# **Multi-Scale Weight Controller**



The Hardy Instruments 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, Allen-Bradley Remote I/O, or Profibus. 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 configure or monitor the HI 3030 operating using your Palm OS PDA, 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 Remote I/O

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. You can even use a Palm PDA as a "virtual" local

# INTEGRATED TECHNICIAN®

port.

keypad and display

via its standard IR

The HI 3030's INTEGRATED TECHNICIAN®, in conjunction with an IT Junction Box, provides builtin system diagnostics that allow you to troubleshoot and diagnose your weighing system right from its front panel, a PDA, 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.

# Hardy 3000 Series Controllers

## **Features & Benefits**

- Real Team Player with Your Network
- Connect via common plant networks
- Use it as DeviceNet Master
- Use it as a gateway between networks
- Assign I/O anywhere on the network
- True Human Interface:
- Use a browser to access the embedded web server
- Download and upload setup data wirelessly with your PDA
- Download the latest firmware for your controller from our website
- Ease of Support
- INTERGRATED TECHNICIAN:
   Lets you isolate system problems
   from the comfort of your control room
- WAVERSAVER®: Ignores plant vibration on and ground scales
- C2®: Lets you calibrate electronically without test weights
- SMM (Secure Memory Module):
  Automatically backs up your
  configuration data for easy transfer



# COMPONENTS TO COMPLETE YOUR HARDY INSTRUMENTS' SYSTEM

#### HI 3030R Blind Remote

Where a keyboard or display does not make sense.



## 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 Series Load Point with C2® Calibration





#### Hardy C2<sup>®</sup> Certified Cable

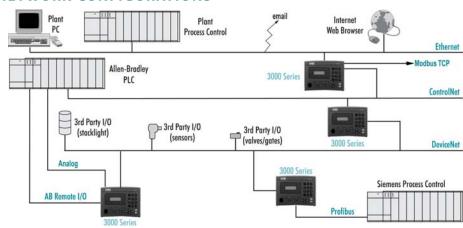
This 8-conductor cable is designed for optimizing weight and load sensor characteristic signals from the junction box to the instrument.

## 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.



#### **NETWORK CONFIGURATIONS**



#### **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 DeviceNet: master scanner

Infrared (IR): wireless connection to Palm OS PDAs Serial RS 232: simplex to Printer

#### Stable Weight Reading

WAVERSAVER® 0.25HZ minimum

#### Calibration Techniques

C2°, Second Generation Calibration: electronic Traditional calibration with test weights

#### • Instrument Local I/O

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

#### • Load Point Excitation

5VDC power drive up to 16 350 ohm load cells

#### • Power Requirement

108-264VAC, 47-63hz or 12-24 VDC 25 Watts maximum

#### • 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:

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

(227mm W x 169mm H)

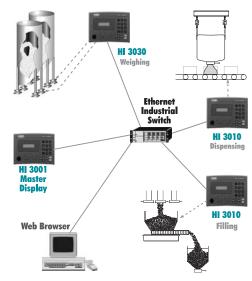
#### Approvals

CE, UL, CUL, Canada Weights & Measures

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

To learn more about the HI 3030, visit our website: www.hardyinst.com or call 800-821-5831

# HARDY CONTROL-LINK NETWORK



#### **MODELS**

- LC Single scale
- JB Single scale with built-in junction box
- 2S Dual scale
- 4S Four scale

#### **OPTIONS**

- Built-in junction box
- Environmental rear cap
- Swivel mount bracket
- DeviceNet master scanner
- Allen-Bradley RIO
- ControlNet
- Modbus TCP
- Profibus
- Analog
- Multiple analog out
- DC power
- DC relay outputs

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ISO 9001: 2000 C E R T I F I E D Since 1993

HI 3030 Rev 0809