

i-Con Real Time

Advanced monitoring tool for gathering live, dynamic data during well operations

A robust tool for gathering and understanding dynamic data recorded during well operations, the i-Con™ Real Time (RT) is a compact, real-time monitoring sub equipped with an electronics package consisting of sensors, batteries, and wired connection for use in drill pipe-conveyed operations. Traditionally, the gathering of precise mechanical downhole dynamic data has been limited to the use of measurement-while-drilling (MWD) tools during drilling operations. However, in most well operations in the completion and intervention phase, the same downhole data would provide valuable input for operational verification, planning, and diagnostics.

The i-Con RT has wired drill pipe connections to ensure seamless integration with the IntelliServ™ wired drill pipe and a full-bore inside diameter (ID) to allow for most work string setups. The intelligent sub records tension, compression, torque, temperature, pressure, vibrations, and acceleration where it matters—downhole. Most importantly, the wired drill pipe connection allows the i-Con RT to deliver the information when it counts—on the rig and in seconds. The IntelliServ wired drill pipe can convey the information in seconds and functions independently of tripping speed, pressure, or circulating speed. Downhole data can be reviewed in real time and compared with surface measurements. This provides improved understanding and learning and ensures optimal decision-making, allowing for reduced NPT without waiting to retrieve the data.



Features

- Records a wide range of vibration, RPM, pressure, weight, torque, and temperature data in real time
- Full bore and short length
- Cost effective
- Not dependent on flow rate, circulating pressures, or other mud pulse telemetry methods
- Measurements updated at ~80Hz (80 times per second)

Benefits

- Game changing valuable real-time data for completion operations
- No flow restrictions and minimum interference with operations
- Low risk
- Accurate, detailed, live downhole data information always available on the rig
- Suitable as surveillance device in most operations

Applications

- Installation of liner and lower completions
- Torque and drag model verification
- Fishing operations
- Plug setting and retrieval
- Shifting tool operations
- Cleanout operations
- Other critical drill pipe interventions
- Slot recovery operations
- Plug and abandon operations

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	Technical data							Measuring range					
	Length in. (mm)	OD in. (mm)	ID in. (mm)	Tensile klbf (ton)	Pressure ¹ psi (bar)	Torque lb-ft (N-m)	Threads	Tensile klbf (ton)	Compression klbf (ton)	Pressure psi (bar)	Temp. °F (°C)	Torque lb-ft (N-m)	RPM
XL ²	121 (3,073)	8 (203.20)	3 (76.20)	550 (249.5)	20,000 (1,379)	48,000 (65,079)	Top: XT57 wired Bottom: XT57	400,000 (181.4)	600,000 (272.2)	20,000 (1,379)	302 (150)	± 60,000 (81,349)	±1,200

¹ For combined loading working envelope, contact NOV Completion Tools.

² Additional configurations available up request; consult our Engineering team.