

AT/14.XX

Tri-axial IEPE accelerometer

IEPE, Side Entry 1/4-28 UNF Connector, Ceramic Isolated Adhesive Mount



KEY FEATURES

- ✓ Titanium case
- ✓ Ceramic isolated base
- ✓ 13 grams
- ✓ 5 standard sensitivity options; 1mV/g to 100mV/g

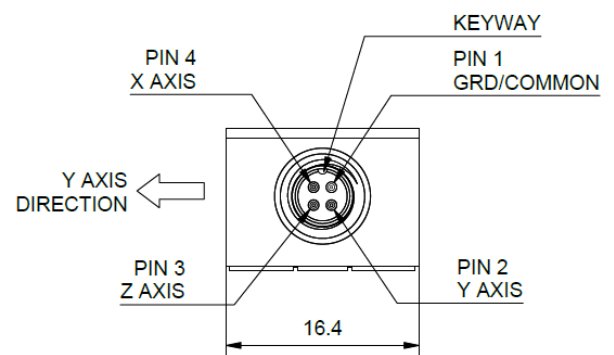
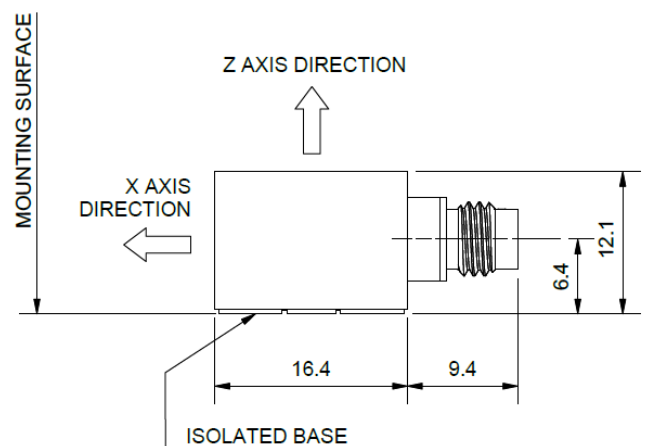
DEVICE / FAMILY OPTIONS

- ✓ AT/14.XXET - Extended temperature variant to 165°C
- ✓ AT/14.XXT - Transducer Electronic Datasheet (TEDS)
- ✓ Extended low & high frequency calibration
- ✓ Custom sensitivities available on request
- ✓ AT/14/TB.XX 10-32 UNF tapped base

TYPICAL CABLE OPTIONS

- ✓ 4S-1/ET25/27/4F/3S18/3/BC1 - 4 pin socket, co-axial cable ending in 3x BNC, 3 metres
- ✓ Other options and lengths available

AT/14 ACCELEROMETER DIMENSIONS

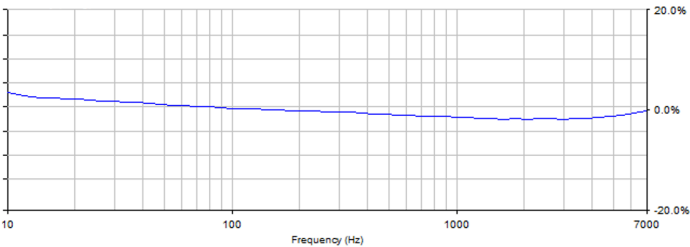


All measurements in millimeters (mm)

TECHNICAL SPECIFICATIONS

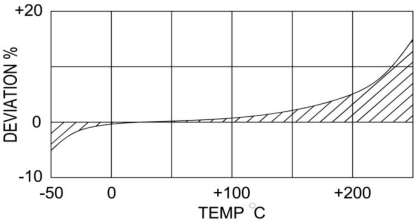
Performance	AT/14.1	AT/14.5	AT/14.10	AT/14.30	AT/14.100
Voltage Sensitivity (±10%)	1mV/g	5mV/g	10mV/g	30mV/g	100mV/g
Measurement Range	±5000g	±1000g	±500g	±160g	±50g
Frequency Response (±5%)	1Hz to 6kHz	1Hz to 6kHz	1Hz to 6kHz	1Hz to 6kHz	1.5Hz to 6kHz
Frequency Response (±10%)	0.7Hz to 7kHz	0.7Hz to 7kHz	0.7Hz to 7kHz	0.7Hz to 7kHz	1Hz to 7kHz
Resonant Frequency	X, Y Axis ≥20kHz, Z Axis ≥33kHz				
Cross Axis Error	≤5%				
Maximum Shock Limit	5000g				
Non-linearity (% FS)	≤1%				
Base Strain Sensitivity	≤0.001g/με				
Broadband Resolution	0.002grms (100mV/g)				
Electrical Characteristics					
Supply Voltage	15V to 35V DC				
Supply Current	2mA to 20mA (max 2mA above 125°C)				
Bias Voltage	10V to 14V DC				
Output Impedance	≤100Ω				
Base Isolation Impedance	>100MΩ				
Settling Time Constant	<5 seconds				
Physical					
Case Material	Titanium				
Connector	1/4 UNF, 4 pin				
Mounting	Adhesive, ceramic isolated base				
Recommended Mounting Torque	N/A				
Weight	13.0 grams				
Size (mm)	16.4 x 16.4 x 12.1mm				
(Inches)	0.65 x 0.65 x 0.48"				
Environmental					
Temperature Range (°C)	-50°C to +125°C (Extended temperature option to 165°C)				
(°F)	-58°F to +257°F (Extended Temperature option to 329°F)				
Total Mass Loss (TML)	<0.1%				

TYPICAL FREQUENCY RESPONSE



TYPICAL THERMAL RESPONSE

Response shows performance of piezoelectric sensing element, including beyond the stated operating limits.



