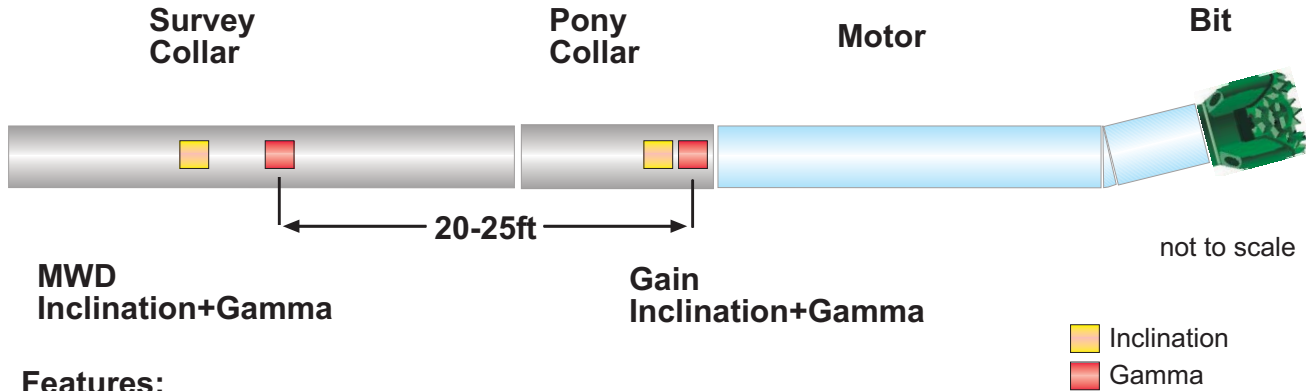


GAIN Navigation Module



Features:

- * The Gain Module positions Gamma and Inclination 20 to 25ft closer to the bit than standard MWD sensors.
- * Standard MWD Gamma and Inclination sensors are still used.
- * Gamma in the Gain Module can be Focused or Radial.
- * The Gain Tool can give inclination on the fly while rotating or sliding.

Advantages:

- * Gamma and inclination closer to the bit.
- * Inclination trend can be monitored while drilling.
- * Faster indication of BHA reaction during slide.
- * No correction algorithm needed unlike bit box sensors.
- * When the Gain Module Gamma is focused, CBM lateral drilling gamma up and down shots are significantly faster saving rigtime.

The GAIN Module is part of the MWD toolstring that can be extended to just above the motor. It works with the SDI Efield and soon, the Mud Pulse MWD option will be available. As part of the MWD system, it does not require separate batteries and/or transmission systems and can work independently of the motor used. The Gain Modules are small and easily transportable, intended to match the SDI design culture. Such modular design also considerably reduces LIH liability.

Technical Specifications		
Tool Length:	38.5"	O.D 1.75"
Gamma Range :	0 - 1000 cnts/sec	
Sensor array:	Inclination : Tri axial accelerometer assembly	Gamma: Shielded/Focused Scintillation Crystal.
Temperature Rating:	302°F (150°C)	
Pressure Rating:	20,000 psi (137,900 kPa)	
Sensor Accuracy	Inclination: $\pm 0.25^\circ$ all angles	