~ Calibration Certificate ~

Model Number: 356A15 Serial Number: LW187198 (x axis) ICP® Triaxial Accelerometer Description: **PCB** Manufacturer: Method: Back-to-Back Comparison AT401-3

Calibration Data

Sensitivity @ 100 Hz

94.8 mV/g

Output Bias

11.1 VDC

 (9.67 mV/m/s^2)

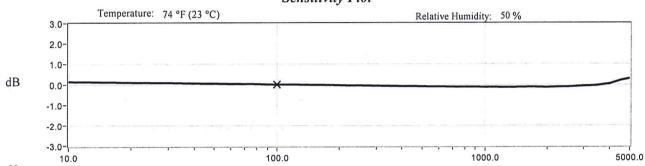
Transverse Sensitivity

0.8 %

Discharge Time Constant

0.4 seconds

Sensitivity Plot



Hz

Data Points

Frequency (Hz)	Dev. (%)	Frequency (Hz)	Dev. (%)
10	1.6	300	-0.8
15	1.3	500	-1.2
30	0.9	1000	-1.5
50	0.5	3000	-0.9
REF. FREQ.	0.0	5000	3.3

Mounting Surface: Beryllium Fastener: Adhesive Fixture Orientation: Inverted 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) = 0.008 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:

As Left:

New Unit, In Tolerance

Notes

- 1. Calibration is NIST Traceable thru Project 683/283498 and PTB Traceable thru Project 10065.
- 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 Z540.3 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:

Raven Lashley PL

Date: 6/30/2015



Headquarters: 3425 Walden Avenue, Depew, NY 14043 Calibration Performed at: 10869 Highway 903, Halifax, NC 27839

TEL: 888-684-0013

FAX: 716-685-3886

www.pcb.com

CAL2-3518548020.549+0

~ Calibration Certificate ~

Model Number: 356A15 Serial Number: LW187198 (y axis) ICP® Triaxial Accelerometer Description: **PCB** Manufacturer: Method: Back-to-Back Comparison AT401-3

Calibration Data

Sensitivity @ 100 Hz

95.1 mV/g

Output Bias

11.1 VDC

 (9.70 mV/m/s^2)

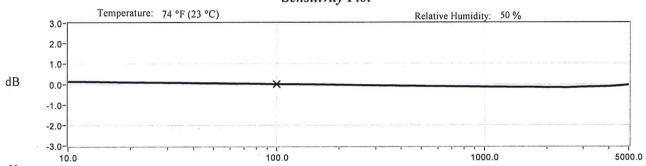
Transverse Sensitivity

0.9 %

Discharge Time Constant

0.3 seconds

Sensitivity Plot



Hz

Data Points

Frequency (Hz)	Dev. (%)	Frequency (Hz)	Dev. (%
10	1.4	300	-0.8
15	1.3	500	-1.2
30	0.9	1000	-1.6
50	0.5	3000	-1.7
REF. FREQ.	0.0	5000	-0.5

Mounting Surface: Beryllium Fastener: Adhesive Fixture Orientation: Vertical

The acceleration Level (pk): 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) = 0.008 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

As Left:

New Unit, In Tolerance

Notes

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Technician:

Raven Lashley RC

Date: 6/30/2015



Headquarters: 3425 Walden Avenue, Depew, NY 14043 Calibration Performed at: 10869 Highway 903, Halifax, NC 27839

TEL: 888-684-0013 · FAX: 716-685-3886

www.pcb.com

CAL2-3518548305.398+0

~ Calibration Certificate ~

Model Number: 356A15 Serial Number: LW187198 (z axis) Description: ICP® Triaxial Accelerometer Manufacturer: Back-to-Back Comparison AT401-3 Method: Calibration Data Sensitivity @ 100 Hz **Output Bias** 11.1 VDC 102.4 mV/g Transverse Sensitivity 2.5 % (10.45 mV/m/s^2) Discharge Time Constant 0.3 seconds Sensitivity Plot Temperature: 74 °F (23 °C) Relative Humidity: 50 % 2.0 dB 0.0 -1.0 -2.0 -3.0 100.0 1000.0 5000 0 10.0 Hz Data Points Frequency (Hz) Dev. (%) Frequency (Hz) Dev. (%) 300 -0.81.7 10 -1.2500 1.4 15 0.9 1000 -1.6 30 3000 -1.30.6 50 5000 0.4 REF. FREQ. 0.0 Mounting Surface: Beryllium w/Silicone Grease Fastener: 10-32 Female Fixture Orientation: Vertical Acceleration Level (pk): 10.0 g (px). In w/s)

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) = 0.008 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: As Left: New Unit, In Tolerance Notes 1. Calibration is NIST Traceable thru Project 683/283498 and PTB Traceable thru Project 10065. 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 Z540.3 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%. Raven LashleyRC Date: 6/30/2015 Technician:



VIBRATION DIVISION
Headquarters: 3425 Walden Avenue, Depew, NY 14043
Calibration Performed at: 10869 Highway 903, Halifax, NC 27839
TEL: 888-684-0013 FAX: 716-685-3886 www.pcb.com

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