~Calibration Certificate~

THE MODAL SHOP INC. A PCB GROUP CO.
3149 East Kemper Rd.
Cincinnati, OH 45241
Ph : 513-351-9919
Fax: 513-458-2172
www.modalshop.com

Sensor Information

Model Number:	353B15
Serial Number:	150212
Manufacturer:	PCB
ID Number:	44377
Description:	ICP® Accelerometer

Calibration Data

Sensitivity @ 100 Hz:	10.68	mV/g
Phase @ 100 Hz:	0.25	deg.
Test Level:	10.00	g
Output Bias Level:	8.7	VDC

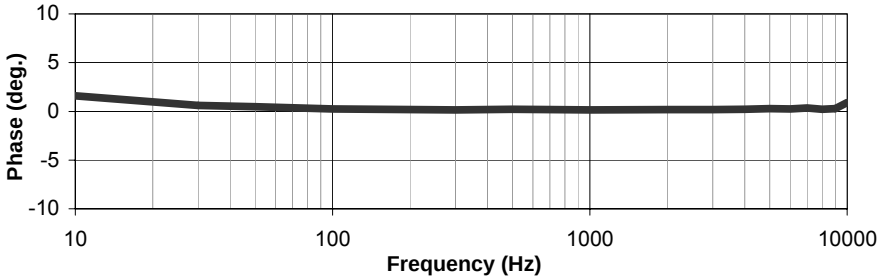
Transducer Specifications

Amp. Range:	± 500	g
Resolution:	0.005	g
Resonant Freq:	≥ 70000	Hz
Temp. Range:	-54 to 121	°C
	-65 to 250	°F
Axis:	Uni-Axial	

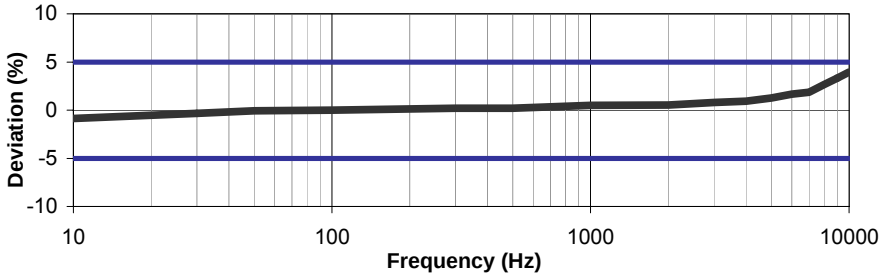
Data Table

Freq. (Hz)	Deviation (%)	Phase (deg)
10	-0.848	1.606
30	-0.321	0.617
50	-0.058	0.462
100	0.000	0.253
300	0.194	0.144
500	0.192	0.208
1000	0.507	0.141
2000	0.542	0.171
3000	0.807	0.180
4000	0.920	0.219
5000	1.250	0.269
6000	1.665	0.234
7000	1.869	0.348
8000	2.656	0.229
9000	3.329	0.287
10000	3.963	0.900

Phase Response



Amplitude Response



Notes

Results relate only to the items calibrated.

This certificate may not be reproduced except in full, without written permision.

Method: Calibration is performed in compliance with ISO 9001 and ISO 17025

This calibration was performed with TMS 9155 Calibration Workstation version 5.1.1

Calibration traceable to NIST (project number 822/271196).

Back-to-Back Comparison Calibration per ISO 16063-21

Procedure Used: PRD-P220

Measurement uncertainty (95% confidence level with coverage factor 2) for frequency ranges tested during calibration are as follows: 5-9 Hz; ± 1.70%, 10-99 Hz; ± 1.20%, 100 Hz; ± 0.75%, 101-920 Hz; ± 1.00%, 921-5000 Hz; ± 1.40%, 5001-10,000 Hz; ± 1.90%, 10,001-15,000 Hz; ± 2.20%, 15,001-20,000 Hz; ± 2.8%.

Customer

TMS Rental
3149 E. Kemper Rd
Cincinnati, OH 45241

User Notes

Lab Conditions

Temperature:	75 (24)	°F (°C)
Humidity:	37	%

Cal Date: 3-Jun-13
Due Date:

Unit Condition

As Found: In Tolerance
As Left: In Tolerance

Approval Information

Technician: Wayne Underwood
Approval:

Equipment Used

Description	Manufacturer	Model	Serial	Due Date
Data Aquisition Card	NI	4461	E4F2A4	11/8/2013
Std Accelerometer	PCB	080A200	110553	12/10/2013
Air Bearing Shaker	PCB	396C11	603	n/a
Std Sig Conditioner	PCB	442A102	305	12/10/2013
SUT Signal Conditioner	PCB	443B101	373	10/4/2013
Power Amplifier	TMS	2100E21-C	1001	n/a

ACCREDITED

Cal ID: 20634 2649.01