

# CMG-6TD-1



## Digital broadband seismometer

The Guralp Systems CMG-6TD-1 is an ultra-lightweight three-component digital seismometer ideally suited for rapid installation in medium-noise sites.

### Key Features:

True broadband force-feedback instrument

Lightweight, waterproof and self-contained

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 at sample rates up to 1000 samples/s

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

Up to 16 Gb of built-in Flash memory as standard

Simple and fast live data download over Firewire, USB or Ethernet

Smart case available for controlling multiple instruments

### Inside the 6TD-1:

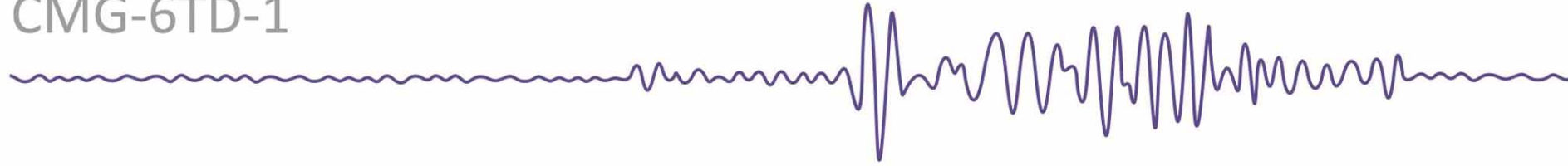
The high-gain feedback loop in the 6TD-1 eliminates mechanical non-linearity (the overall measured linearity exceeds 90 dB) and minimizes resonances in the spring system.

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



# Specifications

CMG-6TD-1



Velocity output bandwidth	<i>1 s – 100 Hz</i>
Velocity output sensitivity	<i>2 × 1200 V/m/s (other options available)</i>
Lowest spurious resonance	<i>450 Hz</i>
Linearity	<i>&gt; 95 dB</i>
Cross-axis rejection	<i>&gt; 60 dB</i>
Electronics noise level	<i>–147 dB (rel. 1m2s-4Hz-1)</i>
Data output format	<i>GCF over RS232, Firewire</i>
Sample rates	<i>1 – 1000 samples/s</i>
Digitizer resolution at 1 sample/s	<i>21 bits</i>
Storage capacity	<i>Up to 8 Gb</i>
Operating temperature	<i>–20 to +85 °C</i>
Temperature sensitivity	<i>&lt; 0.6 V per 10 °C</i>
Mass recentring range	<i>±3 ° from horizontal</i>
Materials	<i>Hard anodised aluminium case Gold plated contacts O-ring seals throughout</i>
Case diameter	<i>154 mm</i>
Case height (excl. handle and feet)	<i>153 mm</i>
Weight	<i>2.7 kg (entire system &lt; 4.1 kg)</i>
Power supply	<i>10 – 36 V DC</i>
Current at 12 V DC	<i>65 mA</i>
Calibration controls	<i>Common signal &amp; enable lines exposed on sensor connector</i>
Offset zeroing	<i>Adjustable through case</i>
Optional remote control	<i>Offset zeroing with DC motors</i>
Optional data interfaces	<i>USB or Ethernet</i>

