**National Conference on Weights and Measures**
15245 Shady Grove Road, Suite 130 • Rockville, MD 20850



# *National Type Evaluation Program*
## *Certificate of Conformance*
## *for Weighing and Measuring Devices*

**For:**
Computing Scale
Digital Electronic
Model: AP-1
$n_{max}$: 3000
Capacity: See Below
Platform: 8.4" X 13.1"

Accuracy Class: III

**Submitted by:**
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### Standard Features and Options

| Model AP-1 | Model AP-1-60 |
|---|---|
| Capacity: 30 lb x 0.01 lb and 15 lb x 0.005 lb | Capacity: 0-30 x 0.01 lb / 30-60 x 0.02 lb |
| Automatic zero setting mechanism (AZSM) | Multi-interval |
| Semi-automatic(push-button) zero setting mechanism | Automatic zero setting mechanism (AZSM) |
| Initial zero setting mechanism (ISZM) (on/off switch) | Semi-automatic(push-button) zero setting mechanism |
| Semi-automatic (push-button) tare | Initial zero setting mechanism (ISZM) (on/off switch) |
| Tare save key | Semi-automatic (push-button) tare |
| Keyboard tare | Save key (tare and unit price) |
| Pre-pack mode key | Keyboard tare |
| Total price accumulation for multiple sales | Numeric keypad |
| Numeric keypad | 1/2 and 1/4 multiplier keys |
| 1/2 and 1/4 multiplier keys | 28 Programmable PLU keys |
| 28 Programmable PLU keys | 200 Programmable PLU codes |
| Customer display | Customer display |
| AC power | RS232 uni-directional communication (printer) |
| | AC power |
| | |
| Load cell: CAS Model BC-15 (15 kg) (30 lb model) | Load cell: CAS Model BC-30A (30 kg)Non NTEP |
| CAS Model BC-6 (6kg) (15 lb model) | |

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

This device was evaluated under the National Type Evaluation Program (NTEP) and was found to comply with the applicable technical requirements of 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.

Ross J. Andersen
Chairman, NCWM, Inc.

Louis E. Straub
Chairman, National Type Evaluation Program Committee

Issue date: June 20, 2003

**CAS (USA) Corporation**
**Electronic Computing Scale**
**Model: AP-1**

**Application:** General purpose computing scale for direct sale or pre-pack use.

**Identification:** The metal identification plate is riveted to the left side of the scale housing.

**Sealing:** A threaded bolt on the rear of the scale adjacent to the base of the pedestal display provides access to the calibration switch. Access is prevented by threading a wire security seal through the bolt and an adjacent drilled head screw.

**Test Conditions:** This certificate supersedes Certificate of Conformance Number 95-007 and is issued to add a, 60 lb capacity, multi-interval model and RS232 printing capability. The emphasis of this evaluation was on device design, operation, marking, and performance. The CAS AP-1-60 multi-interval model was tested over a temperature range of -10 °C to 40 °C (14 °F to 104 °F). A load of approximately one half scale capacity was placed on the device 100 000 times. Increasing/decreasing load and shift tests were conducted periodically during this time. The scale was tested interfaced with a Nuri Data Systems model ND-192 tape printer via the RS232 port. Price computations were evaluated and the scale was tested over a voltage range of 100 to 132 VAC. Previous test conditions are listed below for reference.

**Certificate of Conformance 95-007:** The 30 x 0.01 lb and 15 x 0.005 lb versions of model AP-1 were evaluated. The emphasis of the evaluation was on device design, operation, and compliance with influence factor requirements. Both devices were tested over a temperature range of -10 °C to 40 °C. Loads of approximately one-half capacity were applied to both scales over 100 000 times. Increasing load, decreasing load, and shift tests were conducted periodically during this time. In addition, the 30 lb scale was tested at supply voltages of 100 and 130 VAC.

The results of the evaluation indicate the device complies with applicable requirements of Handbook 44.

**Type Evaluation Criteria Used:** NIST Handbook 44, 2003 Edition

**Tested By:** W. Fishman (NY), E. Szesnat (NY) 95-007, A. P. Buie, J. T. Price (MD) 95-007A1

**Reviewed By:** S. Patoray (NCWM), L. Bernetich (NCWM) 95-007A1