









manufacturer of seismic borehole equipment



## BHC1000 | Digital Hydrophone String

The BHC digital hydrophone string is designed for efficient recording P-waves in boreholes down to 1000 m for seismic tomographic surveys. High-resolution P-wave tomographic investigations between boreholes are routinely applied for the exploration of development sites considered for larger building projects, e.g. power stations, dams or high-rise buildings or can be used for nuclear and CO2 storage monitoring, geothermal projects and mining exploration. The hydrophone string BHC1000 is a fully digitized borehole tool and consists of a downhole digitization unit, 24 hydrophones moulded to a multicore cable, the BHC1000 surface unit and acquisition software. The BHC1000 runs on a standard 4-conductor logging cable. The communication is made via a RS485 interface.



BHC1000 digitization unit with 24 hydrophones and surface unit.

## **Technical Details**

**Downhole Unit** 

**Hydrophone sensor:** SQ54 **Pre-Amplification:** 4x

Operational depth: Up to 1000 m Number of hydrophones: 24 Max. pressure: 100 bar Temperature range: 0-70 °C Digitizer length: 70 cm Digitizer diameter: 57 mm Borehole diameter: Min. 70 mm Depth indicator: Via logging winch Signal transmission: 4-conductor cable

Cable head: GO-4 A/D conversion: 24 bit

Sampling frequencies: 250-48000 Hz

Trace length: 65000 samples

Surface Unit Power: 12 V DC Weight: 3kg

Communication: 2 wire RS-485

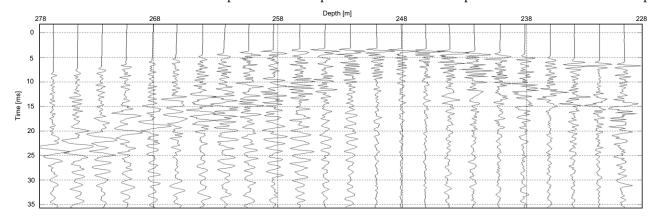
**Downhole electronics:** DSP = Blackfin 548,

64 MB SDRAM

**Trigger:** Piezo, switch, TTL **Auxiliary channel:** 4

## **Data Example**

The record shows a crosshole data example with a shot depth of 252 m and receivers placed between 276 and 230 m depth.



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