



## 3-1/8" Ultrawire™ Radial Bond Tool

The 3-1/8 " URB evaluates cement bond integrity. A slotted sleeve technology provides superior isolation, rigidity and tool strength. 8-segmented piezoelectric crystal sensors detect the minutest of channels. The URB is Memory/SRO capable and combinable with any of the complete range of Ultrawire™ tools. These advantages make the URB a superior bond tool.

### Description

The URB measures based upon the principle of Sonic Wavetrain Attenuation. A traditional Cement Bond Log (CBL) measures the amplitude of a sonic signal passing along the casing; the signal is reduced where the casing is bonded to the cement. While cement bonds that are either complete, or totally absent, can be clearly identified, signals showing partial bonds provide insufficient data to determine hydraulic isolation. The URB overcomes this problem by using 8-receivers positioned circumferentially around the tool. Each receiver provides bond data covering a sector of the casing, generating a 'map' of the cement in addition to a conventional CBL.

### Features

#### Cement bond evaluation

- Simultaneous cement bond and casing inspection
- Horizontal/deviated hole investigations (for example, combined with the Ultrawire inclinometer tool to determine high-side)
- Combines with other Ultrawire™ tools (for example, the casing inspection suite)

### Specification

Parameter	Value
Supply Voltage	18 VDC
Power/Current	50 mA
Tool Diameter	79.375 mm (3 - 1/8" in.)
Tool Length	~3.02 m (9.92 ft.)
Tool Weight	~41 kg (90 lbs.)
Max. Temperature	175°C (350°F)
Max. Pressure	138 Mpa (20,000 psi)
Receivers	Piezoelectric Crystal
Measurement	8-Channel Radial (Near @ 3', Far @ 5')
Logging Speed @ 50 Kbps	21 m/min (70 ft/min) @ 0.05m (0.167 ft.) standard depth resolution
Logging Speed @ 100 Kbps	25 m/min (83 ft/min) @ 0.05m (0.167 ft.) standard depth resolution
Borehole Fluids	Oil, Fresh Water, Brine

