

Model HI 4060 Loss-in-Weight Rate Controller



Applications PROCESS WEIGHING

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



Features

THE HARDY PROCESS TOOLBOX

The Hardy Process Toolbox is a set of productivity tools that support process weighing functions. Each tool saves time, increases accuracy, improves efficiency or reduces risk in process weighing applications.



- **C2[®] and eCAL[™]**
Electronic Calibration
Electronic calibration without test weights



- **WAVERSAVER[®]**
Ignores vibration on and around scales

- **INTEGRATED TECHNICIAN[®]**
Weighing system monitoring and troubleshooting



Advantages

- **Automatic Closed Loop Control**
Continuously adjusts feeder to deliver desired feed rate
- **Graphics Display Mode**
Graphs actual feed rate vs. setpoint or operation percentage output
- **Automatic Refill**
Starts and stops refilling without interrupting the feeding of material

Used in new applications, or to retrofit volumetric feeders or replace outdated controllers in gravimetric systems, Hardy's HI 4060 loss-in-weight rate controller controls many feeding devices, such as auger, vibratory and belt-based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

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 4060's, HI 4050's or other process inputs. Let multiple DIN-rail HI 4060's be controlled from a common host computer or programmable controller.

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.

EASE OF SET-UP

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.

MODULARITY AND EASE OF INSTALLATION

Configure your HI 4060 rate controller to suit your specific application:

- With or without display
- DeviceNet, EtherNet/IP, Modbus TCP/IP, Profibus, or Allen Bradley[®] Remote I/O
- Panel, DIN rail, remote or wall mount
- Either AC or DC power

Just drill or punch standard holes in your panel and attach the front panel keyboard display. The rate controller housing can be attached to the rear of the panel or remotely, up to 100 feet away to a DIN rail.

CORE TECHNOLOGIES

WAVERSAVER[®] 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. 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.

COMPONENTS TO COMPLETE YOUR HARDY SYSTEM

Hardy Bench Scales, Floor Scales and Load Points

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



ADVANTAGE Series
Load Point with
C2 Calibration



Hardy Bench
Scales

Weighing Instruments Dedicated to Your Applications

Controllers, Weigh Modules, Weigh Processors

Allen-Bradley® Compatible
Plug-in Weigh Scale Modules



HI 3000 Series
HI 4050 Controllers
and HI 6000 Series



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

Standard Interfaces

- Ethernet: 10/100base T; embedded web server
- Serial RS 232: simplex to printer or to remote scoreboard

Stable Weight Reading

- WAVERSAVER® 0.25Hz minimum

Calibration Techniques

- C2® electronic calibration
- Traditional calibration with test weights

Time Units

- Seconds, minutes and hours

Units of Measure

- lb, oz, ton, kg, g, mt

Mode

- Batch, continuous, manual, automatic

Load Point Excitation

- 5VDC power drives up to eight 350-ohm load cells

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
- 4-20mA, 0-5VDC or 0-10VDC

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)

Enclosure

- Panel/remote mount
- DIN mount (blind)
- Wall mount

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)

Approvals

- CE, UL/CUL, CB Scheme, NTEP, Canada Weights & Measures

Compliance

- RoHS & REACH

Warranty

- Two-year warranty against defects in workmanship

MODEL NUMBERS

HI 4060

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

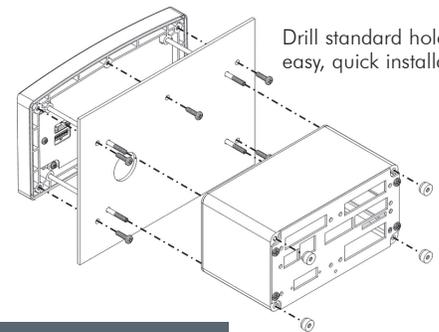
NETWORK OPTIONS

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

DeviceNet

EtherNet/IP
performance tested

PROFI
BUS



Drill standard holes for easy, quick installation

To learn more about the HI 4060 visit our web site for:

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

www.hardysolutions.com

or call us: 800-821-5831
+1-858-278-2900

Integrated Panel Configuration (HI 4050 Shown)



HARDY
PROCESS SOLUTIONS
Measurement • Automation • Productivity

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