

CMG-6TD



Broadband Seismometer and Digitiser

The Guralp CMG-6TD is an ultra-lightweight three-component digital seismometer ideally suited for rapid installation in medium-noise sites.

Key Features:

A true broadband, force-feedback instrument, the 6TD has zero mechanical non-linearity (the overall measured linearity exceeds 90 dB). The three components are oriented true to the sensitive axes to an accuracy better than 0.1 °.

Lightweight and waterproof to IP67 standard, with "O"-ring seals throughout, the 6TD is suitable for installation in a wide range of environments. The 6T mechanics have been tested down to -50 °C.

Quick and easy, one-person installation

No mass clamping required – plug in and go

High sensitivity and dynamic range

On-board 24-bit digitizer with configurable output

Ultra low power (< 0.9 W at 100 samples/s)

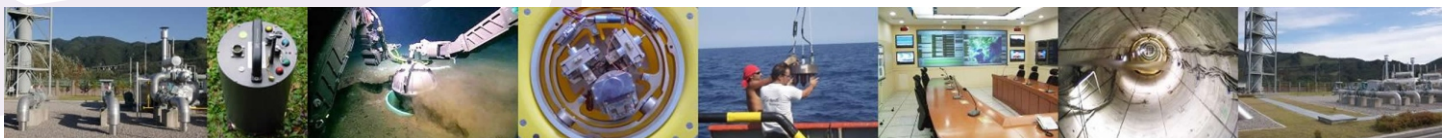
Up to 16 Gb of built-in Flash memory

Simple and fast live data download over Firewire

Ethernet and Wi-Fi options available

Smart case available for controlling multiple instruments

The 6T is also available as an analogue instrument for use with your own recording system.



Specifications



CMG-6TD



Velocity output high corner	100 Hz
Velocity output low corner	30 s (optional 10 s)
Velocity output sensitivity	2 × 1200 V/m/s,
Lowest spurious resonance	450 Hz
Linearity	> 95 dB
Cross-axis rejection	> 60 dB
Electronics noise level	-147 dB (rel. 1m2s-4Hz-1)
Data output format	GCF over RS232, Firewire, Ethernet or Wi-Fi
Sample rates	1000 – 1 samples/s
Digitizer resolution at 1 sample/s	21 bits
Storage capacity	64 Mb internal Flash memory Options to 16 Gb
Operating temperature	-20 to +85 °C
Temperature sensitivity	< 0.6 V per 10 °C
Internal thermometer accuracy	±0.33 °C (30 °C), ±0.5 °C (10 °C to 50 °C), ±1.0 °C (-10 °C to 85 °C)
Mass recentring range	±3 ° from horizontal
Materials	Hard anodised aluminium case Gold plated contacts O-ring seals throughout
Case diameter	154 mm
Case height (excl. handle and feet)	153 mm
Weight	2.7 kg (entire system < 4.1 kg)
Power supply	10 – 36 V DC
Current at 12 V DC	65 mA (80 mA for 60 s sensor)
Calibration facilities	On board signal; generator: sine wave, impulse and broadband exposed on sensor connector
Offset zeroing	Adjustable through case
Optional remote control	Offset zeroing with DC motors

