

# CMG-6TC



## Robust portable lightweight broadband seismometer

The Güralp CMG-6T Compact is an ultra-lightweight three-component seismometer ideally suited for rapid installation in medium-noise sites. This sensor is developed from the original 89mm OD CMG sensors.

### Key Features:

*89mm outer diameter; height less than 160mm*

*True broadband, 3-component, force-feedback instrument*

*Direct velocity outputs*

*Lightweight (<2.0 kg), waterproof and self-contained*

*No mass clamping required – plug in and go*

*High sensitivity and dynamic range (>135 dB)*

*Orthogonal instrument with high cross-axis rejection (>65 dB)*

*The 6TC can be supplied with response options of 1s, 10s, 30s, 60s\* or 120s for the long period and 50Hz, 100Hz\* or 200Hz for the short period*

*\* standard*

*Optional Smart Sensor interface (IEEE 1451.4 TEDS Compliant)*

*The sensor response is completely flat and linear across the entire passband. Its high-gain feedback loop eliminates mechanical non-linearity (the overall measured linearity exceeds 95 dB) and minimizes resonances in the spring system.*

*Low-frequency vibration modes are carefully avoided in the design. The lowest spurious vibration mode of the 6T is a barely measurable resonance at 440Hz.*



# Specifications

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Velocity output bandwidth	<i>60 s – 100 Hz (Standard), LP options 1, 10, 30, 120s SP options, 50, 200 Hz</i>
Velocity output sensitivity	<i>2 × 1200 V/m/s, (Standard) 2 × 750 V/m/s 2 × 2000 V/m/s or 2 × 4000 V/m/s</i>
Peak output	<i>±10 V Differential (40 V pk-pk)</i>
Optional high gain sensitivity	<i>2 × 10000 V/m/s (adjustable)</i>
Lowest spurious resonance	<i>450 Hz</i>
Linearity	<i>&gt; 95 dB</i>
Cross-axis rejection	<i>&gt; 65 dB</i>
Electronics noise level	<i>−172 dB (rel. 1m s Hz )</i>
Operating Temperature sensitivity	<i>−20 to +60 °C</i>
Horizontal tilt tolerance	<i>±12 ° from horizontal</i>
Materials	<i>Hard anodised aluminium case (optional dichromate treatment) Gold plated contacts, O-ring seals throughout Exceeds IP67</i>
Case diameter	<i>89 mm</i>
Sensor height	<i>160 mm</i>
Weight	<i>2 kg</i>
Power supply	<i>9 –36 V DC (Isolated)</i>
Optional low power sensor	
Power Consumption @12 V DC	<i>&lt;180 mW</i>
Calibration controls	<i>Common signal &amp; enable lines exposed on sensor connector</i>
Optional accessories	<i>Handheld Control Unit Single or multiple unit carry case Signal cable with right angled connector</i>

