

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

**For:**

Computing Scale  
Digital Electronic  
Models: PCXXA and PCXXB Series\*  
(see page 2)  
 $n_{max}$ : 3000  
Capacity: See Page 2  
Platform: 13" x 8"  
Accuracy Class: III

**Submitted by:**

Cardinal Scale Manufacturing Co.  
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**Standard Features and Options**

\*Where XX in Model is for capacity

Semi-automatic (pushbutton) zero  
Automatic zero setting (AZSM)  
Semi-automatic (pushbutton) tare  
Multiple tare memory with PLU  
Prepack mode  
Accumulate function

Power switch zero  
26 single key PLU's with shift function for 26 more PLU's  
Motion detection  
AC/DC adapter  
RS232 communication port for printer

**OPTIONS:**

Remote customer display  
Battery Power supply

**Suffix Designations**

<u>Suffix Designations</u>		<u>Description</u>
A		Standard
B		Battery Operated
M	Optional	Extra Memory
D	Optional	Display Tower
NF	Optional	No Fractional Pricing Capability

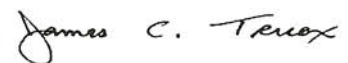
Options will be listed on the identification badge following the preface "OPT"

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.



Chairman, NCWM, Inc.



Chairman, National Type Evaluation Program Committee

Issue date: March 30, 2006

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.

**Cardinal Scale Mfg. Co.**  
**Bench Scale**  
**Models: PCXXA and PCXXB Series**

**Application:** Direct sales, supermarket and delicatessen

**Identification:** The required information is on a badge located on the top beneath the platter

**Sealing:** These scales can be sealed using a wire security seal on the side panel.

MODEL NO	CAPACITY	SCALE INTERVAL	PLATFORM SIZE	LOAD CELL
PC-10	6 lb	0.002 lb	8" x 13"	Cardinal SP-10L
PC-10 kg	3 kg	0.001 kg	8" x 13"	Cardinal SP-10L
PC-11	6 lb	0.002 lb	8" x 13"	Cardinal SP-10L
PC-11 kg	3 kg	0.001 kg	8" x 13"	Cardinal SP-10L
PC-20	15 lb	0.005 lb	8" x 13"	Cardinal SP-25L
PC-20 kg	6 kg	0.002 kg	8" x 13"	Cardinal SP-25L
PC-21	15 lb	0.005 lb	8" x 13"	Cardinal SP-25L
PC-21 kg	6 kg	0.002 kg	8" x 13"	Cardinal SP-25L
PC-30	30 lb	0.01 lb	8" x 13"	Cardinal SP-50L
PC-30 kg	15 kg	0.005 kg	8" x 13"	Cardinal SP-50L
PC-31	30 lb	0.01 lb	8" x 13"	Cardinal SP-50L
PC-31 kg	15 kg	0.005 kg	8" x 13"	Cardinal SP-50L

**Test Conditions:** This certificate supersedes Certificate of Conformance number 88-028A4 and is issued to correct the test conditions of Certificate of Conformance number 88-028A4. No additional testing was required. Previous test conditions are listed below for reference.

**Certificate of Conformance Number 88-028A4:** This Certificate supersedes Certificate of Conformance number 88-028A3 and is issued to add the 26 PLU keys to the keyboard, and the accumulate feature. A Model PC-30 was submitted for this evaluation. The emphasis of this evaluation was on operation of the PLU keys, management of stored tare, weight display format, and the accumulate feature. The device was evaluated using NCWM Publication 14, DES Checklist 2004 Edition. There were no metrological changes made to the device and no further testing was deemed necessary. Previous test conditions are listed below for reference.

**Certificate of Conformance Number 88-028A3:** This Certificate supersedes Certificate of Conformance Number 88-028A2 and is issued to acknowledge the redesigned PC Series. The exterior and operational features have not changed. The new design includes a repositioned load cell and a redesigned printed circuit board. A Model PC-30B was submitted for this evaluation. The emphasis of the evaluation was on compliance with influence factor requirements. Since a Model PC-30A and a Model PC-30B have undergone complete evaluations, further testing was not deemed necessary.

**Certificate of Conformance Number 88-028A2:** This Certificate supersedes Certificate of Conformance Number 88-028A1 and is issued to include additional options for the PC series. The battery version was tested for accuracy from 10.3 VDC to 12.0 VDC. The emphasis of the evaluation was on compliance with influence factor requirements. The Model PC-30A was tested for accuracy over a temperature range of -10 °C to 40 °C (14 °F to 104 °F).

**Cardinal Scale Mfg. Co.**  
**Bench Scale**  
**Models: PCXXA and PCXXB Series**

**Certificate of Conformance Number 88-028A1:** This Certificate supersedes Certificate of Conformance Number 88-028 (listed under Detecto Scale Co) and is issued to include the models with redesigned circuit boards. The emphasis of this evaluation was on device compliance with influence factor requirements. The Model PC-30A was tested for accuracy over a temperature range of -10 °C to 40 °C (14 °F to 104 °F).

**Certificate of Conformance Number 88-028:** These scales were previously evaluated under 1985 requirements and received Certificate of Conformance Nos. 58-85 and 59-85. the emphasis of this examination was on device compliance with influence factor, time dependence, and marking requirements. The Models PC-10 and PC-20 were tested for accuracy over a temperature range of -10 °C to 40 °C (14 °F to 104 °F). Additionally, the Model PC-30 contains the identical analog circuitry as the Model 6600-50 bench scale (Certificate of Conformance No. 87-027).

**Type Evaluation Criteria Used:** NIST Handbook 44, 2004 Edition, NCWM Publication 14, 2004 Edition

**Tested By:** A. McCoy (OH); T. Lucas (OH) 88-028A4; G. Castro (CA) & Ronald Flores (CA) 88 028A2; G. Castro (CA) 88-028A1; S. Cook (CA) 88-028

**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) 88-028A4, 88-028A5