Increasing complexity of lithology requires more accurate decision making to remain in the sweet spot. With azimuthal gamma, operators can see the dip and direction of the formation. By using the rotary inclination, operators can make instantaneous corrections to the well bore trajectory. By combining state of the art technology from the PDT Flashlight tool with the cost effective style MWD probe, Pulse Directional Technologies is pleased to offer the Orbital Gamma probe. It is designed to be incorporated with the MWD tool string, and replace the existing MWD gamma while providing the same features currently available in our Flashlight tool. The Orbital Gamma is capable of communicating to surface in real time, azimuthal gamma measurements of 2, 4 or 8 bins, and storing up to 32 bins in memory. Using PDT’s surface decoder, an 8 bin azimuthal gamma can be compressed into a single 16 bit word and decompressed on surface for blazing fast decoding.

**Features and Benefits**

**Field Programmable**
- Selectable between 2, 4 and 8 bin azimuthal gamma.
- Gamma can be sent to surface using conventional 1 bin at a time transmission or data compression methods.
- Rotary inclination.
- Shock and vibration.
- Conventional gamma.
- RPM

**Fully Retrievable**
- Reduce LIH exposure.
- Field replaceable fin centralizer.

**Applications**

**Conventional Drilling**
- Vertical, directional and horizontal drilling.

**Unconventional Drilling**
- Coal Bed Methane/coal seam gas.
- Mining/degasification and delineation of fields.

**Faulted Formations**
- Rotary inclination feature allows for continuous survey while drilling
- Azimuthal gamma tells the dip and directional of the formation.

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**Diagram**

![Diagram of Orbital Gamma](image)