Fox Valley Metrology
3114 Medalist Drive
Oshkosh, WI 54902
(920) 426-5894 • Fax (920) 426-8120
https://www.FoxValleyMetrology.com

CERTIFICATE OF CALIBRATION

ANSI National Accreditation Board ACCREDITED ISO/IEC 17025 CALIBRATION AND DIMENSIONAL MEASUREMENT

Certificate No. ACT-1272

CERTIFICATION NUMBER	CP134-00104-840
FOR	Sample Manufacturing 3121 Medalist Drive Oshkosh, WI 54902
TEST INSTRUMENT	Frequency Counter
MAKE	Keysight
MODEL	53131A
CUSTOMER LOCATION	Location1 Location2
CONDITION RECEIVED	In Tolerance
CONDITION RETURNED	In Tolerance
CALIBRATED BY	Jeremy Armstrong
REVIEWED/ISSUED	D.P. 07/29/2025
CALIBRATION LOCATION	FVM
ENVIRONMENT	69.0°F, 31.0%RH, 28.92inHg
CALIBRATION DATE	05/14/2025
RECALIBRATION DUE	05/14/2026

IDENTIFICATION	EL-017A
SERIAL NUMBER	104
PURCHASE ORDER #	

PROCEDURES FOLLOWED

EL-017A rev. 1

STANDARDS USED

INSTRUMENT	SERIAL NUMBER	TRACE NUMBER	NEXT CAL
T-0753	2884903	CP105-41963-762	04/30/2026
T-0884	3546A02489	CO250-41429-802	09/30/2025
T-0968	C8922	CO322-55686-697	11/30/2025

CALIBRATION RESULTS

* DENOTES "OUT OF TOLERANCE"

FEATURE	NOMINAL	LOWER LIMIT	UPPER LIMIT	AS FOUND	AS LEFT	UNCERTAINTY
Self Test	Pass/Fail			Pass	Pass	
Time Interval	(uS)	(uS)	(uS)	(uS)	(uS)	(uS)
	0.1500	0.1460	0.1540	0.1536	0.1536	6.0E-5
Trigger Level	(V)	(V)	(V)	(V)	(V)	(V)
Channel 1	0.000	-0.015	0.015	0.005	0.005	6.0E-4
Channel 2	0.000	-0.015	0.015	0.006	0.006	6.0E-4
Peak Volts	(V)	(V)	(V)	(V)	(V)	(V)
Channel 2 (-)	-1.00	-1.12	-0.88	-0.95	-0.95	6.0E-3
Channel 2 (+)	1.00	0.88	1.12	0.97	0.97	6.0E-3
Channel 1 (-)	-1.00	-1.12	-0.88	-0.96	-0.96	6.0E-3
Channel 1 (+)	1.00	0.88	1.12	0.99	0.99	6.0E-3
Channel 1 Accuracy	(Hz)	(Hz)	(Hz)	(Hz)	(Hz)	(Hz)
	1000000.0000	999999.9990	1000000.0010	1000000.0001	1000000.0001	6.0E-5
	(MHz)	(MHz)	(MHz)	(MHz)	(MHz)	(MHz)
	100.000000000	99.999999930	100.000000070	100.000000000	100.000000000	6.0E-10
	200.000000000	199.999999870	200.000000130	200.000000000	200.000000000	6.0E-10
	225.000000000	224.999999850	225.000000150	225.000000001	225.000000001	6.0E-10
Channel 1 Sensitivity	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)

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FEATURE	NOMINAL	LOWER LIMIT	UPPER LIMIT	AS FOUND	AS LEFT	UNCERTAINTY
100kHz to 100MHz	<-21.0	<-21.0	<-21.0	Pass	Pass	
100MHz to 200MHz	<-17.5	<-17.5	<-17.5	Pass	Pass	
200MHz to 225MHz	<-15.0	<-15.0	<-15.0	Pass	Pass	
Channel 2 Accuracy	(Hz)	(Hz)	(Hz)	(Hz)	(Hz)	(Hz)
	1000000.00000	999999.99900	1000000.00100	1000000.00001	1000000.00001	6.0E-6
	(MHz)	(MHz)	(MHz)	(MHz)	(MHz)	(MHz)
	100.000000000	99.999999930	100.000000070	100.000000000	100.000000000	6.0E-10
	200.000000000	199.999999870	200.000000130	200.000000000	200.000000000	6.0E-10
	225.000000000	224.999999850	225.000000150	225.000000000	225.000000000	6.0E-10
Channel 2 Sensitivity	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)	(dBm)
100kHz to 100MHz	<-21.0	<-21.0	<-21.0	Pass	Pass	
100MHz to 200MHz	<-17.5	<-17.5	<-17.5	Pass	Pass	
200MHz to 225MHz	<-15.0	<-15.0	<-15.0	Pass	Pass	
Time Base	M(Hz)	M(Hz)	M(Hz)	M(Hz)	M(Hz)	
	10.000000	9.999931	10.000069	10.000000	10.000000	6.0E-7
Termination Check	(ck)	(ck)	(ck)	(ck)	(ck)	(ck)
Ch1, 50ohm	Pass/Fail			Pass	Pass	
Ch2, 50ohm	Pass/Fail			Pass	Pass	
Ch1, 1Mohm	Pass/Fail			Pass	Pass	
Ch2, 1Mohm	Pass/Fail			Pass	Pass	
10MHz External Timebase Input	(ck)	(ck)	(ck)	(ck)	(ck)	(ck)
	Pass/Fail			Pass	Pass	
10MHz External Timebase Input	(ck)	(ck)	(ck)	(ck)	(ck)	(ck)
				Pass	Pass	
				Pass	Pass	
				Pass	Pass	
				Pass	Pass	

COMMENTS

Example certificate, actual results and uncertainties will be reported at the time of calibration.
Nominal and limits may vary based on actual make/model.

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ANAB ACCREDITED ISO/IEC 17025 CALIBRATION AND DIMENSIONAL MEASUREMENT
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■ This certificate shall not be altered in any form or reproduced, except in full, without prior written approval from originating lab. These results relate only to the item(s) calibrated. Form Revision 10: 06/04/2024
■ Total expanded measurement uncertainties expressed are based on a confidence level of 95%; coverage factor of (k=2). The statement of compliance in this certificate was issued without taking the uncertainty of measurement into consideration. The customer shall assess the results and uncertainty when determining if the results meet their needs. (This is considered “shared responsibility.”) Uncertainties expressed in nominal units.
■ The calibrations within the certificate/report are traceable through NIST or another National Metrology Institute to the International System of Units (SI). Calibration was completed in accordance with ISO/IEC 17025:2017, ANSI/NCSL Z540-1-1994 and ANSI/NCSL Z540.3-2006. Other standards listed upon request.