



THE ROAR

FOGWD



The North Seeking Fiber Optics Gyro While Drilling “Roar” system is designed using a aero-space Fiber Optics Technology. The Roar tool is built to withstand harsh drilling conditions and is operated in a similar manner as a conventional MWD system. The tool can work in combination other MWD and Gamma tools.



When the pumps are turned off, the tool will seek North and take a survey and store it in its memory. After the shot is taken and the pumps are turned back on, the tool will transmit via mud pulse telemetry; the stored survey data as well as all quality control flags to verify the quality of the shot.



After survey is transmitted, the tool will continue sending information like INC, GTF, ERH.

The tool stores every shot it takes, while download, for use later when retrieved at surface

NORTH SEEKING



THE ROAR

Dimensions

Diameter: 48mm/1.89"
 Probe Length: ~1.5m/59.05"
 OD of Drilling Tool: from 4.75" - 9.50"

Power, Storage and Communication

Maximum Pressure: 140Mpa (20,300psi)
 Power Consumption: Working: 140mA@21V
 Standby: 35mA@21V
 Storage Capacity: 64Mbit
 Comm. Interface: 85/ Magnetic coupling

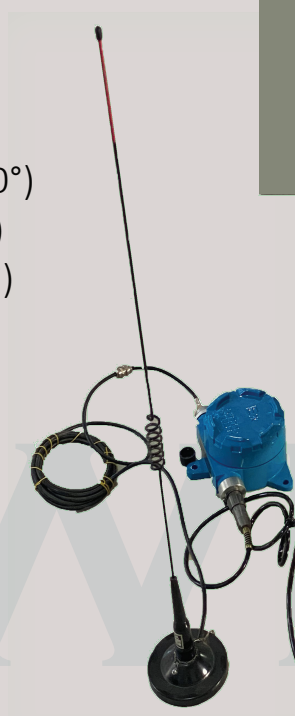
Operating Environment

Regular Mud Drilling: Oil base and Water base mud
 Maximum Temperature: 150°C/302°F
 Shock and Vibration resistance: 10G RMS (30G peak, peak time 3%)
 Impact: 1000G 0.5ms
 Flow Rate: 10~75.7L/s (158~1200gpm)
 Pulse Signal: 0.5~2Mpa (73~290psi)
 Downhole Working Hours: 200h

Operating Mode: Pump Survey Mode / GMWD Mode / Memory Mode

Operating Range and Accuracy

Inclination: 0~90° ±0.2°
 Azimuth: 0~360°±0.5° (10° ≤ INC ≤ 70°)
 Gravity High Side: 0~360°±1° (10° ≤ INC ≤ 90°)
 Gyro North Toolface: 0~360°±0.5° (0° ≤ INC ≤ 70°)
 Time for Survey: 45s ≤ SHOT ≤ 120s



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