

NATIONAL TYPE EVALUATION PROGRAM

Certificate of Conformance for Weighing and Measuring Devices

For:

Computing Scale Digital Electronic

Models: UNI-7 Series and UNI-5 Series

n_{max}: 3 000

 e_{min} : 0.005 lb / 0.002 kg / 0.1 oz Capacity: 30 lb / 15 kg / 480 oz Platform: 15.75 in x 10.75 in

Accuracy Class: III

Submitted By:

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Standard Features and Options

- Semi-automatic (push-button) Zero Setting Mechanism
- Automatic Zero Tracking (AZT)
- Initial Zero Setting Mechanism (IZSM)
- Semi-automatic (push-button) Tare
- RS-232 Serial Port and Network Communications
- Programmable Unit Price, Commodity Name, UPC Numbers
- Unit Price and Tare Save Key
- Percentage Tare

- Keyboard Tare
- Tare/Net Display
- Units (lb, kg)
- Programmable (PLU) Tare
- Integral Printer
- AC Power
- LCD Display, Touch Screen

• Load Cell Used: Ishida Model CLC 25L or NMB Model CLC-25N for 15kg (30 lb), non-NTEP Ishida Model CLC 50L or NMB Model CLC-50N for 30kg (60 lb), non-NTEP

Models	Cap x d (lb)	Cap x d (kg)	Cap x d (oz)	Suffix Designation
UNI-7 TYPE B/H*	60 x 0.02	30 x 0.01	0 to 240 oz x 0.1 oz	B: Regular Customer Display
	OR	OR	240 to 480 oz x 0.2 oz	H: Hanging
UNI-7 TYPE P*	30 x 0.01	15 x 0.005		P: Customer Display on Pole
UNI-7 TYPE EV1	OR	OR		EV1: Label Printer/Display on Pole
UNI-7 TYPE EV2	0 to 15 x 0.005	0 to 6 x 0.002		EV2: Label Printer/Display/Receipt
	15 to 30 x 0.01	6 to 15 x 0.005		Printer on Pole
UNI-7 TYPE RP		OR		RP: Remote Platter
WM-NANO		0 to 6000 g x 2 g		WM-NANO: UNI-7 RP (remote
UNI-5 TYPE B*		6000 g to 15000 g x 5 g		platter) with Wrapping Machine
UNI-5 TYPE P*				
UNI-5 TYPE EV1				

^{*}Models Evaluated

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.

Brett Gurney Chairman, NCWM, Inc.

Chairman, National Type Evaluation Program Committee

Issued: June 12, 2019

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Computing Scale / UNI-7 and UNI-5 Series

Application: General purpose industrial, retail, self-service and pre-packaging scale.

<u>Identification</u>: The required markings are located on the right side of the scale. The capacity and division size information is adjacent to the weight display. For UNI-7 type RP, the markings are located on the right side of the indicator and of the platter unit. The capacity and division size information is adjacent to the weight display. Type H, the required marking is adjacent on the bottom of main body.

<u>Sealing</u>: For UNI-7 and UNI-5, a tamper-evident paper seal over two screws underneath the scale platter prevents access to the calibration switch inside. One screw prevents access to the calibration switch and the other screw protects the integrity of the case. Option 1 to seal access to the UNI-7 type RP and WM-Nano calibration switch is with a wire security seal through the bolt securing the access plate to the A/D board cover and a hole in the cover. Option 2 is two seal access to the case removal screws by sealing two of the four platform support bolts with a wire security seal. For WM-Nano, option 3 is calibration switch is over a cover plate secured with a wire security seal. For UNI-7 H, a tamper-evident paper seal over two screws on the top of main body which prevents access to the calibration switch inside and opening case. One screw prevents access to the calibration switch and the other screw protects the integrity of the case.

<u>Test Conditions</u>: This certificate supersedes Certificate of Conformance number 07-005A3 and is issued without additional tests to update the contact information for the certificate holder. Previous test conditions are listed below for reference.

