

2-3/4" DUAL RECEIVER RADIITM CEMENT BOND W/TEMP. SENSOR PART NUMBER 050-RADII-275T

The Radii™ Cement Bond Tool, utilizes a single ceramic transmitter, an eight segment receiver at 3 foot spacing and a single receiver at 5' 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 optional temperature sensor is mounted close to a transmitter enabling a temperature log while running into the well to provide additional cement quality information.

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

The digital signal section is capable of transmitting to the surface data from Gamma Ray/CCL above the Radii CBL an in-line neutron, a compensated neutron or other tool that has one or two pulse channels run on the bottom of the CBL tool.

Transmission of the sonic data to the surface is accomplished by an internal controller which transmits 8 signals from the RADII receiver, a composite 3' signal which is the sum of all 8 RADII signals, a 5 foot receiver signal, and an internally generated calibration signal. Transmission of the remaining signals are digitally encoded data transmitted between 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 uphole on demand by the operator.

SIGNALS:

- Line Voltage
- Internal Temperature
- External Temperature
- 8 individual signals from a single RADII receiver
- Internal RADII calibration pulse (internally generated signal for tool set up purposes)
- Composite 3' Signal (Sum of all 8 RADII signals)
- 5' receiver signal

SPECIFICATIONS:

Diameter 2.75 in. (70 mm)
Operating Voltage 130 VDC
Operating Current 45 Ma. DC

LIMITATIONS:

Maximum Operating Pressure 20,000 PSI (137.9 MPa)
Maximum Operating Temperature 350°F (176°C)

MECHANICAL

Top Connection 1-3/16" - 12P GOI Box Bottom Connection 1-3/16" - 12P GOI Pin

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