



GEOTOMOGRAPHIE



BGK1000 - Digital Borehole Geophone

The BGK1000 is a 3 channel digital borehole geophone. It consists of the downhole probe and a surface communication unit. The BGK1000 is designed to run on a winch having a 4-conductor cable and Gearhart Owen cable head.

Communication between the downhole VSP tool is established by the surface unit. The surface unit can be connected to the USB port of a laptop. The optimal transmission rate can be automatically evaluated. An auxiliary channel can be connected to the surface unit to record an external seismic signal, i.e. a pilot vibrator sweep. Triggering is made via the surface unit allowing TTL pulses or geophone triggering.

The acquisition software can be used to display the data, to stack and to correlate the seismic signals. Seismic data are stored in SEG2 format and can be further processed by any seismic software.

Specs

BGK1000

Sonde dimensions	Length 0.9 m Diameter 60 mm Weight 9 kg
Pressure	100 bar tested
Temperature	0 - 70 °C
Clamping arm	Up to Ø 200 mm
Geophones	Sunfull PSO-15-8000 15 Hz, omni, 88 V/m/s
Sonde supply	12V at surface
Telemetry	RS485
Downhole electronics	DSP Blackfin 548, 533 MHz, 64 MB DDR SRAM
A/D Converter	24 bit delta sigma
Seismic channels	3 Geophones
Sample rate	48 kS/s
Trace length max.	21 seconds
Oversampling	250, 500, 1000, 2000, 4000, 8000, 16000
Trigger	Via RS485
Magnetic Compass	XY - 360°
Motor Controller	H-Bridge





BGK1000 Downhole Probe



BGK1000 Surface Unit



The BGK1000 is manufactured by Hinz Messtechnik GmbH and exclusively distributed by Geotomographie GmbH.

Robust 	Adaptable 	Powerful 	Flexible 
Geophysical Consulting	Instrument Design	Rental & Software	For information contact: info@geotomographie.de