NATIONAL TYPE EVALUATION PROGRAM

Certificate of Conformance

for Weighing and Measuring Devices

For:
Non-Computing Scale
Digital Electronic
Model: GX-AN Series (see table on page 2)
n_{max}: 320 000
e_{min}: 0.001 g (see table on page 2)
Capacity: see table on page 2
Platform: see table on page 2
Accuracy Class: I / II (see table on page 2)

Submitted By:
A&D Engineering, Inc.
4622 Runway Boulevard
Ann Arbor, MI 48108
Tel: 631-560-3497
Contact: Evan Foisy
Email: efoisy@andonline.com
Website: www.andweighing.com

Standard Features and Options

Model Designation:

- G = Type X= Internal Calibration A= A&D Apollo Family N= Legal for Trade Certified

- Initial Zero Setting Mechanism (IZSM)
- Automatic Zero Tracking (AZT)
- AC/DC Adapter
- Liquid Crystal Display
- Tare function
- Draft Shields (model dependent)
- Bracketing of the Display is Used to Identify "d" when it is not equal to "e" (d<e)
- Selectable and sealable e = d or e =10d
- Semi-automatic Zero Setting Mechanism (SAZSM)
- Communication Ports: RS-232, USB
- Level Indicator
- Semi-Automatic (Push button) Tare
- Power Saving Feature (Sleep Mode & Auto Shut Off)
- External printer
- Under Scale weighing
- External Unit Conversion (g, oz, lb, oz t, dwt, c, mg)

"**The counting feature is not legal for trade,**" is labeled on the front of the device for non-prescription models.

Load Cells Used: A&D 1PAGX1603A-K Non NTEP Certified

Temperature Range: 10 ºC to 30 ºC (50 ºF to 86 ºF)

This device was evaluated under the National Type Evaluation Program and was found to comply with the applicable technical requirements of *Handbook 44: Specifications, Tolerances and Other Technical Requirements for Weighing and Measuring Devices*. Evaluation results and device characteristics necessary for inspection and use in commerce are on the following pages. *Editorial changes, not affecting the type or metrological content, corrected this certificate.

Marc Paquette
Chair, NCWM, Inc.

Gene Robertson
Chair, NTEP Committee
Issued: August 22, 2024

9011 South 83rd Street/ Lincoln, Nebraska 68516

The National Conference on Weights and Measures (NCWM) does not approve, recommend or endorse any proprietary product or material, either as a single item or as a class or group. Results shall not be used in advertising or sales promotion to indicate explicit or implicit endorsement of the product or material by the NCWM.

A&D Engineering, Inc.

Non-Computing Scale / GX-AN Series

Model	Capacity (g)	nmax	e (g)	d (g)	pan diameter (inches)	Class
GX-124AEN	120	120 000	0.001	0.0001	3.5 Ø	I
GX-124AN	120	120 000	0.001	0.0001	3.5 Ø	I
GX-203AN	220	22 000	0.01	0.001	5 x 5	II
GX-224AEN	220	220 000	0.001	0.0001	3.5 Ø	I
GX-224AN	220	220 000	0.001	0.0001	3.5 Ø	I
GX-303AN	320	32 000	0.01	0.001	5 x 5	II
GX-324AEN	320	320 000	0.001	0.0001	3.5 Ø	I
GX-324AN	320	320 000	0.001	0.0001	3.5 Ø	I
GX-403AN	420	42 000	0.01	0.001	5 x 5	II
GX-603AN	620	62 000	0.01	0.001	5 x 5	II
GX-2002AN	2200	22 000	0.1	0.01	6.5 x 6.5	II
GX-3002AN	3200	32 000	0.1	0.01	6.5 x 6.5	II
GX-4002AN	4200	42 000	0.1	0.01	6.5 x 6.5	II
GX-6002AN	6200	62 000	0.1	0.01	6.5 x 6.5	II
GX-10001AN	10200	10 200	1.0	0.1	6.5 x 6.5	II

Application: General purpose balance with top loading or under device weighing capability. The GX-AN Series of devices are suitable for use in any class I and II, direct or indirect sale application.

Identification: The device markings are on a pressure sensitive, tamper evident label located on the side of the scale, the appropriate capacity x division markings are adjacent to the weight display.

