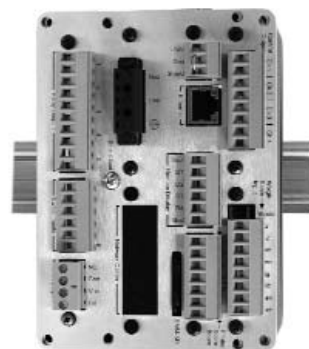


Loss-in-Weight Rate Controller



Used in new applications, or to retrofit volumetric feeders or replace outdated controllers in gravimetric systems, Hardy's HI 4060 loss-in-weight rate controller controls many feeding devices, such as auger, vibratory and belt-based feeders, as well as your proprietary designs.

MODULARITY AND EASE OF INSTALLATION

You can order your rate controller with or without display, in panel, DIN rail, remote mount or wall mount, with AC or DC power, and a wide choice of communication interfaces. Installation doesn't require special tools: just drill standard holes in your panel and install the front panel display. You can attach the rate controller housing directly to the rear of the panel or to a DIN rail up to 100 feet away.

EASY SET-UP AND WORRY-FREE OPERATION

You can quickly access menus to set up process weight and rate parameters from the controller's front panel keys and LCD display. The HI 4060's embedded web server also gives you remote access to control information and instrument parameters. The rate controller will watch your process and notify you of problems. Display prompts and alarm relay outputs occur with tolerance errors and other failures. By entering specific control parameters, you decide at which levels to alarm or shut down the application. You can also assign three different security levels to each function.

AUTOMATIC WEIGHT AND RATE CALIBRATION

A five-point auto rate calibration automatically allows the HI 4060 to calibrate itself to the feed characteristics of the feeder and the material being fed. This allows for a higher feed accuracy over a broader range of feed rates.

MULTIPLE CONFIGURATION STORAGE

The HI 4060 lets you store set-up and calibrations in hundreds of dedicated, on-board memory locations, for easy and fast configuration retrieval and change. Configurations are also automatically stored in the Secure Digital Memory Module (SMM®-SD) card, letting you easily transfer data from one instrument to another, or view that data on your PC.

MULTIPLE FEEDER CONTROL

The HI 4060 is a powerful building block when it comes to multiple feeder systems. It can act as a master to multiple controllers or as a slave to other HI 4060s or other process inputs. Let multiple DIN-rail HI 4060s be controlled from a common host computer or programmable controller.

CORE TECHNOLOGIES

WAVESAVER® ignores vibration and mechanical noise in feeders and the plant environment. C2® electronic calibration enables fast, accurate, electronic calibration of your system, saving start-up costs and aggravation. Of course, you can still calibrate your system using certified test weights. Finally, used in conjunction with an IT Junction Box, INTEGRATED TECHNICIAN® (IT) allows you to troubleshoot and diagnose your weighing system right from the instrument's front panel or a web browser. You can read individual load sensor voltages and weights, make comparisons, and isolate individual system components.

HI 4060

Process Weighing Applications

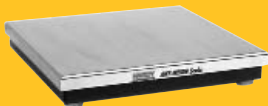
- Gravimetric Feeding
- Continuous and Batch Rate Control
- Master/Slave

Features and Advantages

- **Automatic Closed Loop Control:**
Continuously adjusts feeder to deliver desired feed rate
- **True Five-Point Automatic Rate Calibration:**
Produces high feed accuracy for a wide range of feed rates
- **Multiple Configuration Storage:**
Stores hundreds of different system configurations
- **Convenient Manual Mode:**
Allows manual speed control, with switch to automatic control at the touch of a button
- **Automatic Refill:**
Starts and stops refilling without interrupting the feeding of material
- **Graphics display mode:**
Graphs actual feed rate vs. setpoint or operating percentage output

COMPONENTS TO COMPLETE YOUR HARDY INSTRUMENTS SYSTEM

• Hardy Platform Scales and Load Points



Hardy carries a wide variety of strain gauge load points and scale bases to meet your application requirements.

• Hardy C2® Certified Cable

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

• Hardy Junction Box (HI 215IT with INTEGRATED TECHNICIAN®)

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 from the instrument.



• Technical Support/Services

Hardy Instruments offers free phone support, a rapid repair program, product training, as well as local field service. Hardy WebTech, our online knowledgebase, provides answers to many technical questions 24/7/365. Visit the Hardy website for more details at www.hardyinstruments.com.

HARDY INSTRUMENTS




SPECIFICATIONS

- **Display**
64x128 LCD display with backlight
- **Averaging**
Sliding up to 250 readings in single unit increments
- **Totalizer**
Keeps track of the amount of ingredient dispensed
- **Time Units**
Seconds, minutes and hours
- **Units of Measure**
lb, oz, ton, kg, g, mt
- **Standard Interfaces**
Ethernet: 10/100base T; embedded web server
Serial RS 232: simplex to printer or to remote scoreboard
- **Stable Weight Reading**
WAVESAVER® 0.5Hz minimum
- **Calibration Techniques**
C2® electronic calibration
Traditional calibration with test weights
- **Load Point Excitation**
5VDC power drives up to eight 350-ohm load cells
- **Mode**
Batch, continuous, manual, automatic
- **Enclosure**
Panel/remote mount
DIN mount (blind)
Wall mount
- **Approvals**
CE, UL/CUL, CB Scheme, Class I Div 2
(all pending)

MODEL NUMBERS

- PM: Panel or remote mount
- PMWS: SS wall mount with display
- DR: DIN rail (blind)
- DRWS: SS blind wall mount
- AC: AC power
- DC: DC power

NETWORK OPTIONS

- DN: DeviceNet 
- EIP: EtherNet/IP 
- RIO: Allen-Bradley Remote I/O
- MD: Modbus TCP/IP
- PB: Profibus DP 

- **Digital Inputs**
Eight configurable, non-isolated
- **Analog Input**
Allows rate setpoint to be adjusted by an external analog input
0-20mA, 4-20mA, 0-5VDC or 0-10VDC
- **Control Output (1)**
User selectable
0-20mA, 4-20mA, 0-5VDC or 0-10VDC
- **Analog Outputs (3)**
Transmits weight or actual rate
4-20 or 0-20mA, 0-5 or 0-10VDC
- **Relay Outputs**
120/240VAC, 3A
- **Power Requirement**
AC: 110-240VAC, 47-63Hz
DC: 24VDC
10 watts max
- **Operating Temperature**
-10° to +40°C (14° to 104°F)
- **Storage Temperature**
PM: -30° to +70°C (-22° to 158°F)
DR: -40° to +85°C (-40° to 185°F)
- **Dimensions**
Front panel: 4"h x 7"w x .725"d
(101.6h x 177.8w x 18.4d mm)
Housing: 4.00"h x 5.65"w x 3.13"d
(101.6h x 143.5w x 79.4d mm)
Wall mount: 11.50"h x 8.28"w x 5.54"d
(292.1h x 210.3w x 140.6d mm)

All specifications subject to change without notice.
Visit www.hardyinstruments.com for up-to-date specs.



Wall Mount
Configuration

To learn more about Hardy's
HI 4060 rate controller,
visit www.hardyinst.com/4060

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ISO 9001:2000
CERTIFIED

HI 4060_rev1009