



**GYRO TECHNOLOGIES LTD**  
**Product Data Sheet**

**GWD™**

Features solid state gyro and accelerometer sensors, the module can be configured with MWD/LWD tool strings in Directional Drilling applications or with logging strings in logging operations, allowing GWD (Gyro While Drilling) or ALC (Gyro While Wireline Logging)

**Capabilities:**

- ✓ Integrated MWD Gyro (GWD)
- ✓ Data transmitted via MWD
- ✓ Precise guidance in magnetic interference
- ✓ All-Angle North Seeking survey
- ✓ Integrated Gyro while logging (ALC)
- ✓ Continues tool-face and Survey
- ✓ Integrated inrun & outrun QA/QC

[enquiries@gyrotechnologies.co.uk](mailto:enquiries@gyrotechnologies.co.uk)  
[www.gyrotechnologies.co.uk](http://www.gyrotechnologies.co.uk)



**GWD™ PRODUCT OVERVIEW**

The GWD survey module applies our state of the art solid-state, north-seeking and all-angle technology. In directional drilling operations, the module integrates with the MWD string to provide real-time gyro data transmitted wirelessly via MWD telemetry. This configuration ensures precise guidance in interference-prone environments, such as near casing kick-offs, atmospheric disturbances, magnetic particles in drilling fluid, and ferromagnetic deposits.

In Wireline logging operations, the module integrates with the logging string to provide real-time gyro data communicated through the wireline cable. The system requires no in-hole calibration, preventing attitude change errors and allowing continuous operation from vertical to horizontal.

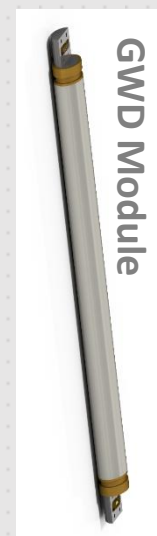
**SYSTEM CONFIGURATION**

GYRO SENSOR	Tri-Axial Solid-State MEMS	DEPTH SYSTEM	Pipe-Tally and Wireline
GYRO TECH ACCELEROMETER	North Seeking Tri-Axial Solid-State MEMS	MODE DEPLOYMENT	Electric and Battery In combination of MWD/LWD tools (GWD), In combination with logging tools (ALC).
ANGLE	All-Angle	SURVEY	Tool-face guidance while drilling, Multi-Shot, Single-Shot, Orientation, and High-Speed Continues.
CALIBRATION	Automation System		

**SPECIFICATIONS**

DIMENSION	
Tool OD	1.75 in
Sensor OD	1.3 in
Min Tool Length	16 in
ENVIRONMENT	
Pressure Rating	20k psi
Max Temperature	200°F
Max Heat-Shield Temp	Within Wireline Housing Specs
Max Depth	30k f
STRESS	
Shock intensity	1000g
Shock Pulse Profile	1/2 sine, 1mS
Vibration Intensity	10g rms
Vibration Frequency Range	20-1000Hz Random

ACCURACY (OWSG)	
Dynamic Azimuth	0.5° <60° Lat
Static Azimuth	0.25° <60° Lat
Inclination	0.1°
Gyro Tool-Face	0.2° > 5° Inc
Gravity TF	0.1°
Position Error Rate	1% of total depth (MD)
Latitude Range	+/- 60°
Latitude Accuracy	1 Sigma, Period: 300s
SURVEY TIME	
Stationary	45 second
Continues	1 second
Max Running Speed	300ft/min
ELECTRICAL SPECS	
Input Power	150mA @ 30V
Output Protected Power	110/240V AC In, 200W
Wireline Cable	Mono/Multi
Battery Type	MWD Bus Power 24-28v
Runtime	Runtime Varies on MWD battery
Consumption	2 Watts
Standby	10ma



Typical Specifications in controlled environment. Subject to change by manufacture