

## 3 3/8" Product Line

## Array Acoustic / CBL

The Array Acoustic Instrument has eight receivers instead of only two in the standard acoustic tool. The array of ceramic receivers measures and records the entire acoustic waveform and facilitates the identification of the shear and Stoneley waves, in addition to the compressional signal. An additional receiver allows for standard CBL measurements. During one logging run, the formation travel time in the open-hole interval and the cement bond log in the cased-hole section can be recorded. The log requires a fluid-filled borehole but is independent of the mud type.



Specifications			
Diameter:	89 mm	(3.51")	<b>Transmitter-Receiver Spacing:</b> T1-T2: 609 mm (2 ft) T2-RCBL 1524 mm (3 ft) T2-R1: 2438 mm (8 ft) R1-R2: 152 mm (0.5 ft) R2-Rx: 152 mm (0.5 ft) ...
Length:	6337 mm	(249.5")	
Weight:	120 kg	(264 lbs)	
Max. Temp:	175°C	(350°F)	<b>Measure Point (from bottom):</b> DT 2477 mm (97.5")
Max. Pressure:	140 MPa	(20 000 psi)	
Telemetry required:	yes		
Top Connector:	yes		
Bottom Connector:	yes		
Transmitter Type:	Ceramic monopole		
Sensors Type:	Ceramic receivers		
Sensor No.	for OH application: 8		
	for CBL application: 1 additional		

Measuring Parameters			
<b>Measuring Range:</b>		<b>Accuracy:</b>	
DT:	50-800 µs/m (15-250 µs/ft)	DT*:	± 3 µs/m (±1µs/ft)
* centralized tool in a 200 mm (8") diameter borehole			

Logging Parameters			
<b>Recommended</b>		<b>Recommended</b>	
Min. Hole Diameter:	125 mm (4.9")	Logging Speed:	3 m/min (590 ft/hr)
Max. Hole Diameter:	550 mm (21.7")	Sample Rate:	76mm (3")

Displayed Standard Curves	
<b>Open Hole</b> DT in µs/m or µs/ft Monopole delta T resolution DT6", 12", 24" Acoustic Travel Time: RuntimeT1R1, -T1R2, -T1R3, -T1R4 in µs RuntimeT1R5, -T1R6, -T1R7, -T1R8 in µs alternative RuntimeT2R1 to T2R8 TTI in µs Integrated Total Time Trace information: TraceT1R1, -T1R2, -T1R3, -T1R4 in mV TraceT1R5, -T1R6, -T1R7, -T1R8 in mV alternative Travel information T2R1 to T2R8	<b>Cement Bond Log</b> SRTN in µs Single Receiver Travel from near receiver AmpN Amplitude of first arrival from near receiver, measured at casing travel time Trace F in mV Trace Information from CBL Receiver BI Bond Index

### Combinability

With all other 3 3/8" instruments