

NATIONAL TYPE EVALUATION PROGRAM

Certificate of Conformance for Weighing and Measuring Devices

For: Non-Computing Scale Digital Electronic Model: APM Series n_{max} : 3 000 Capacity: (see below) Platform: 13.125 in x 11 in Accuracy Class: III Submitted By:

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Standard Features and Options

- Semi-Automatic (push-button) Zero
- Automatic Zero Setting Mechanism (AZSM)
- Semi-Automatic (push-button) Tare
- Initial Zero Setting Mechanism (IZSM) (on/off switch)
- External lb/kg Selection
- Weight Accumulation
- Liquid Crystal Display
- Remote Display
- AC/DC Adapter
- Battery Power Supply (rechargeable)
- Battery Saving Feature Auto Shut-off

This certificate is applicable to the following models and capacities: APM-15, APM-30, APM-60 and APM-150. The number following the APM- designates the device capacity in kilograms.

Model Number	Capacity	Load Cell	NTEP CC Number
APM-15	30 x 0.01 lb (15 x 0.005 kg)	Vishay Transducers model 1022 20kg	96-122A1
APM-30	60 x 0.02 lb (30 x 0.01 kg)	Vishay Transducers model 1022 35 kg	96-122A1
APM-60	150 x 0.05 lb (60 x 0.02 kg)	Vishay Transducers model 1022 100kg	96-122A1
APM-150	300 x 0.1 lb (150 x 0.05 kg)	Vishay Transducers model 1022 200kg	Non NTEP

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 / APM Series

Application: For use as a general-purpose scale.

Identification: A self-destructive identification label is affixed to the back of the indicator case, and an additional self- destructive identification label is on right side of the weighing element case. The serial number is repeated on both labels.

Sealing: 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 key pad. To verify whether access to external calibration is enabled or disabled:

- Hold the "MODE" key while turning the device on.
- "CAL._1" 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 displayed and the device returns to the weight display.

<u>Test Conditions</u>: This certificate supersedes Certificate of Conformance Number 03-055 and was issued to recognize a change to the company name from Universal Weight Enterprise Co., 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 03-055</u>: The emphasis of this evaluation was on device design, marking, operation, and compliance with influence factors. The model APM-15, 30 lb capacity and APM-150, 300 lb capacity were tested for accuracy over a temperature range of: -10 °C to 40 °C (14 °F to 104 °F). A load of approximately one-half scale capacity was applied to the devices 100 000 times. Increasing/decreasing load and shift tests were conducted periodically during this time. The devices were tested over a voltage range of 100 VAC to 132 VAC and 9.0 to 3.3 VDC. The devices were tested with their maximum IZSM load applied.

Evaluated By: A.P. Buie, J.T. Price (MD) 03-055

Type Evaluation Criteria Used: NIST, Handbook 44: Specifications, Tolerances and Other Technical Requirements for Weighing and Measuring Devices, 2003. NCWM, Publication 14: Weighing Devices, 2003.

<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 (NCWM), L. Bernetich (NCWM) 03-055; J. Truex (NCWM) 03-055A1

Example of Device:

