

Digi-Pas®

JSBTECH Pte Ltd

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Certificate of Calibration

Certificate No: D000000B0D01

Manufacturer: JSB TECH

Model No: DWL3500XY

Serial No: S/N 00A00001

Date: 26th December 2012

Description: Dual Axis Precision Digital Level &
Vibrometer

Date of Calibration: 19th December 2012

Temperature: 20° C \pm 1 °C

Humidity: 55 \pm 10 %RH

Procedure: DP_3500XYV1V1/temp 382793093

This certifies that the above product (s) was calibrated in compliance with ISO9001:2008 using applicable Digi-Pas® procedures. These calibration procedure and test points are those recommended in the procedure developed by Digi-Pas®.

As received: Factory tested

As Shipping Conditions: At the completion of the calibration, measure values were In-Specification at the points tested.

Remarks or Special Requirements: The product (s) bear a CE and/or FCC marks which is tested and certified by TÜV SÜD & PSB to comply with the EC and/or USA directives.

Traceability Information: Supporting document related to traceability is available for review by appointment. This report shall not be reproduced accept in full, without prior written approval of the calibration facility.

Calibration Equipment Used:

<u>Model Number</u>	<u>Model Description</u>
SH-240 S3	ESPEC -TAIBAI Temperature & Humidity Chamber
P3- KPI897803	Digi-Pas® Reliability, Test & Evaluation Equipment
GT-0401008	Mitutoyo Granite Table (Grade Zero)
MS-308405	Starrett Master Square (Grade AA)
SB-283809	Sine Bar
BG-516-946R-10	Mitutoyo Block Gauge (Grade Zero)

Test/Inspection Report:

<u>Test Description</u>	<u>Specifications</u>	<u>Results</u>	<u>Judgments</u>
Resolution:	0.001° ($\leq 20\mu\text{m/M}$)	OK	PASS
Accuracy Cal:	$\pm 0.001^\circ$ ($0.000^\circ \sim \pm 2.000^\circ$)	$\pm 0.001^\circ$	PASS
	$\pm 0.003^\circ$ for other angles	$\pm 0.003^\circ$	PASS
Repeatability:	$\pm 0.001^\circ$	$\pm 0.001^\circ$	PASS
Symmetrical Check:	$\pm 0.001^\circ$	$\pm 0.001^\circ$	PASS
Metal Base Surface Flatness:			
Base Surface:	8 μm	6 μm	PASS
Vertical Surface:	8 μm	7 μm	PASS
Metal Base Angle:	90° \pm 0.01°	90° \pm 0.01°	PASS
Buzzer (Smart sensor):	>50dBA	64dBA	PASS
LCD display:	TFT LCD	OK	PASS
Operating Temp.:	-10° C to + 50° C	-15° C to + 55° C	PASS
Storage Temp.:	-20° C to + 70° C	-25° C to + 75° C	PASS

The result of this Certificate of Calibration apply only to the item described above. All reported accuracy values are as measured with no reduction by the uncertainty of measurement. Measurement uncertainty is expresses at a confidence level of 95% (coverage factor k=2).

**Certificate No :** D000000B0D01
Serial Number : S/N 00A00001**Uncertainty:** ± 0.002
Units : Degrees**Single Axis:**

Description	Standard	Lower Limit	Upper Limit	As Found
(+) SLOPE	0.000	-0.001	0.001	0.000
	1.003	1.002	1.004	1.004
	1.433	1.432	1.434	1.432
	2.006	2.003	2.009	2.008
	2.866	2.863	2.869	2.869
	5.020	5.017	5.023	5.021
	10.079	10.076	10.082	10.080
	15.070	15.067	15.073	15.068
	19.877	19.874	19.880	19.878
(-) SLOPE	0.000	-0.001	0.001	0.000
	1.003	1.002	1.004	1.004
	1.433	1.432	1.434	1.432
	2.006	2.003	2.009	2.009
	2.866	2.863	2.869	2.869
	5.020	5.017	5.023	5.020
	10.079	10.076	10.082	10.081
	15.070	15.067	15.073	15.068
	19.877	19.874	19.880	19.877

Dual Axis:

Description	Standard	Lower Limit	Upper Limit	As Found
X-axis				
(+) SLOPE	0.000	-0.001	0.001	0.000
	1.003	1.002	1.004	1.002
	1.433	1.432	1.434	1.434
	2.006	2.003	2.009	2.009
	2.866	2.863	2.869	2.863
	5.020	5.017	5.023	5.018
	9.933	9.930	9.936	9.936
(-) SLOPE	0.000	-0.001	0.001	0.000
	1.003	1.002	1.004	1.002
	1.433	1.432	1.434	1.434
	2.006	2.003	2.009	2.009
	2.866	2.863	2.869	2.863
	5.020	5.017	5.023	5.019
	9.933	9.930	9.936	9.936
Y-axis				
(+) SLOPE	0.000	-0.001	0.001	0.000
	1.003	1.002	1.004	1.004
	1.433	1.432	1.434	1.432
	2.006	2.003	2.009	2.008
	2.866	2.863	2.869	2.868
	5.020	5.017	5.023	5.020
	9.933	9.930	9.936	9.931
(-) SLOPE	0.000	-0.001	0.001	0.000
	1.003	1.002	1.004	1.004
	1.433	1.432	1.434	1.432
	2.006	2.003	2.009	2.009
	2.866	2.863	2.869	2.868
	5.020	5.017	5.023	5.020
	9.933	9.930	9.936	9.932

Checked By: _____

Simon
QA Engineer

Laboratory Authorized: _____

Klu
Senior Engineer