

CMG-55T



Triaxial strong motion accelerometer



The Güralp Systems CMG-55T is an extremely compact, robust accelerometer based on MEMS technology, suitable for civil engineering, hazard mitigation and structure monitoring applications.

Key Features:

- Three axes of acceleration with high dynamic range
- Compact, hard anodized aluminium case
- Full-scale sensitivity from 2 to 10 g
- High frequency corner from 200 to 1000 Hz
- Highly robust, with no moving parts
- Response to DC as standard; optional high-pass filter option with user-specified corner frequency
- Isolated power supply for 10 – 36 V operation
- 19-way mil-spec connector compatible with original 5T
- Cables provided for connection to all Güralp Systems digitizers
- Combine with Güralp Systems feedback accelerometers for high-density, high performance arrays
- Simple installation with fixing bolts; two mounting orientations provided
- Clamps available for secure attachment to cables or rods of any diameter



Specifications

CMG-55T



Output sensitivity	<i>10 g, 5 g, 2 g</i>
Acceleration output low corner	<i>DC</i>
Acceleration output high corner	<i>2 g: 200, 400 Hz</i>
	<i>5 g: 200, 400, 600 Hz</i>
	<i>10 g: 200, 400, 600, 1000 Hz</i>
Peak output	<i>±10 V differential</i>
Maximum shock	<i>2000 g (1 ms)</i>
Nominal output impedance	<i>47 Ω</i>
Lowest spurious resonance	<i>> 1000 Hz</i>
Nonlinearity	<i>0.5 % full scale</i>
Cross-axis rejection	<i>0.02 g/g</i>
Dynamic range	<i>105 dB</i>
Noise level	<i>2 µg Hz^{-1/2}</i>
Operating temperature	<i>–55 to +85 °C</i>
Temperature shift	<i>300 ppm / °C</i>
Materials	<i>Hard anodized aluminium case</i>
	<i>Mil-spec connector</i>
Case depth/height	<i>51 mm (square cross-section)</i>
Case width	<i>76 mm</i>
Weight	<i>0.8 kg</i>
Isolating power supply	<i>10 – 36 V DC</i>
Current at 12 V DC	<i>60 mA</i>
Power consumption at 12 V DC	<i>0.72 W</i>

