~ Calibration Certificate ~

SWLW 246 274

Model Number: 356A01 Serial Number: LW246274 (x axis) Description: ICP® Triaxial Accelerometer Manufacturer: Method: Back-to-Back Comparison AT401-3 Calibration Data Sensitivity @ 100 Hz 5.40 mV/g **Output Bias** 10.1 VDC (0.551 mV/m/s^2) Transverse Sensitivity 0.3 % Discharge Time Constant 0.39 seconds Sensitivity Plot Temperature: 71 °F (22 °C) Relative Humidity: 47 % 3.0 2.0-1.0 dΒ 0.0 -1.0 -2.0 -3 0~ 100.0 1000.0 5000.0 HzData Points Frequency (Hz) Frequency (Hz) Dev. (%) Dev. (%) 10 -0.3300 0.3 15 -0.2500 0.3 -0.1 30 1000 0.4 50 0.0 3000 1.4 REF. FREQ. 0.0 5000 2.6 Mounting Surface: Tungsten Adapter Fastener: Adhesive Fixture Orientation: Inverted Vertical 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)⁸. 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 683/287323 and PTB Traceable thru Project 17014. 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 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:

Date: 6/12/2018



Headquarters: 3425 Walden Avenue, Depew, NY 14043 Calibration Performed at: 10869 Highway 903, Halifax, NC 27839 TEL: 888-684-0013 · FAX: 716-685-3886

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Model Number:		356A01		Per ISO 16063-21	
Serial Number: LW		246274 (y axis)			
Description:	ICP® Triaxia	l Accelerometer			
Manufacturer:		РСВ	Method:	Back-to-Back Comparis	on AT401-3
		Calibration 1	Data		
Sei	nsitivity @ 100 Hz	5.27 mV/g	Output Bias		10.4 VDC
		(0.538 mV/m/s^2)	Transverse Sensitivity		3.2 %
Discharge Time Constant		0.36 seconds			
		Sensitivity	Plot		
3 0	Temperature: 71 °F (Sensitivity 22°C)		lative Humidity: 47 %	
3.0- 2.0-	Temperature: 71 °F (lative Humidity: 47 %	
3.0- 2.0- 1.0-	Temperature: 71 °F (lative Humidity: 47 %	
2.0-	Temperature: 71 °F (lative Humidity: 47 %	
2.0- 1.0-	Temperature: 71 °F (lative Humidity: 47 %	
2.0- 1.0- IB 0.0-	Temperature: 71 °F (22 °C)		lative Humidity: 47 %	
2.0- 1.0- -1.0- -2.0- -3.0-		22 °C)		lative Humidity: 47 %	8000.0
2.0- 1.0- dB 0.0- -1.0- -2.0- -3.0-		22 °C)	Re		8000.0
2.0- 1.0- dB 0.0- -1.0- -2.0-	0	22 °C)	Re		8000.0 (Hz) Dev. (
2.0- 1.0- 1B 0.0- -1.0- -2.0- -3.0- 10.0	0	22 °C) 100.0 Data Poin	ts Re	1000.0	

			V I.V		
Frequency (Hz)	Dev. (%)	Frequency (Hz)	Dev. (%)	Frequency (Hz)	Dev. (%)
10	-0.3	300	0.1	7000	1.8
15	-0.2	500	0.1	8000	2.3
30	-0.2	1000	0.2		
50	-0.1	3000	0.7		
REF. FREQ.	0.0	5000	1.1		

Mounting Surface: Tungsten Adapter | Fastener: Adhesive | Fixture Orientation: Vertical |
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:

As Left:

New Unit, In Tolerance

Notes

- 1. Calibration is NIST Traceable thru Project 683/287323 and PTB Traceable thru Project 17014.
- 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 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%.

ACCREDITED

Technician:

Date: 6/12/2018



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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~ Calibration Cortificate

	LW246274 (Triaxial Accelerate PCB		Method:	Park to Park Co.	
Description: ICP@ Manufacturer:		ometer	Method:	Parket Park C	
Manufacturer:	РСВ		Method:	Dealers Death O	
		РСВ		Back-to-Back Compariso	on AT401-3
		Calibration 1	Data		
Sensitivity @ 10	0 Hz 5.0)7 mV/g		Output Bias	10.2 VDC
	(0.51	7 mV/m/s²)	Tran	sverse Sensitivity	1.2 %
Discharge Time Cons	stant 0.3	4 seconds		•	-1- /•
Temperature	e: 71 °F (22 °C)	Sensitivity .		latíve Humidity: 47 %	
2.0-			Notative Hamilton, 1770		
1.0					
B 0.0-			***************************************		
-1.0-					
-2.0-					
-3.0-					
10.0 Hz	100.0		1000.0		
_		Data Poin	ts		
	·. (%)	Frequency (Hz)	Dev. (%)	Frequency (1	Hz) Dev. (9
	0.1	300	0.2	7000	1.8
	0.3	500	0.2	8000	2.2
	0.1 0.1	1000	0.2	•	
	0.0	3000 5000	0.6 1.0		

- 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%.

Date: __

Technician: VIBRATION DIVISION
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