



NATIONAL TYPE EVALUATION PROGRAM

Certificate of Conformance

for Weighing and Measuring Devices

For:

Non-Computing Scale
Digital Electronic, Prescription, Jeweler's
Model: ALE Series (See table on Page2)
 n_{max} : 8200 to 120 000 (See table)
 e_{min} : 0.01 g, 0.1 g & 1 g (See table)
Capacity: 220 g to 15 000 g (See table)
Platform: See "Pan Size: below
Accuracy Class: I & II (See table)

Submitted By:

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Standard Features and Options

Automatic Zero Tracking (AZT)	Auto Shut Off
Initial Zero Setting Mechanism (IZSM)	Alphanumeric Display
Semi-Automatic Zero (Push Button)	Liquid Crystal Display
Push Button Tare	RS232/USB
DC power (USB, battery)	percentage mode
Specific gravity mode (not legal for trade)	Gross/Tare/Net display
Units of Measure (g, oz, lb, gr, c, and PC (pieces in counting mode))	AC/DC Adapter

Optional Features:

Draft Shield (ALE 223N, RN thru ALE 1203N, RN)	Remote printer capability
Additional RS232 communication port	Bluetooth Wireless communication
Relay contact port	

Pan Size: ALE 223N, RN thru ALE 1203N, RN 118 mm Dia. ALE 1502N, RN thru ALE 15001N, RN 180 mm x 160 mm SS.

Temperature Range: 5°C to 35°C (41°F to 95°F) all class II devices and 10°C to 30°C (50°F to 86°F) for ALE 1203N, RN

This device was evaluated under the National Type Evaluation Program and was found to comply with the applicable technical requirements of "NIST 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.

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Chairman, NCWM, Inc.

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Shinko Denshi Co., Ltd.
Non-Computing Scale / ALE Series

Application: Precision weighing, prescription, laboratory, precious metals and gems.

Model*	Capacity	e (g)	D (g)	n _{max}	Temperature Range	Class
ALE 223N, RN	220 g	0.01 g	0.001 g	22 000	5 ⁰ C to 35 ⁰ C	II
ALE 323N, RN	320 g	0.01 g	0.001 g	32 000	5 ⁰ C to 35 ⁰ C	II
ALE 623N, RN	620 g	0.01 g	0.001 g	62 000	5 ⁰ C to 35 ⁰ C	II
ALE 1203N, RN	1200 g	0.1 g	0.001 g	120 000	10 ⁰ C to 30 ⁰ C	I
ALE 1502N, RN	1500 g	0.1 g	0.01 g	15 000	5 ⁰ C to 35 ⁰ C	II
ALE 2202N, RN	2200 g	0.1 g	0.01 g	22 000	5 ⁰ C to 35 ⁰ C	II
ALE 3202N, RN	3200 g	0.1 g	0.01 g	32 000	5 ⁰ C to 35 ⁰ C	II
ALE 6202N, RN	6200 g	0.1 g	0.01 g	62000	5 ⁰ C to 35 ⁰ C	II
ALE 8201N, RN	8200 g	1 g	0.1 g	8200	5 ⁰ C to 35 ⁰ C	II
ALE 15001N, RN	15 000 g	1 g	0.1 g	15 000	5 ⁰ C to 35 ⁰ C	II

*Models with “RN” are equipped with semi-automatic internal calibration weight.

Identification: The required information, the Minimum Piece Weight (MPW) and the Minimum Sample Size (MSS) is on a self-destructive label located on the back of the device. Other required information capacity x division and “The Counting Feature Not Legal for Trade” or “Counting Feature for Prescription Filling Only”, is located on the front of the unit above the display.

Sealing: The balance is physically sealed by applying a pressure sensitive, tamper proof seal over the enclosure screw located on the rear of the unit or with a lead and wire seal thru the u-shaped bracket covering the enclosure screw. There is also a hole on the bottom front of the balance that must be sealed with a pressure sensitive tamper evident security seal preventing access to the Legal/non-legal for trade switch.

Test Conditions: This Certificate is issued based upon the following tests and information provided by the manufacturer. The models ALE 223RN, ALE 623RN, ALE 1203RN, ALE 6200RN and ALE15001RN were submitted for evaluation. The emphasis of the evaluation was on device design, performance, operation, marking requirements, compliance with influence factors and verifying that the indicated piece count value complies with the tolerances in NCWM Publication 14 Table T.N.3.10. Several increasing/decreasing, load and shift tests were conducted. The scales were tested over a temperature range of 5° C to 35° C (41° F to 95° F) for all class II devices and 10° C to 30° C (50° F to 86° F) for ALE 1203N, RN. A load of approximately one-half capacity was applied to the scales 100,000 times with the scales being tested periodically during this time. Tests were conducted using 102V AC and 264V AC and 3.55 VDC and 6.6 VDC power supplies. Peripheral USB supplied DC power was also tested at 3.47 VDC and 6.6 VDC.

Evaluated By: J. Gibson (OH)

Type Evaluation Criteria Used: NIST Handbook 44 Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices, 2017 Edition. NCWM Publication 14 Weighing Devices, 2017 Edition.

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



Shinko Denshi Co., Ltd.
Non-Computing Scale / ALE Series

Information Reviewed By: J. Truex (NCWM)

Examples of Device:

ALE 223N (RN) thru ALE 1203N (RN)

ALE 1502N (RN) thru ALE 15001N (RN)





Shinko Denshi Co., Ltd.
Non-Computing Scale / ALE Series

Sealing ALE 1502N (RN) thru ALE 15001N (RN)

Sealing ALE 223N (RN) thru ALE 1203N (RN)



OR



OR



Sealing ALE 1502N (RN) thru ALE 15001N (RN)

Sealing ALE 223N (RN) thru ALE 1203N (RN)

