

Raptor WHISPR™

Wireless Acoustic Barrier Monitoring

An innovative downhole surveillance tool featuring advanced wireless acoustic data transmission capabilities. The Raptor WHISPR™ (Wireless High-Integrity Sensing & Pressure Relay) is positioned below the barrier to collect key measurements such as pressure and temperature, monitoring barrier integrity. The data is sent as acoustic tones along the well structure to the surface system - directly, or relayed by repeaters.

Features & Benefits

- **Data Communication Across Barriers:**
 - Enables wireless transmission of data within wellbores and across barriers
 - Unique multitone signal transmission for maximum reliability
 - No tuning required, truly plug & play
 - Continuous recording at surface, including between transmissions
- **Verification:** Real time data from below the barrier during pressure test from above or below
- **Barrier curing validation:** under development. Data can be recorded for future analysis
- **Monitoring:** long term surveillance of pressure and temperature up to 10 years
- **Long Transmission Range:** Up to 1,200 meters spacing between repeaters. Distances vary with actual well environment
- **Deployment:** Slickline, e-line, coiled tubing, or pipe. Anchored on mechanical plug or gauge carrier or drill pipe

Specifications

Tool OD	36"
Pressure rating	10,000 psi
Temperature rating	125 degC
NACE compliant	MRIO/5 Region 3
Surface system	Zone 1 IECEx and ATEX certified
Battery life	2.5 years (up to 10 years with battery extension sub)

Additional specifications available on request.

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Applications

- Safe and controlled access to temporarily abandoned wells
- Regulatory compliance for Extended P&A
- Accurate pressure monitoring below suspension Plugs (e.g. batch drilling on deep water wells)
- Accurate pressure measurement with the sensor close to the barrier when testing from the top
- Monitoring of primary and secondary barriers
- Passive Monitoring on permanently abandoned wells
- FracProtect™ for Frac operations
- Validation of new abandonment methods and materials (i.e. Bismuth)

Example of use



Raptor WHISPR™ for long term
P&A monitoring



Raptor WHISPR™ for pressure
test monitoring