Certificate of Conformance Number 07-099A3: This Certificate supersedes Certificate of Conformance Number 07-099A2 and is issued to include the model UNI-7 TYPE H, UNI-7 (240 oz x 0.1 oz / 480 oz x 0.2 oz), UNI-7 (6000 g x 2 g / 15000 g x 5 g) and the 60 lb x 0.02 lb capacity scale. The UNI-7 H test data was received from Measurement Canada under the MRA agreement and evaluated as passing all NTEP requirements. The 60 lb x 0.02 lb capacity device was fully tested. Previous test conditions are listed below for reference.

<u>Certificate of Conformance Number 07-099A2</u>: This Certificate supersedes Certificate of Conformance Number 07-099A1 and is issued to include the model UNI-7 TYPE RP and the UNI-5 scale series. The model UNI-7 TYPE RP consists of the scale for the IP-EMZ (see NTEP Certificate of Conformance 06-029A1) with load cell from the 3000/4000Series (see NTEP Certificate of Conformance 95-057A7) and the UNI-7 without the load cell and A/D converter board. The difference between UNI-7 and UNI-5 is the customer's display for the UNI-7 is color, and the customer's display for the UNI-5 is monochrome. No additional testing was deemed necessary. Previous test conditions are listed below for reference.

<u>Certificate of Conformance Number 07-099A1</u>: This Certificate supersedes Certificate of Conformance Number 07-099 and is issued to correct an error in the Standards Features and Option box on page 1. The capacity by division for the kg version of this device was incorrectly stated. No further testing was deemed necessary.

Certificate of Conformance Number 07-099: The models, UNI-7 TYPE B and UNI-7 TYPE P, computing scales, were submitted for evaluation. The emphasis of the evaluation was on device design, operation, marking requirements, compliance with influence factor requirements, and accuracy of computations. Several increasing, decreasing, and eccentric loading tests were conducted to evaluate the performance of the scale. Also, each scale was tested over a voltage range of 100 VAC to 130 VAC. Influence factor tests were conducted over a temperature range of -10 °C to 40 °C (14 °F to 104 °F). Several receipts were printed utilizing the RS-232 serial port connected to the scale and several receipts were generated using the integral receipt printer. Additionally, a load of approximately half capacity was applied to this scale over 100 000 times. The scale was tested periodically over this time for accuracy, zero functions and general metrological operation.

Evaluated By: S. Boyd (CA) 07-099; J. Raspino (CA) 07-099A2; C. Harris (OH) 07-099A3

<u>Type Evaluation Criteria Used:</u> NIST, <u>Handbook 44: Specifications, Tolerances and Other Technical Requirements for Weighing and Measuring Devices</u>, 2012. NCWM, <u>Publication 14: Weighing Devices</u>, 2012.

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

<u>Information Reviewed By</u>: J. Truex (NCWM) S. Patoray, L. Bernetich (NCWM) 07-099, 07-099A1; J. Truex (NCWM) 07-099A2, 07-099A3; D. Flocken (NCWM) 07-099A4





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Computing Scale / UNI-7 and UNI-5 Series

Examples of Device:



Model UNI-7 TYPE RP



TYPE RP Sealing Option 1



TYPE RP Sealing Option 2



Model UNI-7 Front View

Model UNI-7 B



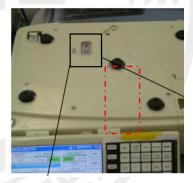
Model UNI-7 P Rear View Model UNI-7 B



Model UNI-7 EV-2 Front View



Model UNI-7 EV-2 Rear View



TYPE UNI-7 and UNI-5 B, P, EV1. EV2, Sealing



Model UNI-5EV1 Front View



Model UNI-5 P Front View



UNI-5 B Front View





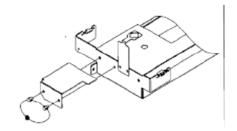
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Model WM-NANO (UNI-7 RP with Wrapping Machine) Front View

Nano's searing as alternative



TYPE WM-NANO (UNI-7 RP with Wrapping Machine) Sealing Option 3



Model UNI-7 H

TYPE H sealing