



AMT/2HR.1000 Triaxial High Resolution MEMS DC Response Accelerometer

$\pm 2g$ range, 1000mV/g sensitivity

The AMT range of accelerometers are Triaxial MEMS (micro electro mechanical system) DC response voltage output devices for testing at low frequency vibration measurement from DC (0Hz) and above. They are Triaxial (measuring in 3 directions simultaneously) variable capacitance design and are available with a 2m integral cable fitted with a 7pin connector to suit the DJB DCM-03 MEMS signal conditioning unit or alternatively as bare wires.

Ideally suited to low frequency vibration applications including low level vibration where high sensitivity is required.

Due to their ability to measure DC response they can also be used to measure constant gravity application.

The AMT/2HR.1000 is a high resolution version and has a range of $\pm 2g$ and a sensitivity of 1000mV/g, we recommend using with DJB's MEMS signal conditioner the DCM-03

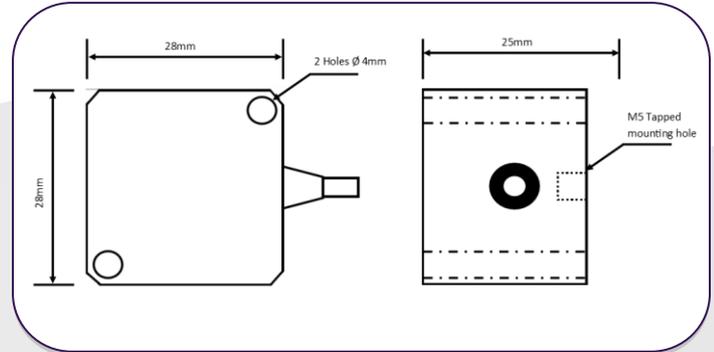
Features:

- Operational frequency range DC to 150Hz
- Integral cable with 7 pin connector or pigtails.
- DJB signal conditioner model DCM-03 available as an option
- Differential Capacitance operation
- Compact form and low mass
- Constant gravity measurement

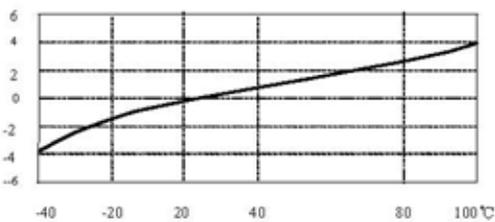
Applications:

- Auto/Aero structural body surveys
- Constant gravity measurements
- General vibration measurement
- Seismic vibration measurement
- Crash testing

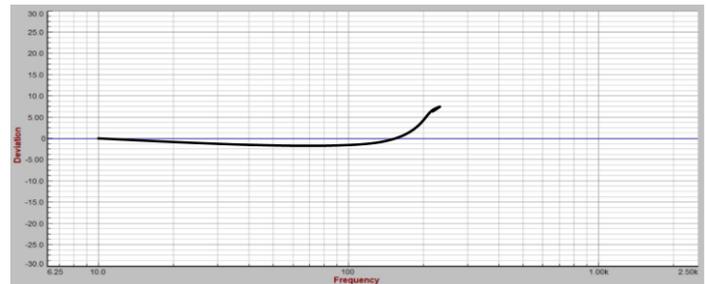
AMT/2HR.1000



Typical Temperature Response



Typical Frequency Response



Please note: For information and reference only. Data should not be used as pass / fail criteria for calibration purposes.

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A UK company with UK-based manufacturing, assembly and calibration in-house.

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±2g range, 1000mV/g sensitivity

| | Metric | Imperial |
|-----------------------------|--------------------------------------|---------------------------------------|
| Sensitivity (20°C) | 100.97mV/(m/s ²)±10% | 1000mV/g±10% |
| Measurement Range | ±19.6m/s ² pk | ±2g pk |
| Transverse sensitivity | ≤5% | |
| Frequency Range (±5%) | DC to 150 Hz | |
| Frequency Range (±10%) | DC to 200Hz | |
| Mounted Resonance Frequency | 5,000 Hz | |
| Temperature Range | -40 to +85°C | -40 to +185°F |
| Temperature Sensitivity | 0.1 mV/°C | |
| Shock limit (No Supply) | 34323m/s ² | ±3,500g |
| Power Supply | +6 to +15 VDC | |
| Operating Current | ≤5mA | |
| Offset Voltage | 2.5±0.1VDC | |
| Noise(100Hz) | < 0.14mVrms | |
| Resolution | 0.15mg (rms) | |
| Output impedance | < 100 Ω | |
| Weight (no cable) | 40grams | 1.41oz |
| Case material | Hard Anodized Aluminum | |
| Case sealing | Epoxy Resin | |
| Mounting | 2 x Ø4mm holes or M5 tapped base | 2 x Ø0.16inch holes or M5 tapped base |
| Integral Output Cable | 2m | 6.5ft |
| Cable Exit | Side | |
| Cable connector | 7 pin connector (optional pigtailed) | |
| Size | 28 x 28 x 25mm | 1.1 x 1.1 x 0.98 inches |
| IP rating | IP65 | |

Options:

- DCM-03 – 3 channel MEMS signal conditioning unit.
- Pigtail cable terminations

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