

# AM/50.40C Monoaxial MEMS DC Response Accelerometer

±50g range, 40mV/g sensitivity

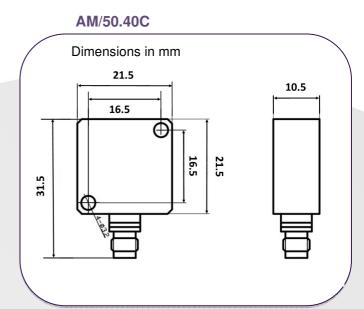


The AM range of accelerometers are MEMS (micro electro mechanical system) DC response voltage output devices for testing at low frequency vibration measurement from DC (0Hz) and above.

The AM/20.100C has a 1/4-28UNF 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/50.40C has a range of  $\pm 50g$  and a sensitivity of 40mV/g, we recommend using with DJB's MEMS signal conditioner the DCM-03



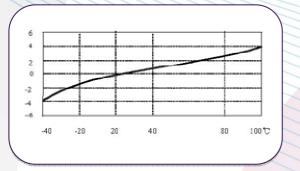
#### Features:

- Operational frequency range DC to 550Hz
- 1/4-28 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

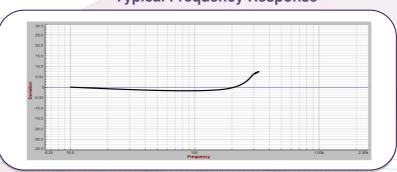
### Applications:

- 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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## AM/50.40C Monoaxial MEMS DC Response Accelerometer ±50g range, 40mV/g sensitivity



	Metric	Imperial
Sensitivity (20°C)	4.1mV/(m/s <sup>2</sup> ) ±10%	40mV/g±10%
Measurement Range	±490m/s² pk	±50g pk
Transverse sensitivity	≤5%	
Frequency Range (±5%)	DC to 500 Hz	
Frequency Range (±10%)	DC to 550Hz	
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	45mg (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

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