



## NATIONAL TYPE EVALUATION PROGRAM

# Certificate of Conformance

for Weighing and Measuring Devices

**For:**

Indicating Element  
Active Junction Box, Remote Addressable Analog to Digital  
Converter  
Model: ICAN-XY Series  
 $n_{\max}$ : 10 000  
Accuracy Class: III/III L

**\*Submitted By: Contact Info. Updated: October 2010**

Cardinal Scale Manufacturing Co.  
203 East Daugherty  
Webb City, MO 64870  
Tel: 417-673-4631  
Fax: 417-673-5001  
Contact: Stephen Langford  
Email: [slangford@cardet.com](mailto:slangford@cardet.com)  
Web site: [www.cardinalscales.com](http://www.cardinalscales.com)

**Standard Features and Options**

"X" in the model number denotes the number of load cell cards in the junction box (1 to 8)

"Y" in the model number denotes glass cored optical fiber ("G") or plastic cored fiber ("P")

**Description:**


- The load cell signal converter allows analog load cells in a multi-cell scale to be adjusted individually. The analog signal from each load cell is converted into a digital value that is read by a compatible indicating element. Operational controls, motion detection and primary weight indication are provided by the certified and compatible primary weight indicating element.
- Approved for use only when interfaced with a NTEP approved and compatible primary indicating element that accepts converted digitized load cell signals from analog load cells. Scale identification is determined by the indicating element.


**Standard Features:**

- A/D Signal Conversion on Individual Plug in Cards
- Multiple Load Cell Interface Capability (maximum of 32 load cells)
- Multiple Scale Capability (maximum of 8 scales)
- Load Cell Diagnostic Features

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. \*Editorial changes, not affecting the type or metrological content, corrected this certificate.

  
Tim Tyson  
Chairman, NCWM, Inc.

  
Randy Jennings  
Chairman, National Type Evaluation Program Committee  
Issued: October 19, 2010

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.



## Cardinal Scale Manufacturing Co.

Indicating Element / ICAN-XY Series

**Application:** For use with load receiving elements employing approved and compatible strain gauge load cells and with an approved and compatible indicating element. May be used for general purpose Class III and IIIIL weighing applications.

**Identification:** The required information for the J-Box such as Manufacture, Model, NTEP number, Class,  $n_{max}$ , and serial number are on an adhesive self-destruct label placed on the side of the J-Box. The required marking information for the indicator is on the front panel of the device. Labels for capacity, division, concentrated load capacity (if required), and section capacity (if required) will be identified on this label.

**Sealing:** The load cell signal converter may be sealed with a wire security seal threaded through the cover clamp and an adjacent fixed hole on the enclosure. Additionally, provisions for sealing metrological parameters are provided by the weighing and indicating element.

**Test Conditions:** A Model ICAN6P was submitted for evaluation, and interfaced with a Model 788 indicating element (Certificate of Conformance Number 97-077). The emphasis of the evaluation was on the device design, operation, and compliance with influence factor requirements. The device was interfaced with multiple load cell simulators and weighing elements and tested for accuracy over a temperature range of -10 °C to 40 °C (14 °F to 104 °F). Additionally, the device was tested with a power supply of 100VAC to 130VAC.

**Evaluated By:** A. McCoy (OH)

**Type Evaluation Criteria Used:** NIST, Handbook 44: Specifications, Tolerances and Other Technical Requirements for Weighing and Measuring Devices, 2003. NCWM, Publication 14: Weighing Devices, 2003.

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

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