

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

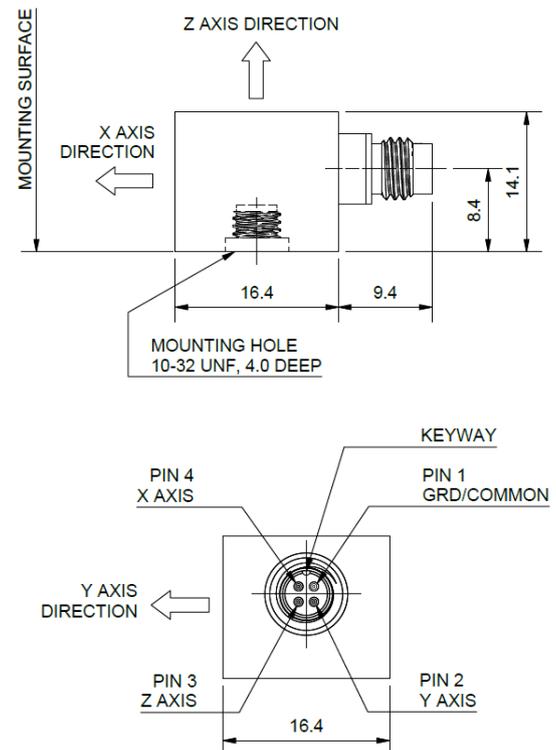
DEVICE / FAMILY OPTIONS

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

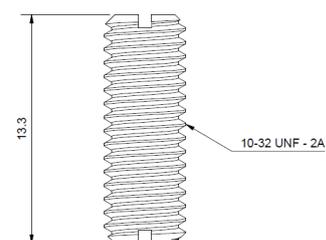
TYPICAL CABLE OPTIONS

- ✓ 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/TB ACCELEROMETER DIMENSIONS



SP/02 MOUNTING STUD DIMENSIONS

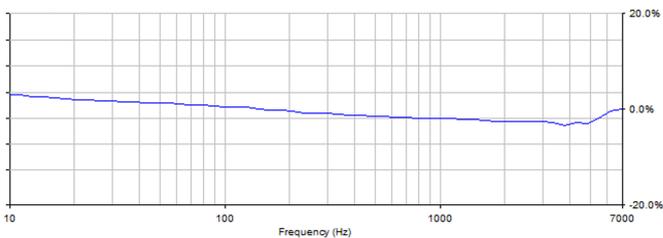


All measurements in millimeters (mm)

TECHNICAL SPECIFICATIONS

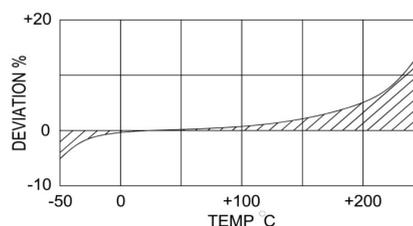
Performance	AT/14/TB.1	AT/14/TB.5	AT/14/TB.10	AT/14/TB.30	AT/14/TB.100
Voltage Sensitivity ($\pm 10\%$)	1mV/g	5mV/g	10mV/g	30mV/g	100mV/g
Measurement Range	$\pm 5000g$	$\pm 1000g$	$\pm 500g$	$\pm 160g$	$\pm 50g$
Frequency Response ($\pm 5\%$)	1Hz to 6kHz				
Frequency Response ($\pm 10\%$)	0.7Hz to 7kHz				
Resonant Frequency	$\geq 20kHz$				
Cross Axis Error	$\leq 5\%$				
Maximum Shock Limit	5000g				
Non-linearity (% FS)	$\leq 1\%$				
Base Strain Sensitivity	$\leq 0.001g/\mu\epsilon$				
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	$\leq 100\Omega$				
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)				
(°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 $\mu g/\sqrt{Hz}$
 10 Hz - 42.8 $\mu g/\sqrt{Hz}$
 100 Hz - 11.2 $\mu g/\sqrt{Hz}$
 1 kHz - 5.67 $\mu g/\sqrt{Hz}$
 10 kHz - 5.23 $\mu g/\sqrt{Hz}$

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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.