TYPICAL SPECTRAL NOISE (100mV/g)

1 Hz - 345 μg/√Hz
10 Hz - 42.8 μg/√Hz
100 Hz - 11.2 μg/√Hz
1 kHz - 5.67 μg/√Hz
10 kHz - 5.23 μg/√Hz

DJB INSTRUMENTS UK LIMITED

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ISO 9001 – 00025363



SPECIFICATIONS MAY BE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

ALL DEVICES CALIBRATED IN ACCORDANCE WITH BS ISO 16063–21:2003. ALL DEVICE CALIBRATIONS ARE UKAS TRACEABLE.

AT/14/TB.XX

Tri-axial IEPE accelerometer

IEPE, Side Entry M3.5 Connector, 10-32 UNF Tapped Base



KEY FEATURES

- ✓ Titanium case
- ✓ Ceramic isolated base
- ✓ 15 grams
- ✓ 5 standard sensitivity options; 1mV/g to 100mV/g

INCLUDED WITH DEVICE

- ✓ SP/02 Mounting Stud

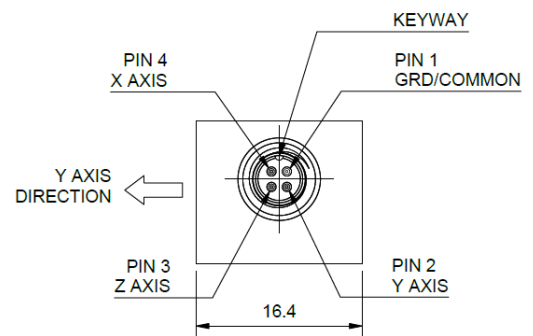
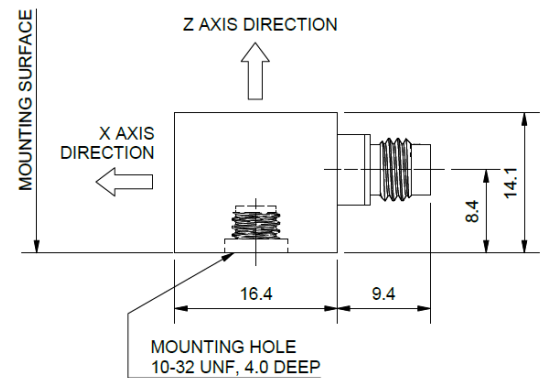
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- ✓ Custom sensitivities available on request
- ✓ AT/14.XX ceramic isolated mount

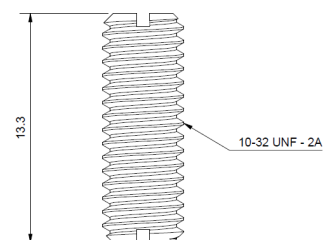
TYPICAL CABLE OPTIONS

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AT/14/TB ACCELEROMETER DIMENSIONS



SP/02 MOUNTING STUD DIMENSIONS

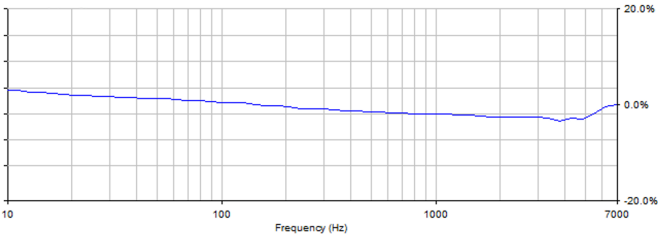


All measurements in millimeters (mm)

TECHNICAL SPECIFICATIONS

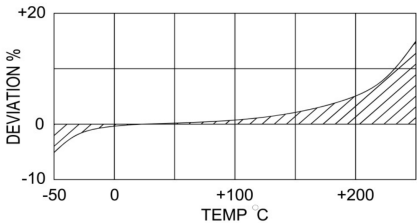
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Supply Current	2mA to 20mA (max 2mA above 125°C)				
Bias Voltage	10V to 14V DC				
Output Imedance	≤100Ω				
Base Isolation Impedance	N/A				
Settling Time Constant	<5 seconds				
Physical					
Case Material	Titanium				
Connector	1/4 UNF, 4 pin				
Mounting	4mm Tapped Base, 10-32 UNF				
Recommended Mounting Torque	1.2Nm				
Weight	15.0 grams				
Size (mm)	16.4 x 16.4 x 14.1mm				
(Inches)	0.65 x 0.65 x 0.56"				
Environmental					
Temperature Range (°C)	-50°C to +125°C (Extended temperature option to 165°C)				
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