

# Weight Controller




**This family of weight controllers helps to reduce your labor content, speed your production throughput, and improve the quality of your end product. Controllers can act as a front end to a PLC, PC or DCS system, or as a stand alone for simple control or weight monitoring.**


## MODULARITY

Configure your HI 4050 weight controller to suit your specific weighing application:

- With or without display
- DeviceNet or Ethernet IP communication network
- Panel mount, DIN rail, or remote mount
- Either AC or DC power

## EASE OF INSTALLATION

 No special tools are required for installation. Just drill or punch standard holes in your panel and attach the front panel keyboard display. The weight controller housing can be attached to the rear of the panel or remotely, up to 100 feet away to a DIN rail. It can be mounted vertically, horizontally or offset to make use of available space.



## LEAD FREE

By being RoHS (Restriction of Hazardous Substances) compliant, this instrument meets government regulations to be free of certain hazardous substances, including lead.

## EASE OF SETUP

Use the embedded web server to set up all parameters

from anywhere on the Ethernet network. Front panel keys and LCD display with simple menus provide quick, easy setup with process weight and parameter display. The embedded web server also gives you remote access to control information and instrument parameters, further optimizing production efficiency by sharing real-time data on the plant floor with OEM partners or off-site maintenance personnel.

## EXPANDABLE SECURE MEMORY MODULE (SMM®-SD)

Hardy's rear panel accessible SMM is more than just a memory card - it now uses a standard Secure Digital (SD) memory card. The card allows easy expansion, the transfer of data from one instrument to another, and is readable on your PC.



## C2® ELECTRONIC CALIBRATION

C2® enables fast accurate electronic calibration of your scale. This saves system start-up costs and aggravation. Of course you can still calibrate your system the traditional way, using certified test weights.

## INTEGRATED TECHNICIAN® (IT)

In conjunction with an IT Junction Box, this built-in system diagnostics tool allows you to troubleshoot and diagnose your weighing system right from its front panel, your intranet or the Internet. Read individual load sensor voltages and weights, make comparisons, and isolate individual system components.

## HI 4050

## Process Weighing Applications

- **Batching/Blending**
- **Filling/Dispensing**
- **Level by Weight**
- **Check Weighing**

## Features and Advantages

- **Small Footprint:**  
Three inches deep
- **Easy Installation:**  
Drill or punch standard holes with no special tools
- **Embedded Web Server:**  
Easy access and set-up
- **SMM®-SD (Secure Memory Module with SD RAM):**  
Expandable automatic back-up of configuration data for easy transfer to other instruments or your PC
- **INTEGRATED TECHNICIAN®:**  
Lets you isolate system problems from the comfort of your control room
- **WAVERSAVER®:**  
Ignores plant vibration on and around scales
- **C2® Calibration:**  
Electronic calibration without test weights

**HARDY**  
INSTRUMENTS

## COMPONENTS TO COMPLETE YOUR HARDY INSTRUMENTS' SYSTEM

### • HI 3030 Multi-Scale Controller

Up to four scales.



### • Hardy Platform Scales and Load Points

Hardy carries a wide variety of strain gauge load points and scale bases to accommodate 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 (ROHS compliant).

### • 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 a rapid repair program, as well as nationwide field service. Consult the Hardy website for services in your area.

# HARDY INSTRUMENTS

## SPECIFICATIONS

- **Display**  
64x128 display with backlit LCD
- **Update Rate**  
100 times per second
- **Averaging**  
Sliding up to 250 readings in single unit increments
- **Resolution**  
Display: 1:985,000 (3mV/V load cells)  
Internal: 1:1,048,000
- **Standard Interfaces**  
Ethernet: 10/100base T; embedded web server  
Serial RS 232: simplex to printer or bi-directional to remote scoreboard
- **Stable Weight Reading**  
WAVERSAVER® 0.25Hz minimum
- **Calibration Techniques**  
C2® second generation calibration; electronic  
Traditional calibration with test weights
- **Units of Measure**  
Lb, lb/oz, oz, ton  
Kg, g, t

- **Mode**  
Gross, net
- **Load Point Excitation**  
5VDC power drive up to 8 350-ohm load cells
- **Digital Inputs**  
3 mappable, non-isolated
- **Power Requirement**  
AC: 108-264VAC, 47-63Hz  
DC: 24VDC  
10 watts max
- **Operating Temperature**  
-10° to +50°C (14° to 122°F)
- **Storage Temperature**  
-20° to +70°C (-4° to 158°F)
- **Enclosure**  
Panel/remote mount  
DIN mount
- **Dimensions**  
Front panel: 4"h x 7"w x .725"d  
(101.6h x 177.8w x 18.4d mm)  
Housing: 2.98"h x 5.65"w x 3"d  
(75.7h x 143.5w x 76.2d mm)
- **Approvals**  
CE (expected 2006)

## TYPICAL APPLICATIONS

The HI 4050 Weight Controller can be used in applications like batch weighing of ingredients, bin inventory, vessel filling and dispensing, check weighing or basic weight indication. The module can be used in industries such as food and beverage, aggregate, glass, chemical, pharmaceutical, etc.



Side profile

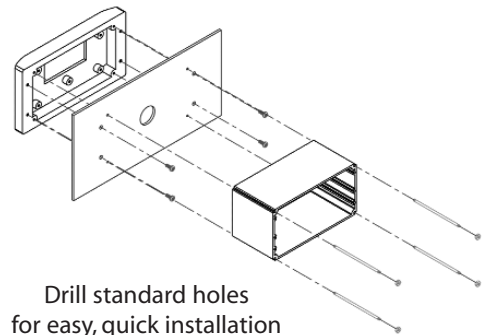
## MODEL NUMBERS

### HI 4050 Weight Controller:

- DR: DIN rail (blind)
- PM: panel or remote mount
- DIS: display/keyboard
- AC: AC power
- DC: DC power

## NETWORK OPTIONS

- DN: DeviceNet
- EIP: Ethernet/IP



Drill standard holes for easy, quick installation

To learn more about the Hardy HI 4050, visit our website:

[www.hardyinst.com/4050](http://www.hardyinst.com/4050)

or call us at

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