CMG-40T-B

Borehole seismometer

The Güralp Systems CMG-40T borehole seismometer uses the CMG-40T transducers stacked vertically in a waterproof 3.5-inch (89mm) outside diameter stainless steel sonde.

The sonde can be installed easily in 4-inch or larger steel-cased holes. The velocity response can be flat from 60s to 100 Hz, and the output sensitivity is 2x1200 V/m/s.
Response options include 0.033Hz (30s), 0.1Hz (10s) and 0.5 Hz (2s) to 100 Hz. Output sensitivity options range from 2x1000 V/m/s up to and including 2x10000 V/m/s.

Key Features:

Levelling from+/ 8 degrees

3 Jaw holelock option

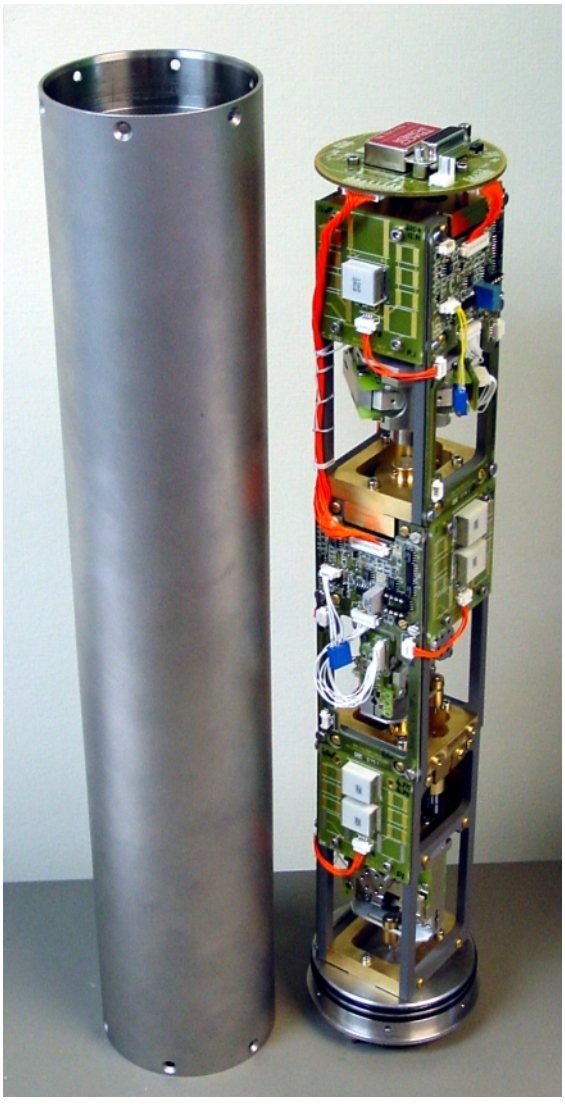
60s, 30s, 10s, 2s and 1s LP corner options

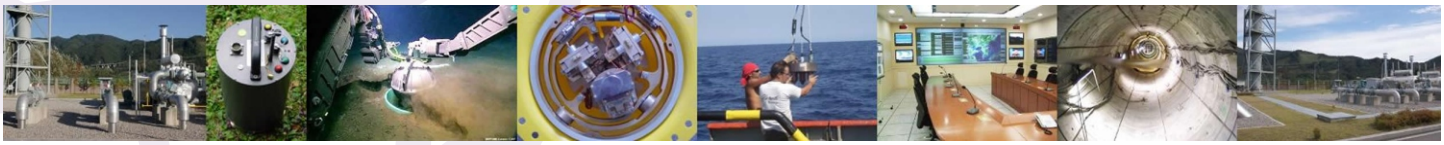
50Hz ro 100Hz High frequency options

Greater than 136 dB dynamic range at 1 Hz

High Linearity

Orthoginal design giving >- 65 dB cross axis rejection





Specifications

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Velocity output bandwidth	*30 s* - 100 Hz*
Acceleration output bandwidth	-
Mass position output	*DC -30 s**
Velocity sensitivity	*2 x 1200 V/m/s**
Lowest spurious resonance	*> 200 Hz*
Linearity, vertical	*> 91 dB*
Linearity, horizontal (USGS)	*> 91 dB*
Cross-axis rejection	*> 65 dB*
Standard low pass corne	*100 Hz*
Self Noiser	*Below USGS NLNM >8s to 5Hz*
Levelling	*+/- 8 degrees*
Storage temperature	*–60 to +75 °C*
Operating temperature	*–20 to +65 °C* *(–55 °C optional: low temperature testing facilities available)*
Power supply	*10 - 36 V DC*
Current at 12 V DC	*65 mA*
Hole lock mechanism	*Spring-loaded 3 jaw skids or studs (>60kg force)*
Borehole diameter	*89 - 229 mm*
Calibration controls	*Open- and closed-loop response*
External inputs	*Sine, step or pseudo-random*
Optional low pass corner	*50 Hz, 100 Hz or 200 Hz*