



NATIONAL TYPE EVALUATION PROGRAM

Certificate of Conformance

for Weighing and Measuring Devices

For:

Computing Scale
Non-computing Scale, Load Cell Electronic
Model: PC1/WE/CSQ
 n_{max} : 3000
 e_{min} : See table on page 2
Capacity: 30 kg / 60 lb (See table on page 2)
Platform: 250 mm X 215 mm Stainless Steel
Accuracy Class: III

Submitted By:

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Standard Features and Options

Automatic Zero Tracking (AZT)
Initial Zero Setting Mechanism (IZSM)
Semi-Automatic Zero (Push Button)
Semi-Automatic Tare (Push Button)
Keyboard Tare
Programmable Tare
Price Computing (model PC1)
Weighing (model WE)
Counting (model CSQ) *

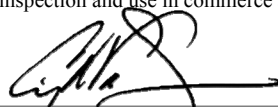
AC Power Supply
DC/Battery Power Supply
Liquid Crystal Display (LCD)
RS-232 Communication Port
Single Range
Multi (Dual) Range

*Model CSQ must be marked "The counting feature is not legal for trade" on both the operator and customer sides.

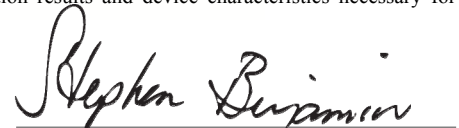
Load Cells Used: ZEMIC Model L6D Series (NTEP Certificate of Conformance number 11-012) or other metrological equivalent and NTEP certified.

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

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.



Craig VanBuren
Chairman, NCWM, Inc.



Stephen Benjamin
Chair, NTEP Committee
Issued: February 18, 2020

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Moorange Electronics MFG (Shanghai) Co., Ltd.
Computing Scale / PC1, WE, CSQ

Maximum Capacity	Division size d	n _{max}	Accuracy Class
3 kg / 6 lb	1 g / 0.002 lb	3000	III
6 kg / 15 lb	2 g / 0.005 lb	3000	III
15 kg / 30 lb	5 g / 0.01 lb	3000	III
30 kg / 60 lb	10 g / 0.02 lb	3000	III
1.5 kg / 3 kg or 3 lb / 6lb	0.5 g / 1 g or 0.001 lb / 0.002 lb	3000 / 3000	III
3 kg / 6 kg or 6 lb / 15 lb	1 g / 2 g or 0.002 lb / 0.005 lb	3000 / 3000	III
6 kg / 15 kg or 15 lb / 30 lb	2 g / 5 g or 0.005 lb / 0.01 lb	3000 / 3000	III
15 kg / 30 kg or 30 lb / 60 lb	5 g / 10 g or 0.01 lb / 0.02 lb	3000 / 3000	III

Application: For use in general purpose weighing applications.

Identification: The required information is on a label affixed to the right side of the scale base.

Sealing: There are two rods protruding through the underside of the scale which have holes drilled through them. Wire security seals are to be affixed to each rod to prevent separation of the housing from the base.

Test Conditions: This certificate is issued based upon the following tests and upon information provided by the manufacturer. For the purposes of this evaluation, a model PC1 1.5/3 kg capacity and a model WE 15/30 kg were submitted. The emphasis of the evaluation was on the design, marking, operation and compliance with influence factor requirements. Several increasing/decreasing load tests and shift tests were performed on each device. The devices were tested with an AC power supply from 102 VAC to 132 VAC and a DC power supply from 4 VDC to 6.6 VDC. The devices were tested over a temperature range of -10 °C to 40 °C (14 °F to 104 °F). A load of approximately one-half capacity was applied to the units over 100,000 times (each) and the scales were tested periodically during this time.

Evaluated By: E. Morabito (NY)

Type Evaluation Criteria Used: *NIST Handbook 44 Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices*, 2017 Edition. *NCWM Publication 14 Measuring Devices*, 2016 Edition.

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

Information Reviewed By: D. Flocken (NCWM)

Example(s) of Device:



PC1



WE



CSQ