

~ Calibration Certificate ~

Per ISO 16063-21

Model Number: 354B22

Serial Number: 6708 (y axis)

Description: ICP® Triaxial Accelerometer

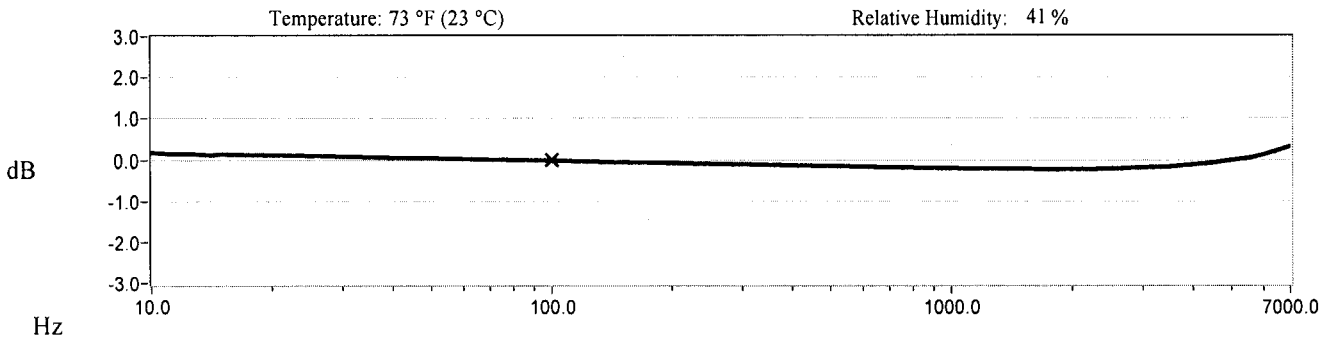
Method: Back-to-Back Comparison (AT401-3)

Manufacturer: PCB

Calibration Data

Sensitivity @ 100.0 Hz 102.2 mV/g Output Bias 14.0 VDC
(10.43 mV/m/s²) Transverse Sensitivity 4.6 %
Discharge Time Constant 0.8 seconds

Sensitivity Plot



Data Points

Frequency (Hz)	Dev. (%)	Frequency (Hz)	Dev. (%)	Frequency (Hz)	Dev. (%)
10.0	2.0	300.0	-1.2	7000.0	3.8
15.0	1.6	500.0	-1.7		
30.0	1.0	1000.0	-2.3		
50.0	0.5	3000.0	-2.1		
REF. FREQ.	0.0	5000.0	-0.1		

Mounting Surface: Stainless Steel Fastener: Cyanoacrylate Adhesive
Acceleration Level (rms): 10.0 g (98.1 m/s²)

Fixture Orientation: Vertical

*The acceleration level may be limited by shaker displacement at low frequencies. If the listed level cannot be obtained, the calibration system uses the following formula to set the vibration amplitude: Acceleration Level (g) = 0.010 x (freq).
*The gravitational constant used for calculations by the calibration system is: 1 g = 9.80665 m/s².

Condition of Unit

As Found: n/a

As Left: New Unit, In Tolerance

Notes

1. Calibration is NIST Traceable thru Project 822/277342 and PTB Traceable thru Project 1254.
2. This certificate shall not be reproduced, except in full, without written approval from PCB Piezotronics, Inc.
3. Calibration is performed in compliance with ISO 9001, ISO 10012-1, ANSI/NCSL Z540-1-1994 and ISO 17025.
4. See Manufacturer's Specification Sheet for a detailed listing of performance specifications.
5. Measurement uncertainty (95% confidence level with coverage factor of 2) for frequency ranges tested during calibration are as follows: 5-9 Hz; +/- 2.0%, 10-99 Hz; +/- 1.5%, 100-1999 Hz; +/- 1.0%, 2-10 kHz; +/- 2.5%.

Technician: Gary Redmond Date: 10/14/09



CALIBRATION CERT #1862.01

PCB PIEZOTRONICS[™]
VIBRATION DIVISION

3425 Walden Avenue Depew, NY 14043
TEL: 888-684-0013 FAX: 716-685-3886 www.pcb.com

~ Calibration Certificate ~

Per ISO 16063-21

Model Number: 354B22

Serial Number: 6708 (z axis)

Description: ICP® Triaxial Accelerometer

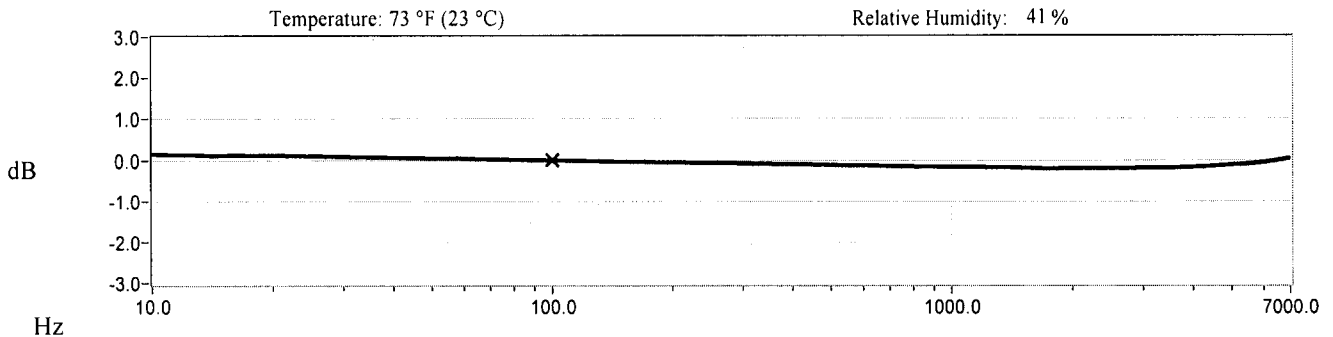
Method: Back-to-Back Comparison (AT401-3)

Manufacturer: PCB

Calibration Data

Sensitivity @ 100.0 Hz	102.5 mV/g	Output Bias	14.0 VDC
	(10.45 mV/m/s ²)	Transverse Sensitivity	4.1 %
Discharge Time Constant	0.6 seconds		

Sensitivity Plot



Data Points

Frequency (Hz)	Dev. (%)	Frequency (Hz)	Dev. (%)	Frequency (Hz)	Dev. (%)
10.0	1.7	300.0	-1.0	7000.0	0.4
15.0	1.3	500.0	-1.4		
30.0	1.0	1000.0	-2.0		
50.0	0.6	3000.0	-2.2		
REF. FREQ.	0.0	5000.0	-1.4		

Mounting Surface: Stainless Steel Fastener: Cyanoacrylate Adhesive

Fixture Orientation: Vertical

Acceleration Level (rms): 10.0 g (98.1 m/s²)

*The acceleration level may be limited by shaker displacement at low frequencies. If the listed level cannot be obtained, the calibration system uses the following formula to set the vibration amplitude: Acceleration Level (g) = 0.010 x (freq)².
 †The gravitational constant used for calculations by the calibration system is: 1 g = 9.80665 m/s².

Condition of Unit

As Found: n/a

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Technician: Gary Redmond **Date:** 10/14/09



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3425 Walden Avenue Depew, NY 14043

TEL: 888-684-0013 FAX: 716-685-3886 www.pcb.com

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~ Calibration Certificate ~

Per ISO 16063-21

Model Number: 354B22

Serial Number: 6708 (x axis)

Description: ICP® Triaxial Accelerometer

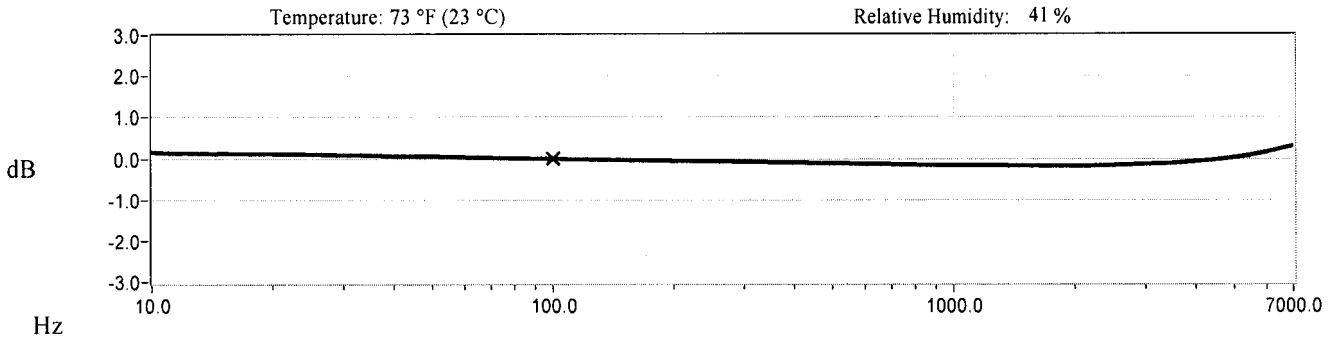
Method: Back-to-Back Comparison (AT401-3)

Manufacturer: PCB

Calibration Data

Sensitivity @ 100.0 Hz 103.4 mV/g Output Bias 14.0 VDC
(10.54 mV/m/s²) Transverse Sensitivity 2.7 %
Discharge Time Constant 0.8 seconds

Sensitivity Plot



Data Points

Frequency (Hz)	Dev. (%)	Frequency (Hz)	Dev. (%)	Frequency (Hz)	Dev. (%)
10.0	1.8	300.0	-0.9	7000.0	3.7
15.0	1.4	500.0	-1.3		
30.0	1.0	1000.0	-1.8		
50.0	0.6	3000.0	-1.5		
REF. FREQ.	0.0	5000.0	0.3		

Mounting Surface: Stainless Steel Fastener: Cyanoacrylate Adhesive
Acceleration Level (rms): 10.0 g (98.1 m/s²)

Fixture Orientation: Vertical

*The acceleration level may be limited by shaker displacement at low frequencies. If the listed level cannot be obtained, the calibration system uses the following formula to set the vibration amplitude: Acceleration Level (g) = 0.010 x (freq).
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