

Sonic / CBL Sonde

The standard 60mm O.D. Geovista sonic sonde is fitted with one piezoelectric transmitter and two receivers. However, an additional transmitter can be added on, if required. The sonde is configured in modular form, for easier transport and handling. It can be used for Sonic Transit Time, CBL /VDL and Full Waveform logs. An 45mm O.D. sonde for very small diameter boreholes is also available. This sonde is fitted with one transmitter, and three receivers.

Specifications:

	60 mm Sonde	45 mm Sonde
Length:	2.34 m	1.99m
Weight:	25 kg	9.5 kg
Receiver spacing:	91 & 152 cm (3' and 5')	60, 80 and 100 cm
Sampling rate:	Variable (500 samples @ 4 mSec or slower)	
Resolution:	12 bit; Record length: min 2 mSec	
Gain settings:	16 levels with selectable AGC	
Transducers:	Ceramic piezoelectric (23 KHz resonant frequency)	
Max. Temperature	80°C	Max. Pressure: 20 MPa



Formation Sidewall Density Sonde

This combinable sonde is suitable for quantitative formation density measurements in uncased holes. It uses a gamma ray source and a set of two detectors at different spacing to detect the gamma rays scattered by the formation.

The amount of scattered gamma rays is a function of the electron density of the formation material and hence, a function of its bulk density. This relationship is used to calibrate the density sonde and then use it to log the bulk density of the formations crossed by the borehole.

In order to optimise performance, the sonde is designed with three main features:

1. A side-walling calliper to ensure that the detector measures only the radiation scattered by the formation
2. A detector mandrel diameter that is large enough to minimise the sonde and borehole curvature mismatch and improve sonde to formation contact to minimise the effect of the borehole fluid
3. An efficient detector shield to prevent gamma rays from

Specifications:

Weight:	26 kg	Length:	2.06 m	Diameter:	54 mm
Detector (NaI) spacing:	47 and 25 cm. Optional additional 14 cm spacing				
Source requirement	Typically 100mCi ¹³⁷ Cs				
Density Range:	1-3 g/cc	Calliper:	60 to 350 mm		
Max. Temperature	80°C	Max. Pressure:	20 MPa		



Geovista reserve the right to change the products' list and specifications without prior notice