

# AM/2HR.1000C Monoaxial MEMS High Resolution DC Response Accelerometer

±2g range, 1000mV/g sensitivity



The AM range of accelerometers are MEMS (micro electro mechanical system) DC response voltage output devices for testing at low frequency vibration measurement from DC (0Hz) and above.

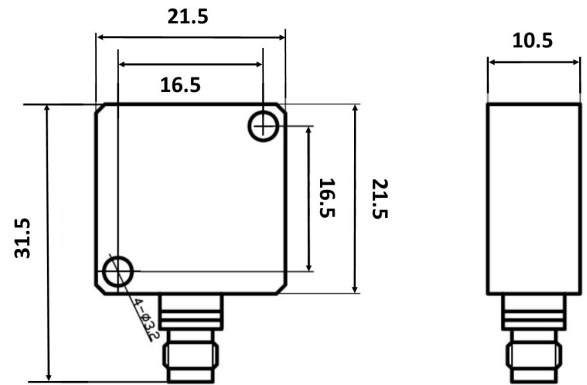
The AM/2HR.1000C has a ¼-28UNF 4 pin connector and cables to suit your application can be supplied as an option.

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 AM/2HR.1000C has a range of ±2g and a sensitivity of 1000mV/g, we recommend using with DJB's MEMS signal conditioner the DCM-03

## AM/2HR.1000C

Dimensions in mm



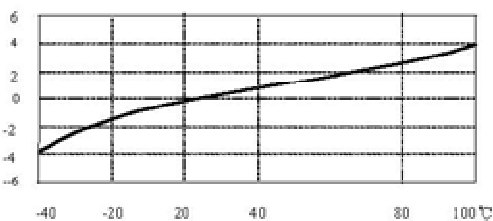
### Features:

- Operational frequency range DC to 200Hz
- ¼-28 UNF 4 pin connector
- DJB signal conditioner model DCM-03 available as an option
- Differential Capacitance operation
- Compact form and low mass
- Constant gravity measurement

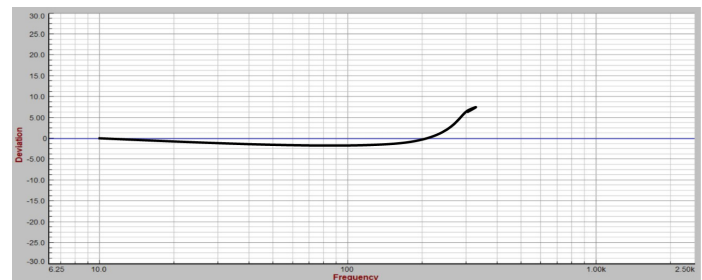
### Applications:

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

### 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.

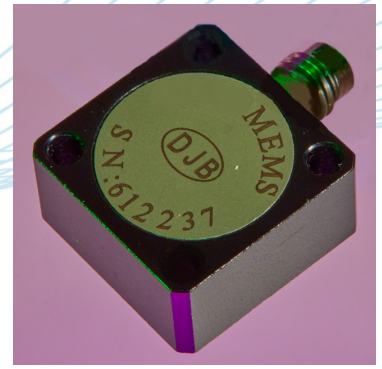
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## AM/2HR.1000C Monoaxial MEMS High Resolution DC Response Accelerometer

±2g range, 1000mV/g sensitivity



|                             | Metric                            | Imperial                  |
|-----------------------------|-----------------------------------|---------------------------|
| Sensitivity (20°C)          | 100.97mV/(m/s <sup>2</sup> ) ±10% | 1000mV/g±10%              |
| Measurement Range           | ±19.6m/s <sup>2</sup> 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 +120°C                     | -40 to +248°F             |
| Temperature Sensitivity     | 0.1 mV/°C                         |                           |
| Shock limit (No Supply)     | 29,420m/s <sup>2</sup>            | ±3,000g                   |
| Power Supply                | +6 to +30 VDC                     |                           |
| Operating Current           | ≤5mA                              |                           |
| Offset Voltage              | 2.5±0.1VDC                        |                           |
| Noise(100Hz)                | < 0.14mVrms                       |                           |
| Resolution                  | 0.3mg (rms)                       |                           |
| Weight                      | 12grams                           | 0.42oz                    |
| Case material               | Titanium                          |                           |
| Case sealing                | Hermetic                          |                           |
| Mounting                    | 2 x Ø3mm holes                    | 2 x Ø0.12inch holes       |
| Connector Exit              | Side                              |                           |
| Size                        | 21.5 x 21.5 x 10.5mm              | 0.84 x 0.84 x 0.41 inches |
| IP rating                   | IP65                              |                           |

### Options:

- DCM-03 – 3 channel MEMS signal conditioning unit.
- Pigtail cable terminations
- AM/2.1000 – 2m integral cable
- AM/2.1000C – side entry 4 pin connector

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