



NATIONAL TYPE EVALUATION PROGRAM

Certificate of Conformance

for Weighing and Measuring Devices

For:

Indicating Element
Digital Electronic
Model: TI-700, TI-700K Series
 $n_{\max}$: 10 000
Accuracy Class III / III L

Submitted By: Contact Info. Updated November 2022

Transcell Technology Inc.
975 Deerfield Parkway
Buffalo Grove, IL 60089
Tel: 847-419-9180
Fax: 847-419-1515
Contact: Jon Heinlein
Email: jheinlein@transcell.com
Web site: www.transcell.com

Standard Features and Options**Standard Features:**

Automatic Zero Tracking (AZT)
Initial Zero Setting Mechanism (IZSM)
Semi-Automatic Zero (push- button)
Semi-Automatic (push- button) Tare
Power saving Feature (Auto Shut Off)
A/C Power supply
Stainless Steel or Plastic Enclosures
Center of Zero Annunciator
Category I Audit Trail
Accumulator Function

7 Digit, 7-Segment (numeric) Display
Unit Conversion (lb, kg, g, oz) (lb-oz Not legal for trade)
Gross/Net/Tare Annunciators
Stable Weight Annunciator
Time/Date Printing
Low Battery Annunciator
Multi-Point Calibration (up to 3)
RS-232 Bidirectional Communication
Liquid Crystal Display (LCD)
Multi-Interval

Optional Features:

DC power (Battery)
Reverse LCD Display
Wireless communication (Bluetooth, Wi-Fi, RS485)
Wireless Operation Between TI-500 RFTM-B1/B1E (NTEP CC 12-002) and Indicating Element

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.


Brett Gurney
Chairman, NCWM, Inc.


James Cassidy
Committee Chair, National Type Evaluation Program Committee
Issued: March 5, 2019

1135 M Street, Suite 110 / Lincoln, Nebraska 68508

The National Conference on Weights and Measures (NCWM) 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.

**Transcell Technology Inc.**

Indicating Element / TI-700, TI-700K Series

Application: General purpose indicating element for use with a NTEP certified and compatible weighing/load receiving element.

Identification: The required markings are located on an adhesive label on the top of the indicator. If an attempt is made to remove the label, a checkerboard pattern will be present to indicate the label has been removed.

Sealing: These indicators use a Category I Audit Trail: Configuration and calibration counters update each time a configuration or calibration change occurs. The counters return to zero after 1000 changes, individually. The counters may be viewed by powering up the unit: The screen will display the configuration audit counter ("CF") and the calibration audit counter ("CA"). Seal these devices using one wire security seal through two adjacent screws on the rear cover; this prevents internal access to the calibration jumper.

Test Conditions: This certificate supersedes Certificate of Conformance 16-086 and is issued to add Multi-Interval, accumulation, additional units, reverse LCD display and a 7-key pad. A model: TI-700K was submitted for evaluation. Multiple increasing/decreasing tests were performed with a load cell simulator. Multi-Interval increase/decrease testing was performed using a Doran DXI 8100 scale base (NTEP CC 97-097A1). The Multi-Interval function was evaluated for correct tare, rounding functions, agreement of indication and registration. The additional units were checked for correct rounding and the accumulation function was evaluated along with the reverse LCD display. No other testing was deemed necessary. Previous test conditions are listed below for reference

Certificate of Conformance Number 16-086: The emphasis of the evaluation was on device design, marking, operation, performance, and compliance with influence factors. Two model TI-700 Series indicating elements, (plastic case and stainless-steel case) were submitted for evaluation. The TI-700 Series indicator was interfaced to a Doran model: DXL 8100 weighing/load receiving element (Certificate of Conformance 97-097A1) to verify compliance with zero, zone of uncertainty, unit conversion, and motion detection requirements. Additionally, the TI- 700 Series was interfaced to a load cell simulator to perform several increasing / decreasing tests, warm-up test and power interrupt test. Wireless communication tests were also performed. Temperature tests were performed on both stainless steel and plastic cases over a range of -10 °C to 40 °C (14 °F to 104 °F).

Evaluated By: J. Gibson (OH) 16-086, 16-086A1

Type Evaluation Criteria Used: *NIST Handbook 44 Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices*, 2019 Edition. *NCWM Publication 14 Weighing Devices*, 2018 Edition.

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

Information Reviewed By: J. Truex (NCWM) 16-086,16-086A1



Transcell Technology Inc.
Indicating Element / TI-700, TI-700K Series

Examples of Device:



TI-700 Stainless Steel



TI-700 Plastic



TI-700K Plastic