

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

**For:**

Indicating Element  
Digital Electronic  
Models: IQ600HB\*, IQ700HB\*, IQ700HB-13  
and IQ700IS  
 $n_{\max}$ : 10 000

Accuracy Class: III/III L

**Submitted by:**

Rice Lake Weighing Systems  
230 West Coleman Street  
Rice Lake, WI 54868  
Tel: (715) 234-9171  
Fax: (715) 234-6967  
Contact: Mark Erickson

**Standard Features and Options**

The following models of devices covered by this certificate are listed below along with a description of the basic model designation:

- IQ600HB\* - All units with battery or external DC power
- IQ700HB\* - All AC power units
- IQ700IS - Intrinsically safe with external power supply or external battery
- IQ700HB-13 - AC power
- WS700 - AC power

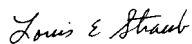
\* See page two for suffix description on models IQ600HB and IQ700HB

Motion detection	Semi-automatic zero and tare
Keyboard tare	Gross/tare/net display modes
Printer interface	Two set points capability
External keyboard calibration and set-up	Low battery annunciator for battery operated models

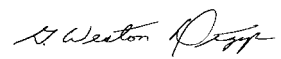
Temperature Range: -10 °C to 40 °C (14 °F to 104 °F)

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.

Effective Date: October 6, 1998



Louis E. Straub  
Chairman, NCWM, Inc.



G. Weston Diggs  
Chairman, National Type Evaluation Program Committee

Issue date: August 3, 1999

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.

This is a reissuance by the NCWM of a Certificate of Conformance already issued by the National Institute of Standards and Technology.

**Rice Lake Weighing Systems  
Indicating Element  
Models: IQ600HB, IQ700HB, IQ700HB-13, WS700 and IQ700IS**

**Application:** For general purpose use with certified and compatible weighing elements.

**Identification:** The model and serial numbers are on the back of the device. The indicator is installed with a tilt base which provides access to the identification information and load cell connections.

<b>Basic Model IQ600HB <u>X X X X</u> &amp; IQ700HB <u>X X X X</u></b>			
First X: Enclosure	Second X: Input Power	Third X: Display	Fourth X: Load Cell Termination
A = Stainless steel with tilt stand base	A = 117 VAC 60 Hz (IQ700HB only)	A = Light emitting diode (LED)	A = Standard 6 wire connector
B = Stainless steel with panel mount brackets	B = 217 VAC 50 Hz (IQ700HB only)	B = Liquid crystal display (LCD)	B = RFI Shielded 6 wire connector
	C = 117 VAC 60 Hz with battery (IQ600HB only)		C = RFI shielded revised
	D = 217 VAC 50 Hz with battery (IQ600HB only)		

**Sealing:** Access to the calibration mode is sealable with a wire security seal on the center bar of the front panel.

**Test Conditions:** This Certificate is issued to include an additional Model IQ700IS indicator. This Certificate was issued without additional testing based on information provided by the manufacturer. The Model IQ700IS is identical to the Model IQ700HB except for the external power supply, which provides intrinsically safe power to the indicator. Test conditions for the previous certificates are listed below for reference.

**Certificate of Conformance Number 89-023A1:** This Certificate was issued to include additional Models WS700 and IQ700HB-13 of indicators, and to include additional model variations as indicated by the expanded guide to the model designation. This Certificate was issued without additional testing based on information provided by the manufacturer. The Model WS700 is identical to the Model IQ700HB. The Model IQ700HB-13 is identical to the Model IQ700HB AAAC (covered under Certificate of Conformance Number 89-023) except for the color of the front panel.

**Certificate of Conformance Number 89-023:** The emphasis of this evaluation was on device design, operation, and compliance with influence factor requirements. The indicator was interfaced with a load cell substitution box and tested for accuracy over a temperature range of -10 °C to 40 °C and 100 VAC to 130 VAC. Additionally, the indicator was attached to a load cell scale base and tested for the zone of uncertainty, AZSM, and discrimination requirements.

The results of the evaluations indicate the devices comply with applicable requirements of NIST Handbook 44.

**Type Evaluation Criteria Used:** NIST Handbook 44, 1998 Edition

**Tested By:** Steve Cook (CA), Sally Barron (CA), K. Newell (NIST)

**Information Reviewed By:** A. McCoy (OH) 89-023A2, W. Wotthlie (MD) 89-023A1