm

## **ENVIRONMENTAL SPECS**

D. I. D	24.000	16F 000 LD
Probe Pressure Rating	24,000 psi	165,000 kPa
Probe Temperature Range (Standard probe)	32° - 302° F	0° - 150° C
Maximum Vibration	20 g <sub>RMS</sub> (5-1000Hz)	
Maximum Shock	250g, ½ sine, ½ msec	

#### **GENERAL SPECS**

Sensor Type	3-axis coriolis vibratory rate gyro 3-axis accelerators	
Survey Accuracy*	Wellbore Dependant	
Running Mode	Gyrocompass, Continuous Toolface, Continuous Inclination while Sliding	
Measurement	Range	Accuracy
Inclination	0° - 180°	±0.05°
Azimuth	0° - 360°	±0.1°
Tool Face	0° - 360°	±1.0°
Gravity Tool Face	-180° - 180°	±1.0°

<sup>\*</sup>ISCWSA / SPE WTS compliant error ellipse reports are available upon request for specific well profiles.

Specifications are subject to change based on well profile. Contact your Gyrodata representative for details. Updated August 2022. Copyright ©2022 Gyrodata, Inc. Patent: www.gyrodata.com/patents

Gyrodata's gyro while drilling service, Quest™ GWD provides all-attitude, high-accuracy, high-performance coriolis vibratory rate-gyroscopic surveys in real-time as drilling progresses. This modular gyro while drilling tool is combined with a host measurement while drilling (MWD) & telemetry system, and provides rate-gyroscopic steering and survey data in vertical to horizontal applications.

## **DESIGN + PERFORMANCE**

- □ High-performance coriolis vibratory gyro assures precise wellbore guidance for collision avoidance and trajectory placement
- □ Provides continuous inclination and tool face from vertical while sliding, and full surveys on demand
- □ Surveys during the connections no additional wait time
- □ Unaffected by magnetic interference, the sensors can run closer to the bit in the MWD string by eliminating the need for non-magnetic spacing collars for the gyro sensor
- □ Eliminates the need to use wireline gyros to orient or steer the drilling assemblies, which saves considerable rig time and provides for safer operations
- Power and communication feed thru capable for versatile positioning in the bottomhole assembly (BHA)
- Memory multishot capability as the BHA is tripped out of hole
- Compatible with electromagnetic, wired pipe and mud pulse telemetry systems
- □ No mass unbalance or calibration shift
- Fully transparent gyro quality control; gravity, full earth rate and latitude. Third parties can QC the data
- No East/West cautionary zones

#### MARKET + APPLICATIONS

- □ Vertical, Directional & Horizontal Drilling
- Multi-Well Pad Drilling
- □ Offshore & Riserless Drilling
- Onshore Drilling
- □ Batch Well Drilling
- □ High Latitude Drilling
- ☐ Gross Error Detection
- □ Definitive Wellbore Placement

- □ Ellipse of Uncertainty Reduction
- ☐ Areas of Magnetic Interference
- Collision Avoidance
- □ Side-Tracking
- □ Relief/Intervention Well
- □ RSS Drilling
- Casing While Drilling
- ☐ IFR & MWD Validation





FEED THRU

<sup>&</sup>quot;Available collar size dependent on MWD / Directional provider.