

# KEYDRILL GYRO-WHILE-DRILLING TOOL (KGWD)

## Overview:

The KeyDrill Gyro While Drilling (GWD) System offers a revolutionary approach to downhole navigation, providing precise and reliable real-time wellbore gyroscopic surveys while drilling, unaffected by magnetic interference. This innovative technology ensures accurate trajectory control, enabling smooth and efficient drilling operations.

## Key Features:

- Compatibility
  - Works with most MWD systems by using the Q-Bus communication protocol.
  - Supports different setups:
    - KeyDrill Mud Pulse System (Standalone)
    - KeyDrill Hybrid EM & MP System (Standalone)
- Optimized for Drilling
  - Ideal for vertical and high-angle drilling
  - Improves accuracy in whipstock orientation and anti-collision situations.
- Easy Add-On Plug-and-Play Module Options
  - Resistivity
  - MWD Directional Module
  - Azimuthal Gamma and Pressure While Drilling sensors
  - Rotary Steerable System (RSS)
- Fully Retrievable
  - Designed for easy recovery and redeployment, reducing downtime.
- Cost-Efficient
  - Reduces the need for multiple single-shot gyro runs and lowers the risk of stuck equipment.
  - Saves rig time and costs while maintaining precision.
- Durable Design
  - Built for tough conditions, making it perfect for challenging jobs like perforation and milling.
  - Approved by major drilling companies and operators.

## Benefits:

- **No Magnetic Interference:** Works without being affected by magnetic fields, ensuring consistent data.
- **Real-Time Adjustments:** Built-in accelerometers allow for quick course corrections during drilling.
- **Efficient Design:** Combines multiple functions into one tool, lowering costs and downtime.

## Applications:

- **Vertical and Deviated Wells:** Works well for different well angles.
- **Offshore Platforms:** Reduces collision risks in multi-well setups.
- **Whipstock and Anti-Collision:** Ensures precise drilling where accuracy matters.

The **KeyDrill GWD System** is a reliable, precise, and efficient solution for top-tier drilling operations, helping companies boost performance and stay competitive.

## Specifications:

Inclination: ..... 0.10° @ <70° inclination  
Azimuth: ..... 0.1°  
Gyro/Roll ToolFace: ..... 0.5°  
Surveying Time: ..... 20 seconds (Standard)  
Operational Temperature: ..... 0°C - 110°C  
Pressure Rate: ..... 20K PSI  
Tool OD: ..... 1.875"  
Length: ..... 21"  
Shock: ..... 200g, 1/2 sine 1mS  
Vibration: ..... 18g rms, 20-1,000Hz random

