

**CERTIFICATE OF CALIBRATION****Customer:** DIGIPAS USA  
304 WEST MAIN STREET  
#120  
AVON, CT 06001**Customer Nbr:** 1-581697-000  
**PO Nbr:** 92820131  
**Date Received:** January 17, 2013**Cert/SO Nbr:** 23-B251G-61-1  
**Manufacturer:** DigiPas USA  
**Model Nbr:** DWL-3000XY**Date Completed:** February 19, 2013  
**Due Date:** February 19, 2014**Description:** High Precision Digital Level &  
**Serial Nbr:** 12A21312  
**ID Nbr:** NONE  
**Unit Barcode:** 901B0101977**Calibrated To:** Manufacturer Specification  
**Calibration Proc:** 1-AC46346-1  
**Item Received:** In Tolerance  
**Item Returned:** In Tolerance

Transcat Calibration Laboratories have been audited and found in compliance with ISO/IEC 17025:2005. Accredited calibrations performed within the Lab's Scope of Accreditation are indicated by the presence of the Accrediting Body's Logo and Certificate Number on this Certificate of Calibration. Any measurements on an accredited calibration not covered by that Lab's Scope are listed in the notes section of the certificate. This report must not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government.

Transcat calibrations, as applicable, are performed in compliance with the requirements of ISO 9001:2008, ISO TS16949, ANSI/NCSL Z540-1994, and ISO 10012-1992. When specified contractually, the requirements of 10CFR21, 10CFR50 App. B and NQA-1 are also covered.

Traceability includes no less than: An unbroken chain of comparison, realization of SI units, measurement uncertainty, documentation, competence, periodic recalibration, and measurement assurance. Transcat documents the traceability of measurements to the SI units through the National Institute of Standards and Technology (NIST) or the National Research Council of Canada (NRC), or other recognized national measurement institutes (NMI's) or international standard bodies, or to measurable conditions created in our laboratory, or accepted fundamental and/or natural physical constants, ratio type of calibration, or by comparison to consensus standards. The specific path of traceability for the reported measurement results is maintained at the Transcat facility and is available there for review.

Complete records of work performed are maintained by Transcat and are available for inspection. Laboratory standards used in the performance of this calibration are shown on the Supplemental Report.

The results in this report relate only to the item calibrated or tested, and the determination of in or out of tolerance is specific to the model/serial no. referenced above based on the tolerances shown on the supplemental report; these tolerances are either the original equipment manufacturer's (OEM's) warranted specifications or the client's requested specifications.

The applied uncertainty is the uncertainty of the calibration process. The Test Uncertainty Ratio (TUR) is calculated as per NCSL International RP-9, section 8.2. All calibrations have been performed using processes having a TUR of 4 : 1 or better, unless otherwise noted on the Supplemental Report. Uncertainties have been estimated at a 95 percent confidence level (k=2). Calibration at a 4:1 TUR (or greater) provides reasonable confidence that the instrument is within the stated tolerances. For measuring instruments, in order to consider the contribution to the uncertainty from reproducibility of the unit under test (UUT), add 0.6 of the UUT's least significant digit to the reported uncertainty. For mass calibrations: Conventional mass referenced to 8.0 g/cm<sup>3</sup>.

Any number of factors can cause a unit to drift out of tolerance at any time following its calibration. Limitations on the uses of this instrument are detailed in the OEM's operating instructions.

**Notes:****Calibrated At:**3251 Lewiston Street #12  
Aurora, CO 80011  
By: James Rathbun**Facility Responsible:**3251 Lewiston Street #12  
Aurora, CO 80011**Digitally Signed By Ryan Gohl**

Date: February 19, 2013

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**Ryan Gohl**  
**Lab Manager**

Digitally Signed On February 19, 2013

Reprinted on February 20, 2013

**Revision 0**

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## SUPPLEMENTAL REPORT FOR 23-B251G-61-1

### CALIBRATION LAB DATA AS FOUND / AS LEFT

Service Order Nbr: 23-B251G-61-1	Mfg: DigiPas USA
Description: High Precision Digital Level &	Model: DWL-3000XY
Serial: 12A21312	
Customer: DIGIPAS USA	
Calibrated: 2/19/2013	PO Nbr: 92820131
Date Due: 2/19/2014	ID Nbr: NONE
Service Type: R9	Calibration Proc: 1-AC46346-1

Description	Setpoints	Accuracy	Low Limit	High Limit	As Found / As Left	O O T	Uncertainty (k=2; ±)		TUR
Function Check									
Warm-up (10-Minutes)			P	P	P				
Absolute Level Function			P	P	P				
Angle Measure - Single Axis									
Clockwise	0.00°	±( 0.01 °)	-0.01	0.01	0.00 °				
	5.00°	±( 0.01 °)	4.99	5.01	5.00 °		4.2e-004 °		23.8 : 1
	15.00°	±( 0.03 °)	14.97	15.03	15.00 °		4.2e-004 °		71.4 : 1
	30.00°	±( 0.03 °)	29.97	30.03	29.99 °		4.2e-004 °		71.4 : 1
	45.00°	±( 0.03 °)	44.97	45.03	44.98 °		4.2e-004 °		71.4 : 1
	90.00°	±( 0.03 °)	89.97	90.03	90.00 °		5.3e-004 °		56.6 : 1
Counter-Clockwise	0.00°	±( 0.01 °)	-0.01	0.01	0.00 °				

The reported uncertainty is the uncertainty of the calibration process. For measuring instruments, add 0.6 of the least significant digit to the reported uncertainty to obtain the measurement uncertainty of the unit under test at the specific test point.

