

# MDT G3 Dual Telemetry MWD System

**The MDT G3 system is Mostar’s flagship MWD tool, and North America’s leading dual telemetry system. Fully patented, and incorporating modifications from 10 years of deployment in thousands of horizontal and directional applications, the G3 system is the most advanced MWD tool available.**

Standard features include close range inclination, live inclination, and real-time advanced 3-axis shock and vibration logging. The MDT G3 system comes with Intelli-Pulse, the fastest and most robust pulse system in the industry.

Applications	Benefits	
<ul style="list-style-type: none"><li>• Troublesome EM areas</li><li>• Troublesome EM areas</li><li>• Deep wells and long-range extended laterals</li><li>• Under Balanced drilling</li><li>• Drilling in chalks, salts, dolomite or anhydrite formations</li><li>• Harsh drilling environments</li></ul>	<ul style="list-style-type: none"><li>• Low maintenance</li><li>• No restriction to LCM</li><li>• High powered transmitter</li><li>• Allows real-time, informed decisions on downhole conditions for bit and bit error rate selection</li><li>• Survey on connection</li><li>• No need to cycle pumps while in mud pulse</li></ul>	<ul style="list-style-type: none"><li>• Provides real-time 6-axis surveys</li><li>• Simultaneously independent transmission of both EM and mud pulse</li><li>• Live inclination while rotating</li><li>• Real time RPM</li></ul>



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## Technical Specifications

### GENERAL SPECIFICATIONS

Pressure drop: 100 psi  
Power Source: 28 to 36 volt lithium batteries  
High temperature available.  
Operating hours: Configurable up to 500 hours  
Programmability: Full programmability at surface.  
Downlink via rotary, pump or talk down.  
Retrievability: Configurable  
Data configuration: User configurable  
Toolface Updates: 3 Seconds

### DIRECTIONAL SPECIFICATIONS

#### Electrical

Operating voltage range: 12 Volt to 36 Volt

#### Environment

Operating temperature: 32°F to 302°F (0°C to 150°C)  
Survival temperature: -40°F to 365°F (-40°C to 185°C)  
Operating pressure: 20,000 psi (138 MPa)

#### Performance

Inclination  
Absolute: +/- 0.1°      Spread: 0.2°  
Azimuth  
Absolute: +/- 0.2°      Spread: 0.4°  
Gravity Toolface  
Accuracy: +/- 0.1°  
Magnetic Toolface  
Accuracy: +/- 0.1°  
Total G field accuracy: +/- 0.0015 g  
Total H field accuracy: +/- 75 nT

### GAMMA MODULE SPECIFICATIONS

#### Environment

Operating pressure: 20,000 PSI (138 MPa)  
Operating temperature: -20°F to 350°F (-29°C to 177°C)  
Maximum heat/cool rate: 3°C/minute  
Vibration: 20 gRMS (15-1000 Hz)

#### Performance

Maximum API range: 8000 API @ 5% PPU error  
Accuracy: +/- 2% @ 302°F (150°C)  
Thin bed resolution: 6.8" (17.3 cm))

#### Canadian Patents:

2544457, 2633904, 2584671, 2634236, 2666695

#### US Patents:

8547245 B2, 7573397 B2, 8154420 B2

