

Gyrodata's **EM MWD** system is designed with a patented method of using multiple antennae inputs to derive a composite signal, with state of the art filtering. Unique detection and filtering methods allow for deeper wells without additional equipment (repeaters), and longer battery life.

Two way communication, via "Downlinking", provides the ability to modify data transmission, increase or decrease power settings, vary the transmission frequency or request from the surface equipment computer, without disruption of drilling activities -no complicated pump on/off sequences.

The **EM MWD** contains industry standard accelerometers and magnetometers, as well as optional gamma ray logging capability.



Gyrodata's EM MWD features include:

- » A rugged directional sensor package
- » Wireline Retrievable - reduced LIH exposure
- » Collar mounted for increased durability in harsh environments
- » Down hole two way communication ("Down link")
- » High LCM Tolerance
- » No fluid restrictions
- » No moving parts
- » Component based for ease of transport
- » Optional gamma ray logging

Specifications:

Directional Performance:

- » +/- 0.1° Inclination
- » +/- 0.75° Azimuth (0°-360°)
- » +/- 1° Toolface

Data Transmission:

- » Electro Magnetic Pulse
- » Probe Size: 47mm (1.875")

Collar sizes:

- » 3 7/8" (2 1/4" I.D.)
- » 4 3/4" (2 11/16" I.D.)
- » 6 1/2" (2 13/16" I.D.)
- » 6 3/4" (3 1/4" I.D.)
- » 7 3/4" (3 1/2" I.D.)
- » 9 1/2" (4" I.D.)

Flow Rates

- 80-150
- 150-300
- 200-450
- 300-700
- 350-900
- 500-1200