

Weight Indicator



High in features and attractive in price, our HI 2110WI high-accuracy Digital Weight Indicator provides local indication, and acts as a front end to a PLC or DCS system. Weight data can be transmitted via any one of its communication options, including Allen-Bradley® Remote I/O, Profibus®, Analog and BCD.

Hardy's HI 2110WI conditions and digitizes the weight signal twenty times per second with over one million counts of resolution over a differential signal range of 0 to 15mv. It can then transmit a clean signal representing gross or net weight data to a PLC, PC or DCS system. This high resolution allows the weight indicator to tolerate large dead loads and over-sizing of the load sensors, while retaining a high level of usable signal. The HI 2110WI supplies 5 volts of DC excitation to drive four 350-ohm load sensors, or load cells associated with a single scale. The indicator is available in panel mount or remote mount configuration.

WAVERSAVER®

The HI 2110WI uses our industry-proven WAVERSAVER® technology. WAVERSAVER® eliminates the effects of unwanted plant vibration on or around a

scale during weighing by permitting the weight indicator to "see" through the unwanted vibration signals as low as 0.25hz-while yielding a stable actual weight reading.

ELECTRONIC WEIGHT CALIBRATION

Hardy Instruments' C2®, Second Generation Calibration, allows you to electronically calibrate your weighing system immediately after installation, eliminating all of the problems associated with test weights. Each C2® certified load sensor in the system contains information detailing its unique performance characteristics. The weight indicator uses these characteristics to automatically calibrate the scale without the need for test weights, even with material on the scale.

SECURE MEMORY MODULE

The rear panel accessible Secure Memory Module (SMM) automatically protects and stores critical data. It allows this data to be physically transferred from one indicator to another. If a problem occurs, simply remove the current SMM and plug it into a new indicator, and your system will be up in running in minutes.

EASY SYSTEM INTEGRATION

We provide a variety of interface capabilities, including Allen-Bradley RIO, Profibus, Analog and BCD to connect to your PLC, PC or DCS system.

Model HI 2110WI

Applications

- **Process Weight Indication**
- **Front End to PLC or DCS System for Use in:**
 - **Batching/Blending**
 - **Filling/Dispensing**
 - **Level by Weight**
 - **Check weighing**

Features

- **WAVERSAVER®:**
 - Ignores Vibration On and Around Scales**
- **C2®, Second Generation Calibration:**
 - Calibrates Electronically**
- **Secure Memory Module:** **Allows Physical Transfer of Data**

COMPONENTS TO COMPLETE YOUR HARDY INSTRUMENTS SYSTEM

• Hardy Weight Indicator HI 2110WI

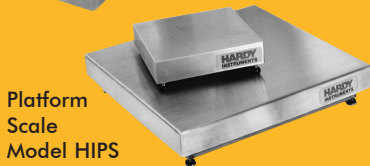


• Hardy Platform Scales and Load Points

Hardy Instruments carries a wide variety of strain gauge load points and scale bases to accommodate your applications requirements.



ADVANTAGE
Lite Load Point



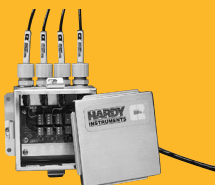
Platform
Scale
Model HIPS

• Hardy C2® Certified Cable

This 8-conductor cable is designed for optimizing weight and load sensor characteristic signals from the junction box to the instrument.

• Hardy Junction Box (HI 215JB Series)

This Nema 4 rated waterproof enclosure sums from one to four load sensor signals. Its unique design allows for easy isolation and troubleshooting of the weighing system.



HARDY INSTRUMENTS

ORDERING INFORMATION

• HI 2110WI

Panel Mount Indicator



• HI 2110WI-RM

Remote Mount Indicator. Its display can mount up to 5 feet from the instrument body.



• HI 2110WI-RIO (-RM-RIO)

Weight Indicator with bi-directional Remote I/O interface to Allen-Bradley PLCs & SLCs



• HI 2110WI-PB (-RM-PB)

Weight Indicator with bi-directional interface to Profibus compatible products including SIEMENS, GE FANUC, and OMRON



• HI 2110WI-AN (-RM-AN)

Weight Indicator with Analog Output
Resolution: 16,000 counts
Current: 0-20 or 4 - 20 milliamps
Voltage: 0 -5 or 0 - 10 VDC

• HI 2110WI-BCD (-RM-BCD)

Weight Indicator with 6 digits of parallel data representing Net, Gross Tare or display with tri-state capability. Includes 60" cable.

SPECIFICATIONS

• Alpha-Numeric Display

6-digit, 14-segment red LED

• Resolution

Display 1: 985,000 (3mV/V load cells)

Internal 1: 1,048,000

• Update Rate

20 times per second

• Averaging

Sliding of up to 200 readings in single unit increments

• Accuracy

0.0015% non-linearity

• Common Mode Rejection

100dB at 50-60Hz

• Standard Networking Choices

Remote I/O (-RIO)

Profibus (-PB)

Analog; current and voltage (-AN)

BCD; includes 60" cable (-BCD)

• Power

120/240VAC±10%, 47/63Hz, 10 watts with options installed

(-240) configured for 240VAC

• Operating Temperature

14° to 122°F (-10° to 50°C)

• Humidity

0-90% non-condensing

• Excitation

5VDC internal power supply to drive up to four 350-ohm load cells

• Stable Weight Readings

WAVERSAVER® 0.25Hz minimum

• Calibration Techniques

C2®, Second Generation Calibration: calibrate electronically

HardCal: traditional calibration using test weights

• Data Security

Secure Memory Module

• Enclosures

Panel Mount:

Display rating: NEMA 4X*

Depth: 10" (254mm)

Panel cutout: 3.09" x 5.75" (78.4 x 146mm)

Weight: 4.6lb (2.1kg)

Remote Mount:

Display rating: NEMA 4X*

Dimensions: 3.23"H x 5.74"W x 10.40"D (82.04H x 145.8W x 264.2D mm)

Panel cutout: 3.09" x 5.75" (78.4 x 146mm)

Weight: 4.6lb (2.1kg)

Displays mounts separately from the instrument body via a 5-foot cable.

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• Inputs

4 remote functions (optional mating connector)

* NEMA 4X rating when mounted in a NEMA enclosure. Specifications subject to change without notice.

To learn more about the HI 2110WI, visit our web site to find:

- full product specifications
- ordering information
- application notes
- technical description
- downloadable operator's manual

www.hardyinst.com

or call us at

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CERTIFIED
Since 1993

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