

NATIONAL TYPE EVALUATION PROGRAM

Certificate of Conformance for Weighing and Measuring Devices

For: Non-Computing Scale Digital Electronic Model: UFM Series n_{max}:3000 and 6000 (see below) e_{min}: (see below) Capacity: 60 to 1200 lb / 30 to 600 kg (see below) Platform: (see below) Accuracy Class: III Submitted By:

Liquid Crystal Display

• Level Indicating Means

• AC/DC Adapter

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• Battery Power Supply (rechargeable)

• Battery Saving Feature (auto shut off)

Standard Features and Options

- Semi-Automatic (push-button) Zero Setting Mechanism
- Initial Zero Setting Mechanism (IZSM) (on/off switch)
- Automatic Zero Setting Mechanism (AZSM)
- Semi-Automatic (push-button) Tare
- External lb/kg Selection
- Weight Accumulation
- Load Cell Used in the Model UFM-B series is the UWE-042 and in the other models is the UWE-263 (non-NTEP)

This certificate is applicable to the following models and capacities. The letter following the UFM in the model refers to the platform size. The number following the letter refers to the device capacity in kilograms.

Model	Capacity (lb)	Capacity (kg)	n _{max}	Platform size
UFM-B30	60 x 0.02	30 x 0.01	3000	330 x 450 mm
UFM-B60	150 x 0.05	60 x 0.02	3000	330 x 450 mm
UFM-B150	300 x 0.1	150 x 0.05	3000	330 x 450 mm
UFM-F30	60 x 0.01	30 x 0.005	6000	420 x 520 mm
UFM-F60	120 x 0.02	60 x 0.01	6000	420 x 520 mm
UFM-F120	250 x 0.05	120 x 0.02	6000	420 x 520 mm
UFM-F300	600 x 0.1	300 x 0.05	6000	420 x 520 mm
UFM-L60	120 x 0.02	60 x 0.01	6000	500 x 600 mm
UFM-L120	250 x 0.05	120 x 0.02	6000	500 x 600 mm
UFM-L300	600 x 0.1	300 x 0.05	6000	500 x 600 mm
UFM-L600	1200 x 0.2	600 x 0.1	6000	500 x 600 mm

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. *Editorial changes, not affecting the type or metrological content, corrected this certificate.

Jerry Buendel Chairman, NCWM, Inc.

Ronald Hayes Chairman, National Type Evaluation Program Committee Issued: November 6, 2015

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Universal Weight Electronic Co., Ltd.

Non-Computing Scale / UFM Series

Application: For use as a general-purpose scale.

Identification: The required information is on a self-destructive label is affixed to the back of the indicator case.

<u>Sealing</u>: Two wire security seals are needed to prevent access to the internal calibration jumper (pin JP1), located on the main circuit board. Access is prevented by inserting plastic caps on top of two recessed screws. The screws hold the indicator case together. Wire security seals may be threaded through the plastic caps and through molded tabs in the indicator case. When pin JP1 is jumped on the main circuit board, external access to the calibration mode is enabled through the keypad. To verify whether access to external calibration is enabled or disabled:

- Hold the "MODE" key while turning the device on
- "CAL1" is displayed if the jumper is in the unsealed position
- Press the "ZERO" key to exit
- If the jumper is in the sealed position "S1 on is display and the device returns to the weight display

An additional wire security seal is needed to seal the quick release load cell cable connector to the indicator case, to prevent the indicator head from being removed from the scale base. A metal ring with tabs fixed to the indicator at the male load cell cable connector entry, wire security seals may be threaded through the tabs and a ring on the female connector, preventing disconnection of the cable.

<u>Test Conditions</u>: This certificate supersedes Certificate of Conformance Number 04-100 and was issued to recognize a change to the company name from Universal Weight Enterprise C.., Ltd to Universal Weight Electronic Co., Ltd. Contact information has also been updated. No additional testing was deemed necessary. Previous test conditions are listed below for reference.

<u>Certificate of Conformance Number 04-100</u>: The emphasis of the evaluation was on the device design, marking requirements, operation and compliance with influence factor requirements. The Models UFM-B30, 60 lb capacity, UFM-F300 600 lb capacity and UFM-L600, 1200 lb capacity devices were submitted for testing. Several increasing/decreasing load and shift tests were performed. The device was tested over a temperature range of $-10 \,^{\circ}$ C to $40 \,^{\circ}$ C (14 $^{\circ}$ F to $104 \,^{\circ}$ F). A load of half capacity was applied to each base over 100 000 times. The scale was tested periodically during this time. The device was tested over a voltage range of 100 VAC to 130 VAC and 9.0 to 3.4 VDC.

Evaluated By: A. McCoy (OH) 04-100

Type Evaluation Criteria Used: NIST, Handbook 44: Specifications, Tolerances and Other Technical Requirements for Weighing and Measuring Devices, 2004. NCWM, Publication 14: Weighing Devices, 2004.

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

Information Reviewed By: S. Patoray, L. Bernetich (NCWM) 04-100; J. Truex (NCWM) 04-100A1

Example of Device:

