



NATIONAL TYPE EVALUATION PROGRAM

# Certificate of Conformance

for Weighing and Measuring Devices

**For:**

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

**Submitted By:**

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](mailto:jheinlein@transcell.com)  
Web site: [www.transcell.com](http://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

7 Digit, 7-Segment (numeric) Display  
lb/kg External Conversion (push button)  
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)

**Optional Features:**

DC power (Battery)  
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.

Kristin Macey  
Chairman, NCWM, Inc.

Jerry Buendel  
Committee Chair, National Type Evaluation Program Committee  
Issued: October 6, 2016

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 Indicating Element / TI-700 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:** 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)

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

**Examples of Device:**



Stainless Steel



Plastic