NATIONAL TYPE EVALUATION PROGRAM

Certificate of Conformance

for Weighing and Measuring Devices

For:
Non-Computing Scale
Digital Electronic
Model: Secura Series
n_{max}: 220 000 (See table page 2)
e_{min}: 0.1 mg (See table on page 2)
Capacity: 120 g to 6100 g (See table on page 2)
Platform: 90 mm, 120 mm, 180 mm Dia.
Accuracy Class: I & II (See Table page 2)

Submitted By:
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Standard Features and Options

- Semi-automatic (push-button) Zero
- Draft Shield (Model dependent)
- Automatic Zero Tracking Mechanism (AZT)
- External Unit Conversion key (kg, g, mg, c)
- Initial Zero Setting Mechanism (IZSM)
- External printer
- USB communication port
- Category 1 Physical Seal
- Touch Screen
- LCD Display
- AC Voltage
- Gross/Net display
- Bubble Spirit Level Indicator
- Percent Weighing
- Bracketing of the Display is Used to differentiate “d” from “e” (d<e)
- External Unit conversion (kg, g, mg, ct)
- Semi-Automatic Push Button tare
- Automatic internal calibration

Load Cell Used:

Sartorius Lab Instruments Model: SQP-A and SQP-I for class I devices and Model SQP-B, SQP-C for class II devices all load cells electromagnetic force compensation. (Non-NTEP)

Limitation of Use: **All Models are for use in Indirect sale applications only.**

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 “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.

Hal Prince
Chairman, NCWM, Inc.

Craig VanBuren
Committee Chair, NTEP Committee
Issued: February 17, 2021

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Sartorius Lab Instruments GmbH & Co. KG
Non-Computing Scale / Secura Series

Application: General purpose top loading balance. The Secura Series of scales are suitable for use in any class I & II indirect sale application.

Identification: The device markings are on a pressure sensitive, tamper evident label displaying a "Checkerboard" pattern when removed the appropriate capacity x division markings are digital and incorporated in the weight display.

Sealing: The device uses a category 1 physical seal. The device is sealed by threading a wire security seal through the two plastic drilled protrusions on the rear housing and thru the drilled hole in the sliding switch protrusion that prevents access to the menu switch inside the device that allows configuration parameter changes.

Model	Capacity	e	d	Class	n_{max}
SECURA124-1NUS	120 g	1 mg	0.1 mg	I	120 000
SECURA224-1NUS	220 g	1mg	0.1mg	I	220 000
SECURA1103-1NUS	1100 g	10mg	1mg	I	110 000
SECURA213-1NUS	210 g	10 mg	1mg	II	21 000
SECURA313-1NUS	310 g	10 mg	1mg	II	31 000
SECURA513-1NUS	510 g	10 mg	1mg	II	51 000
SECURA613-1NUS	610 g	10 mg	1 mg	II	61 000
SECURA612-1NUS	610 g	100 mg	10 mg	II	6100
SECURA1102-1NUS	1100 g	100 mg	10 mg	II	11 000
SECURA2102-1NUS	2100 g	100 mg	10 mg	II	21 000
SECURA3102-1NUS	3100 g	100 mg	10 mg	II	31 000
SECURA5102-1NUS	5100 g	100 mg	10 mg	II	51 000
SECURA6102-1NUS	6100 g	100 mg	10 mg	II	61 000
SECURA3101-1NUS	3100g	100 mg	100 mg	II	31 000
SECURA6101-1NUS	6100g	100 mg	100 mg	II	61 000

Test Conditions: The emphasis of the evaluation was on the device design, operation, environmental factors, performance and marking requirements. Four models of the Secura series the Secura224-1NUS (220 g x 0.0001 g), Secura1103-1NUS (1100 g x 0.001 g), Secura613-1NUS (610 g x 0.01 g) and the Secura6102-1NUS (6100 g x 0.1 g) were submitted for evaluation. Multiple increasing/decreasing load and eccentricity tests were performed. Each device was tested over a voltage range of 102 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. Printing functions were tested utilizing the RS-232 and USB port to an external printer. 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 test was repeated.

The devices were evaluated by Measurement Canada under the Mutual Recognition Agreement and the technical data was reviewed by the Ohio NTEP laboratory.

Sartorius Lab Instruments GmbH & Co. KG
Non-Computing Scale / Secura Series

Evaluated By: R. Henshaw (MC), J. Gibson (OH)

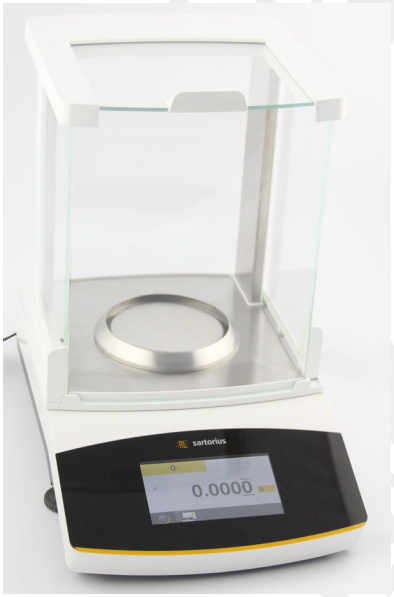
Type Evaluation Criteria Used: *NIST Handbook 44 Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices*, 2020 Edition. *NCWM Publication 14 Measuring Devices*, 2020 Edition.

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)

Example(s) of Device:

SECURA124-1NUS & SECURA224-1NUS



SECURA1103-1NUS

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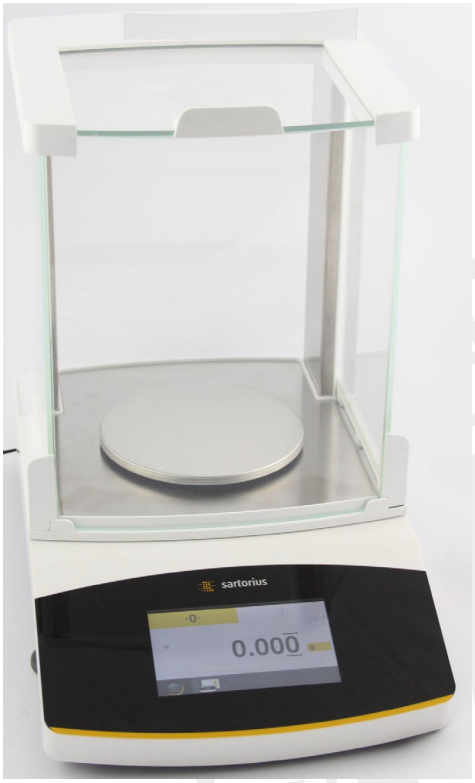
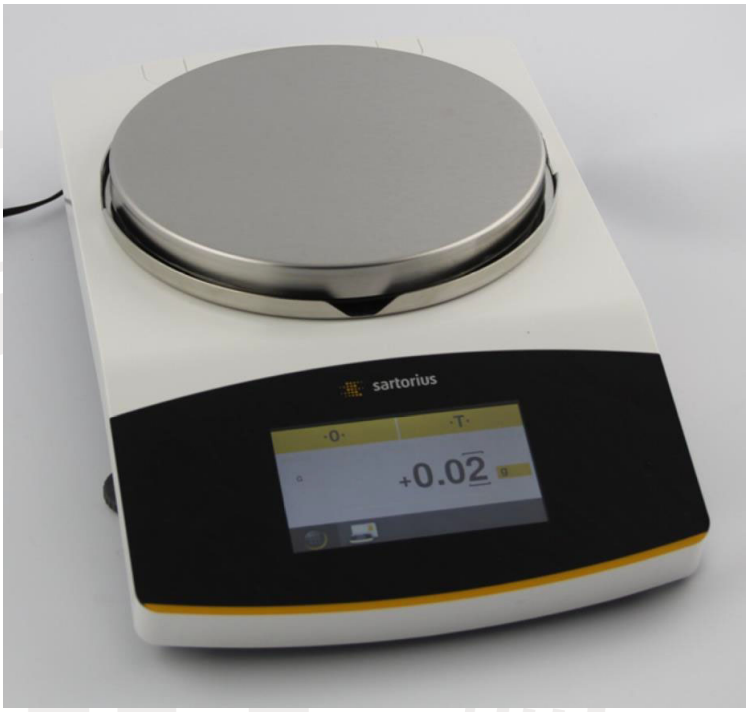
SECURA613/513/313/213



SECURA6102/5102/3102/2102/1102



Sealing all models of Class I and Class II devices

Sartorius Lab Instruments GmbH & Co. KG
Non-Computing Scale / Secura Series

Sliding cover when closed and sealed prevents access to the menu switch that controls access to configuration parameters.