

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.

A 50 mm O.D. sonde for smaller diameter boreholes is also available. This sonde is fitted with one transmitter, and four receivers. All sonde can measure transit time, amplitude and full waveform.

Specifications:

	60 mm Sonde	50 mm Sonde
Length:	2.34 m	2.20m
Weight:	25 kg	16.70 kg
Receiver spacing:	91 & 152 cm (3' and 5')	60, 80, 100 and 120cm
Sampling rate:	Variable (500 samples @ 4 mSec or slower)	2µs or 4µs
Resolution:	12 bit; Record length: min 2 ms	12 bit; Record length: 1 or 2 ms
Gain settings:	16 levels with selectable AGC	11 levels 0-30 db in 3db steps
Transducers:	Ceramic piezoelectric (23 KHz resonant frequency)	Ceramic piezoelectric (28 KHz resonant frequency)
Temp. / Press.	Max. 80°C / 20 MPa	Max. 80°C / 20 MPa



Digital Downhole Geophone System

The Geovista Digital Borehole Geophone system includes a down the hole digital sonde and a compact digital interface unit at the surface. There is no requirement for a seismograph. The sonde runs on a single conductor, on a standard logging winch. It includes a motorized clamping arm and three SM24 geophones arranged in an X-Y-Z pattern. The motorised clamping arm allows for work in a range of borehole diameters, by ensuring adequate coupling for the seismic signal. The geophones are non-gimbaled, 3 axis devices, allowing for seismic energy to be measured in X and Y horizontal axis and in the vertical Z axis. The digital interface unit at the surface has inputs for the down the hole sonde, three surface geophones and the trigger. Collected data is output to a PC via the USB port. The acquisition software allows for data viewing and stacking. The generated SEG2 files can then be imported into most commercial seismic processing software.

Analogue Downhole Geophone System. Geovista also supply an analogue system for use with a surface seismograph as well as smaller monitoring geophones for seismic monitoring.

Specifications:

Weight / length:	15 kg / 1.69 m
Diameter :	64 mm
Clamping:	Motorised Arm
Downhole Sensors:	X-Y-Z SM24 geophones
Surface Sensors:	3 geophones with simultaneous recording
Seismic Source:	Not included (Please enquire)
Trigger:	From suitable source (e.g. surface geophone)
Data acquisition:	Max. 16s record length / 16 bit resolution on a 500 µs sample interval.
Output file format:	SEG2
Oper. Press./Temp.	Max. 20 MPa / 80°C