Reported resolution of the UUT does not represent calibration uncertainty or accuracy of the UUT.

 Field not applicable.

## SUPPLEMENTAL REPORT FOR 23-B251G-61-1

### CALIBRATION LAB DATA AS FOUND / AS LEFT

Description	Setpoints	Accuracy	Low Limit	High Limit	As Found / As Left	O T	Uncertainty (k=2; ±)		TUR
	5.00°	±( 0.01 °)	4.99	5.01	5.00 °		4.2e-004 °		23.8 : 1
	15.00°	±( 0.03 °)	14.97	15.03	15.00 °		4.2e-004 °		71.4 : 1
	30.00°	±( 0.03 °)	29.97	30.03	30.01 °		4.2e-004 °		71.4 : 1
	45.00°	±( 0.03 °)	44.97	45.03	45.02 °		4.2e-004 °		71.4 : 1
	90.00°	±( 0.03 °)	89.97	90.03	90.01 °		5.3e-004 °		56.6 : 1
180° Rotation	0.00°	±( 0.01 °)	-0.01	0.01	0.00 °				
Repeatability	0.00°				0.00 °				
	0.00°				0.00 °				
	0.00°				0.00 °				
	0.00°				0.00 °				
	0.00°				0.00 °				
	0.00°				0.00 °				
	0.00°				0.00 °				
	0.00°				0.00 °				
	0.00°				0.00 °				
	0.00°				0.00 °				
Repeatability (Std Dev)		±( 0.01 °)	-0.010	0.010	0.000 °				
Angle Measure - Dual Axis									
X-Axis	-15.00°	±( 0.03 °)	-15.03	-14.97	-14.99 °		4.2e-004 °		71.4 : 1

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Reported resolution of the UUT does not represent calibration uncertainty or accuracy of the UUT.

Field not applicable.

## SUPPLEMENTAL REPORT FOR 23-B251G-61-1

### CALIBRATION LAB DATA AS FOUND / AS LEFT

Description	Setpoints	Accuracy	Low Limit	High Limit	As Found / As Left	$\frac{O}{T}$	Uncertainty (k=2; $\pm$ )		TUR
	15.00°	$\pm(0.03^\circ)$	14.97	15.03	14.98 °		4.2e-004 °		71.4 : 1
	0.00°	$\pm(0.01^\circ)$	-0.01	0.01	0.00 °				
Y-Axis	-15.00°	$\pm(0.03^\circ)$	-15.03	-14.97	-15.02 °		4.2e-004 °		71.4 : 1
	15.00°	$\pm(0.03^\circ)$	14.97	15.03	15.01 °		4.2e-004 °		71.4 : 1
	0.00°	$\pm(0.01^\circ)$	-0.01	0.01	0.00 °				
X-Axis Repeatability	0.00°				0.00 °				
	0.00°				0.01 °				
	0.00°				0.00 °				
	0.00°				0.00 °				
	0.00°				0.00 °				
	0.00°				0.00 °				
	0.00°				0.00 °				
	0.00°				0.00 °				
	0.00°				0.00 °				
	0.00°				0.00 °				
Repeatability (Std Dev)		$\pm(0.01^\circ)$	-0.010	0.010	0.003 °				
Y-Axis Repeatability	0.00°				0.00 °				
	0.00°				0.00 °				
	0.00°				0.00 °				

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### CALIBRATION LAB DATA AS FOUND / AS LEFT

Description	Setpoints	Accuracy	Low Limit	High Limit	As Found / As Left	O Q T	Uncertainty (k=2; ±)		TUR
	0.00°				0.00 °				
	0.00°				0.00 °				
	0.00°				0.00 °				
	0.00°				0.00 °				
	0.00°				0.00 °				
	0.00°				0.00 °				
	0.00°				0.00 °				
Repeatability (Std Dev)		±( 0.01 °)	-0.010	0.010	0.000 °				

As Found and As Left Data recorded on 2/19/2013

Temperature: 68.9°F / 20.5°C      Relative Humidity: 28%      Temp/RH Asset: 114001

<u>Asset</u>	<u>Manufacturer</u>	<u>Model</u>	<u>Description</u>	<u>Cal Date</u>	<u>Due Date</u>	<u>Traceability Numbers</u>
673000	Rahn	36" X 60"	Surface Plate	8/29/2012	8/31/2013	23-&673000-1-1
822000	Starrett	AG16.SI	Angle Block Set, 16 pcs., Inspection	2/14/2013	1/31/2015	23-&822000-1-1

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Reported resolution of the UUT does not represent calibration uncertainty or accuracy of the UUT.

Field not applicable.