Slimhole Full-Wave Triple Sonic Probe FWS60

The **Slimhole Full-Wave Triple Sonic FWS60 sonde** is a compact tool that can be operated by a single operator and intended for geotechnical and mining applications. Its rigid construction provides an effective centering inside the hole.

The piezoelectric transmitter is stimulated by a high voltage pulse and radiates high frequency acoustic waves through the borehole fluid and formation up to each receiver.
The sonde records the full-wave train from three receivers simultaneously and these waveform data may be exported to interpretation software such as WellCad for calculation of compressional, shear and Stoneley velocities.

The **Slimhole Full-Wave Triple Sonic FWS60 sonde** main applications are:

- Geotechnical / Mining / Water
- Fracture and permeability indication in hard rock
- Rock strength and elasticity
- Lithology identification
- Porosity
- Correction of seismic velocity

FWS60 SLIMHOLE FULL-WAVE TRIPLE SONIC PROBE FEATURES

TECHNICAL SPECIFICATIONS

Length:	2.61m without natural gamma option; 2.95m with the option
Diameter:	42mm for the upper and lower pressure housing; 60mm for the transducer section
Weight:	20kg
Max. Operating Temp:	70°C
Max. Operating Pressure:	200bars
Borehole Diameter:	3 to 15", open hole, water-filled – Two centralizers required

WIRELINE

Cable Type:	Any standard wireline - coaxial, mono or multi-conductors (automatic cable selection)
Data Rate:	156Kb/s typical over a 1000m 4-conductor wireline 125Kb/s typical over a 1500m 4-conductor wireline 104Kb/s typical over a 2000m 4-conductor wireline
Logger Compatibility:	eMindLogger

TRANSDUCER

Transducer Type:	Piezoelectric, 18KHz
Spacing:	TX-RX1 = 60cm TX-RX2 = 90cm TX-RX3 = 120cm

DATA ACQUISITION

2, 5 or 10cm depth sampling interval
512 x 16-bit samples per receiver
Sampling interval of 4 or 8µsec
Gain adjustable from 0 to 36dB on each receiver

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