## **National Conference on Weights and Measures**

15245 Shady Grove Road, Suite 130 • Rockville, MD 20850

Certificate Number: 06-013

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

For:

Computing Scale Load Cell, Electronic Model: S2000 Jr nmax: 3000

Capacity: See Below d = e = See Below

Platform: 8.66 inch x 12 inch (220 mm x 304 mm)

Accuracy Class: III

**Submitted by:** 

CAS USA Corporation 99 Murray Hill Parkway East Rutherford, NJ 07073

Tel: 800-223-4227, 201-933-9002

Fax: 201-933-9025

Email:charlieg@cas-usa.com Contact: Charles Gabriel

## **Standard Features and Options**

Available with multi-interval of:

Capacity, lb	$\mathbf{d} = \mathbf{e}$	Capacity, kg	$\mathbf{d} = \mathbf{e}$
0-6/6-15 lb	0.002 / 0.005 lb	0-3 / 3-6 kg	0.001 / 0.002 kg
0-15 / 15-30 lb	0.005/ 0.01 lb	0-6 / 6-15 kg	0.002 / 0.005 kg
0-30 / 30-60 lb	0.01 / 0.02 lb	0-15 / 15-30 kg	0.005 / 0.01 kg

Display: dual LCD or VFD, base mount or pole displays

PLU capability, 199 numbers, 28 names

Tare: platter, key board, programmed with PLU

Enunciators for: lb or kg and \$/lb or \$/kg

Multiplier keys for 1/4 and 1/2 pricing, where permitted

AC power supply with internal recharging DC battery with low battery indicator

Load cells: CAS Non-NTEP	TP 6L, 6 kg	TP 15L, 15 kg	TP 30 L, 30 kg
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## **Options**

Thermal printer, external, CAS model DLP-50 or equilivant, using RS232 communication

Temperature Range: 0 °C to 40 °C (32 °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.

Don Onwiler Chairman, NCWM, Inc.

Chairman, National Type Evaluation Program Committee Issued Date: January 16, 2006

Automatic zero setting mechanism (AZSM)

Initial zero setting mechanism (IZSM)

Semi-automatic (push button) zero

Back light and power saver options

Note: The National Conference on Weights and Measures 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.

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CAS USA Corp. Computing Scale Model: S2000 Jr

**Application:** General purpose computing scale for direct sale of commodities in stores such as: supermarkets, delicatessens and groceries.

**<u>Identification:</u>** A metallic Identification tag is riveted to the left side of the scale.

<u>Sealing:</u> This scale utilizes a category one sealing method. The scale may be sealed with a wire security seal. This seal is threaded through two sealing bolts which secure a sealing plate that prevents access to the calibration switch. The seal is located under the scale in a recessed area in front of the DC battery compartment.

**Operation:** Model S2000 Jr. available in several different configurations, they include three multi-interval capacities and two display configurations. This scale has an eternal lb/kg conversion switch which only operates at gross load zero. The scale has dual markings and the lb/kg switch changes enunciators for proper indications. Tare weight may be entered using: platter tare, key board tare and tare programmed with a PLU. This scale has ¼ and ½ lb multiplier keys that are protected by the security seal and may be activated in those jurisdictions that allow that method of sale. Weight labels issued from a remote printer connected to this scale, must meet all the applicable requirements of NIST Handbook 130.

Test Conditions: Two multi-interval versions model S2000 Jr. were evaluated; a 0-6 /6-15 lb x 0.002 / 0.005 lb and a 0-30 / 30-60 lb. x 0.01 / 0.02 lb. 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 0 °C to 40 °C. Loads of approximately one-half capacity were applied to the 0-6 /6-15 lb version over 100 000 times. Increasing and decreasing loads, and shift tests were conducted periodically during this time. In addition, 0-30/30-60 lb scale was evaluated with power supply voltages of 100 and 130 VAC and the DC battery voltage from 6 VDC to 4 VDC. A remote printer was connected to the scale through the RS232 communication port, to evaluate the print format.

Type Evaluation Criteria Used: NIST Handbook 44, 2006 Edition, NCWM Publication 14, 2005 Edition

**Tested By:** B. Fishman (NY)

**Conclusion**: The results of the evaluations and information provided by the manufacturer indicate the devices comply with applicable requirements.

**Information Reviewed By:** S. Patoray (NCWM), L. Bernetich (NCWM)