



NATIONAL TYPE EVALUATION PROGRAM

Certificate of Conformance

for Weighing and Measuring Devices

For:

Indicating Element
Digital Electronic
Models: R310, R320, R323, X320, R420 and R423
 n_{\max} : 10 000
Accuracy Class: III/III L

Submitted By:

Rinstrum Pty Ltd
41 Success Street Acadia Ridge
Qld 4110 Australia
Tel: +61 7 32167166
Fax: +61 7 32166211
Contact: Darren Pearson
Email: Darren.pearson@rinstrum.com
Web site: www.rinstrum.com

Standard Features and Options

- Semi-automatic (push button) zero setting mechanism (SAZSM)
- Automatic Zero Tracking (AZT)
- Gross/Net Display (Models: R320, R323 and X320)
- Gross and Net Accumulation
- Liquid Crystal (LCD) Display
- AC or DC Power
- Semi-automatic (push button) Tare
- One Bi-directional Communication Poert
- Keyboard Tare (Models: R420 and R423)
- ABS Plastic Enclosure (desktop or panel mount) (Models: R310, R320 and R420)
- Composite Plastic Enclosure (desktop) (Model: X320)
- Stainless Steel (Models: R323 and R423)
- Category II Audit Trail Capability (see page two)
- Silicon Rubber Keypad (Models: R310, R320 and R420)
- Membrane Keypad (Models: R323 and R423)
- Capacitive Keypad (Model: X320)
- External Unit Selection (kg, lb, g, t)
- Gross/Tare/Net Display (Models: R420 and R423)
- Battery Saving Feature (auto shut off)
- Multiple Range Capacity
- Multi-interval Capacity
- Rinstrum Viewer Software

Temperature Range: -10 °C to 40 °C (14 °F to 104 °F)

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.

Randy Jennings
Chairman, NCWM, Inc.

Jack Kane
Chairman, National Type Evaluation Program Committee
Issued: July 23, 2009

1135 M Street, Suite 110 / Lincoln, Nebraska 68508

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.



Rinstrum Pty Ltd

Indicating Element / R310, R320, R323, X320, R420 and R423

Application: General-purpose indicator for use with certified and compatible Class III or III L weighing elements.

Identification: An adhesive identification badge is located on the front of the device (Models: R310, R320, R323, R420 and R423). The Model X320 identification badge is inside the enclosure and is visible through a clear plastic window.

Sealing: This device is equipped with non-resettable counters that increment every time the unit is calibrated or configured. To view the counters:

1. Press and hold the power key for 3 seconds to turn off the indicator.
2. Press the power key to turn the indicator back on.
3. The event counters will be displayed during the power up sequence for approximately two seconds.
 - a. The calibration counter will be identified by C.xxxxx (example: C.00005).
 - b. The setup configuration counter will be identified by F.xxxxx (example: F.00005).

Calibration mode by default is accessed via front panel keys protected with a 6-digit PIN code. Alternatively calibration mode can be accessed via a button marked "setup" located on the rear of the indicator which can be protected using traditional physical seals in addition to the PIN code. Enable the rear "setup" button as follows:

- The Models: R310, R320, X320 and R323 setup button is located in the lower middle. The r.entry parameter must be set to "on."
 1. Press [POWER] + [F1] to access the setup mode ([POWER] + [GROSS/NET] on the X320).
 2. Press [ZERO] to the OPTION menu.
 3. Press [TARE] to the r.entry parameter.
 4. Press [GROSS/NET] to view the parameter.
 5. Press [PRINT] to turn on if set to off.
 6. Press [F] to accept change.
 7. Press [POWER] + [F1] to save the change and exit the setup mode.
 8. Press the setup button to access the setup mode and make changes or calibrate.
 9. Press [POWER] + [F1] ([POWER] + [GROSS/NET] on the X320) to save the change and exit the setup mode. The setup mode cannot be accessed again without pressing the rear "setup" button.
 10. Press Place the physical seal plastic cover over the load cell and comm port connectors (R310, R323, R320 panel mount installation) and install the drill head screws.
 11. Thread the wire security seal through the drill head screws.
- The Models: R420 and R423 setup button is located above the load cell connector.
 1. Press the setup button to access the setup mode and make changes or calibrate.
 2. Press [ZERO] to SCALE.
 3. Press [TARE] to OPTION.
 4. Press [GROSS/NET] to r.entry.
 5. Press the UP ARROW to "on."
 6. Press [OK].
 7. Press [POWER] + [F3] to save the change and exit the setup mode. The setup mode cannot be accessed again without pressing the rear "setup" button.
 8. For panel mount applications place the physical seal plastic cover over the load cell connector and install the drill head screws.
 9. Thread the wire security seal through the drill head screws

Test Conditions: This Certificate supersedes Certificate of Conformance Number 08-072 and is issued to add the Models R310 and R423. The R310 and R423 models are virtually the same metrologically as other models evaluated in the series of indicators. No additional testing was deemed necessary. Previous test conditions are listed below for reference.



Rinstrum Pty Ltd

Indicating Element / R310, R320, R323, X320, R420 and R423

Certificate of Conformance Number 08-072: The emphasis of the evaluation was on the device design, operation, marking requirements and compliance with influence factor requirements. The indicator was interfaced with a load cell simulator and then tested for accuracy over a temperature range of -10 °C to 40 °C (14 °F to 104 °F). The indicator was interfaced with a GSE Model 4700 (Certificate of Conformance 05-058) 100 lb x 0.02 lb weighing element and a printer. The device was tested for discrimination, power interruption, zero tests, and print format. Additionally, the device was tested with a supply voltage of 100VAC to 130VAC and 10.8VDC to 26.4VDC.

Evaluated By: A. McCoy and J. Morrison (OH) 08-072

Type Evaluation Criteria Used: NIST, Handbook 44: Specifications, Tolerances and Other Technical Requirements for Weighing and Measuring Devices, 2008. NCWM, Publication 14: Weighing Devices, 2008

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

Information Reviewed By: J. Truex (NCWM) 08-072, 08-072A1

Example of Devices:



Model R310



Model R320



Model R323



Model RX320



Model R420



Model R423