

# Multi-Scale Weight Controller





## **Applications**

## **PROCESS WEIGHING**

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

## **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.



## **WAVERSAVER®**

Ignores vibration on and around scales

# C2<sup>®</sup> AND eCAL™ ELECTRONIC CALIBRATION

• Electronic calibration without test weights

CZ eCAL

## INTEGRATED TECHNICIAN®

Weighing system monitoring and troubleshooting

IT INTEGRATED TECHNICIAN

The Hardy HI 3030 is a flexible weight controller that can monitor and control up to four scales simultaneously. It can act as a front end to a PLC, PC or DCS system for applications such as level, batching, filling, dispensing, and check weighing, or as a stand alone for simple control or weight monitoring.

#### **NETWORKING**

As a bridge to a PLC, its four scales can share one network connection, whether it is DeviceNet, ControlNet, EtherNet/IP, Profibus or Analog. You can also link additional HI 3030s with their multiple scales and share the same network connection. Just like the other Series 3000 products, you can also configure or monitor the HI 3030 using a web browser or network interface.

## THE PLC SOLUTION

Imagine you have eight storage tanks and would like to monitor and control the weight in each of the tanks using your PLC. You could buy two HI 3030s, each with four scale inputs and tie them together with the built-in Ethernet communications. Bring all eights scales back to your PLC using just one of the HI 3030s and one of its optional technologies:DeviceNet, ControlNet, Profibus, or EtherNet/IP network card. If you are in need of more than eight storage tanks, you can connect up to 16 controllers, for a total of 64 scales, through that same single interface. You save wiring, time, and money.

#### THE STAND-ALONE SOLUTION

Let's again take the example of the eight storage tanks, but this time you wish to control tank weights outside of the PLC. No problem! With or without a connection to the PLC, you can set up the HI 3030 to automatically refill each of the storage vessels when they get to their individual "low" levels. Now you can also save on programming costs.

#### **COMPLETE FLEXIBILITY**

With the flexible I/O mapping and twelve independent internal setpoints in the HI 3030, you can direct alarms or enunciators to a local output or to any point on the plant network. You can even have an alarm emailed directly to you! Don't need a display or keypad on the controller? Use the Blind Remote HI 3030R, and control or configure the unit via your web browser or your local network.

## **INTEGRATED TECHNICIAN®**

The HI 3030's INTEGRATED TECHNICIAN, used in conjunction with an IT Junction Box, provides built-in system diagnostics that enable you to troubleshoot and diagnose your weighing system right from its front panel or a web browser. You can read individual load sensor voltages and weights, make comparisons, and isolate individual system components for quick and easy troubleshooting.

# **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 accommodate your application requirements.



ADVANTAGE Series Load Point with C2 Calibration



Hardy Bench

# **Weighing Instruments Dedicated to Your Applications**

Controllers, Weigh Modules, **Transmitters** 

> Allen-Bradley® Compatible Plug-in Weigh Scale Modules







#### **SPECIFICATIONS**

#### Display

- 4 line x 20 character backlit LCD
- 5 x 7 dot matrix

#### Update Rate

• 55 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

## Stable Weight Reading

• WAVERSAVER® 0.25Hz minimum

## **Calibration Techniques**

- C2® electronic calibration
- Traditional calibration with test weights

#### Instrument Local I/O

- Five mappable inputs optically isolated
- Four or seven mappable outputs 48-240VAC Form A
- Third party mappable

## **Load Point Excitation**

5VDC power drives up to 16 350-ohm load cells

#### Power Requirement

- 108-264VAC, 47-63Hz or 12-24 VDC
- 25 watts max

## **Operating Temperature**

• -10° to +50°C (14° to 122°F)

## Storage Temperature

-20° to +70°C (-4° to 158°F)

#### **Enclosure**

- Panel mount
- Swivel mount

#### **Dimensions**

- Panel mount: 6.03" (153mm) with rear cap
- Panel cutout: 8.94" W x 6.63" H (227mm W x 169mm H)

#### Approvals

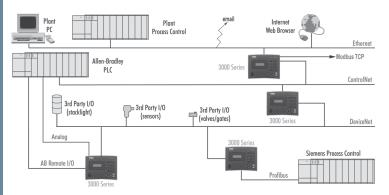
UL/CUL, NTEP, Canada Weights & Measures

#### Warranty

• Two-year warranty against defects in workmanship

All specifications subject to change without notice. Please contact the Hardy factory or visit our website for the latest specifications.

## **NETWORK CONFIGURATIONS**



#### **MODELS**

HI 3030

HI 3030R Blind Remote

Single scale -LC

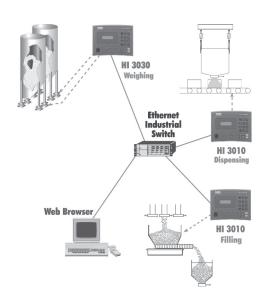
Single scale with -JB

built-in junction box

-2S Dual scale

-45 Four scale

## HARDY CONTROL-LINK NETWORK



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#### **OPTIONS**

- Built-in junction box
- Enviromental rear cap
- Swivel mount bracket
- DC power
- DC relay outputs
- Multiple analog out
- Profibus ControlNet
- DeviceNet master
- scanner/slave
- Modbus TCP
- EtherNet/IP



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> **ISO** 9001: 2008 CERTIFIED Since 1993

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