

PRODUCT SPEC SHEET

JAVELIN-GWD - MODULAR

powered by SPEAR™

Solid-State Gyro While Drilling

MECHANICAL SPECS

Probe Length	10 ft	3.048 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

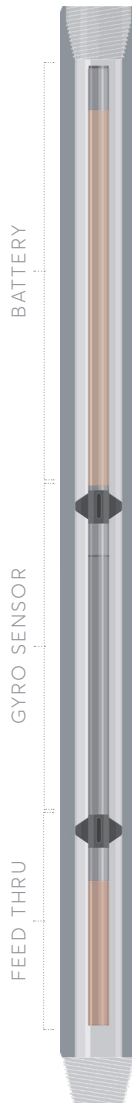
Probe Pressure Rating	24,000 psi	165,000 kPa
Maximum Operating Temperature	212° F	100° C
Maximum Vibration	20 g _{RMS} (5-1,000Hz)	
Maximum Shock	500g, 1/2 sine, 1/2 msec	
Reactive Torque Fluctuation	475 deg / sec	

SENSOR 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° - 40°	±0.05°
Azimuth	0° - 360°	±0.1°
Tool Face	0° - 360°	±1.0°
Gravity Tool Face	-180° - 180°	±1.0°

OPERATIONAL SPECS

	Javelin-GWD XT	Javelin-GWD
Operating Time	Up to 28 days	Up to 7 days
Uncrewed	Yes	No
In-collar Loadout	Yes	Limited



Gyrodata's gyro while drilling service, Javelin-GWD provides accurate coriolis vibratory rate-gyroscopic surveys, up to 40 degrees of wellbore inclination. This modular gyro while drilling tool is combined with a third party host measurement while drilling (MWD) & telemetry system, and provides rate-gyroscopic steering and survey data in lower angle applications.

DESIGN + 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
- 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)
- Compatible with third party electromagnetic, wired pipe and mud pulse telemetry systems
- No mass unbalance or calibration shift

MARKET + APPLICATIONS

- Onshore Drilling
- Fix Offshore Drilling with riser
- Vertical and Lower Angle Directional Drilling
- Multi-Well Pad Drilling
- Batch Well Drilling
- Collision Avoidance
- Side-Tracking
- RSS Drilling
- Casing While Drilling
- Areas of Magnetic Interference
- Gross Error Detection

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

*Available collar size dependent on MWD / Directional provider.

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