Sealing: The device can be sealed by threading a wire security seal through two screws on the RS-232 serial interface plate and scale housing. This prevents access to the calibration switch inside the device

Test Conditions: This Certificate supersedes Certificate of Conformance Number 21-045A2 and was issued without additional testing to reactivate Certificate of Conformance 21-045A2 without lapse. Previous test conditions are listed below for reference.

Certificate of Conformance 21-045A2: This certificate supersedes Certificate of Conformance 21-045A1 and is issued to correct the emin in the "For" Box from 0.0001 to 0.001. Previous test conditions are listed below for reference.

Certificate of Conformance 21-045A1: This certificate supersedes Certificate of Conformance 21-045 and is issued to add the class I designation to the applicable models of the GX-AN family. The emphasis of the evaluation was on the device design, operation, environmental factors, performance, and marking requirements. Two models of the GX series the GX-124AN (220 g x 0.001 g), GX-324AN (320 g x 0.001 g) were submitted for evaluation. Multiple increasing/decreasing load and eccentricity tests were performed on the platter. Each device was tested over a voltage range of 85 VAC to 264 VAC. Influence factor tests were conducted over a temperature range of 10 °C to 30 °C (50 °F to 86 °F). Discrimination and level sensitivity tests were performed. All applicable portions of publication 14 checklist were performed. A load of one-half capacity was applied over 100 000 times, increase/decrease testing was performed during this time. At the conclusion of permanence testing an increase/decrease, eccentricity and discrimination tests were repeated. Previous test conditions are listed below for reference.

A&D Engineering, Inc.

Non-Computing Scale / GX-AN Series

Certificate of Conformance 21-045: The emphasis of the evaluation was on the device design, operation, environmental factors, performance and marking requirements. Four models of the GX series the GX-203AN (220 g x 0.01 g), GX-603AN (620 g x 0.01 g), GX-6002AN (6200 g x 0.1 g) and the GX-10001AN (10200 g x 1 g) were submitted for evaluation. Multiple increasing/decreasing load and eccentricity tests were performed on the platter and multiple increase/decrease tests were performed on the under-scale weighing attachment. Each device was tested over a voltage range of 85 VAC to 264 VAC. Influence factor tests were conducted over a temperature range of 10 °C to 30 °C (50 °F to 86 °F). Discrimination and level sensitivity tests were performed. All applicable portions of publication 14 checklist were performed. A load of one-half capacity was applied over 100 000 times, increase/decrease testing was performed during this time. At the conclusion of permanence testing an increase/decrease, eccentricity and discrimination tests were repeated. Testing was performed in both selectable and sealable resolutions of e=d and e=10d to make the GX-AN series comply with direct and indirect sales applications.

Evaluated By: J. Gibson (OH) 21-045; C. Boggs (OH) 21-045A1; J. Gibson (NCWM) 21-045A2 (CN 10875), 21-045A3 (CN 11183)

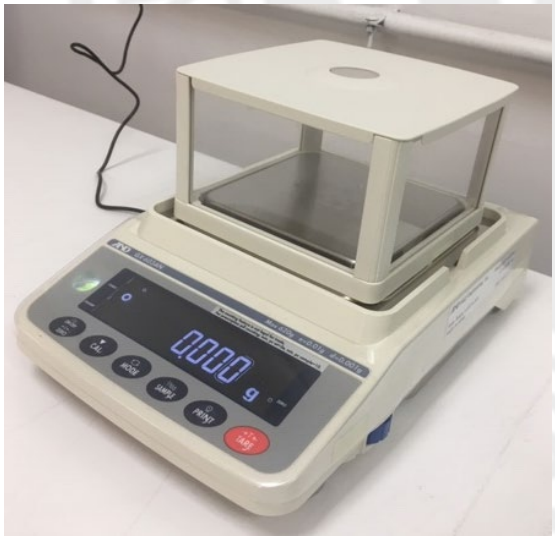
Type Evaluation Criteria Used: *NIST Handbook 44 Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices*, 2022 Edition. *NCWM Publication 14 Measuring Devices*, 2021 Edition.

Conclusion: The results of the evaluation and information provided by the manufacturer indicate the device complies with applicable requirements.

Information Reviewed By: D. Flocken (NCWM) 21-045, 21-045A1, 21-045A2, 21-045A3

Examples of Device:

Models: GX-203AN to GX-603AN



Models: GX-2002AN to GX-10001AN



A&D Engineering, Inc.

Non-Computing Scale / GX-AN Series

Models: GX-124AEN to GX-324AN

