

1 11/16" RADII™ Dual Receiver Cement Bond Log



Product Reference: 050-RADII-170

The RadII™ Cement Bond Tool utilizes a single ceramic transmitter, an eight segment receiver at 3 ft. spacing, and a single receiver at 5 ft. spacing to accurately measure the quality of the cement job in a cased hole well environment. The segmented receiver provides good indication of cement channeling behind the casing.

The small diameter tool contains oil filled, pressure compensated transmitter and receiver sections. The transmitter and both receivers are ceramic to withstand the hostile high temperature of well environments. On each transmitter firing, data from all the receivers is digitized and stored in internal memory, then sequentially transmitted to the surface computer.

The digital signal section is capable of transmitting to the surface data from a Gamma/Ray CCL and an In-Line Neutron, a Compensated Neutron or other tool that has three or less pulse channels run on the bottom of the CBL tool. The tool also accepts PTX digital telemetry from below.

Transmission of the sonic data to the surface is accomplished by an internal controller, which transmits eight signals from the RADII™ receiver, a composite 3-foot signal (the sum of all 8 RADII™ signals), a 5-foot receiver signal, and an internally generated calibration signal. Transmissions of the remaining signals are digitally encoded data transmitted after the acoustic signals.

The electronics contains firmware that allows the tool to be auto-calibrated in a calibration fixture. The digital gain is set and all signals are stored in memory. These signals can be transmitted up hole on demand by the operator.



SPECIFICATIONS - 1 11/16" RADII™ DUAL RECEIVER CEMENT BOND LOG

Diameter	1 11/16"	4.3 cm	Mechanical:	
Length	103 1/4"	2.61 m	Top Connection	1 3/16" 12P GOI Box
Weight	41 lb.	19 kg	Bottom Connection	1 3/16" 12P GOI Pin
Operating Voltage	100 VDC		Signals:	
Operating Current	38 mA. DC			— Line voltage
Limitations:				— Internal Temperature
Maximum Pressure	20,000 psi	137.9 MPa		— 8 individual signals from single RADII receiver
Maximum Temperature	350°F	177°C		— Internal RADII calibration pulse (internally generated signal for tool setup purposes)
				— Composite 3 ft. signal (Sum of all 8 RADII signals)
				— 5 ft. receiver signal

RELATED PRODUCTS

- 050-GR170-0000 Gamma Ray/CCL Tool
- 050-FA130-1700 Centralizer
- 050-TP170-QOHT Quartz Gauge Temperature Tool
- 050-NU170-0000 Neutron Tool
- 050-T1375-0000 Temperature Tool

Note: An optional neutron module may be operated below the tool with a contact centralizer between the bond tool and the neutron module.

At Probe, we design, manufacture and service specialized modular downhole tools and systems. Our tools are used in formation evaluation, well integrity assessment and well productivity determination across the global energy industry.

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