

# Model HI 3010

# Filler/Dispenser Controller







# **Applications**

# **PROCESS WEIGHING**

- Batching/Blending
- Filling/Dispensing
- Bulk Bag

# **Features**

## **WAVERSAVER®**

Ignores vibration on and around scales

# **C2®** Electronic Calibration

• Electronic calibration without test weights

# SECOND GENERATION CALIBRATION

## INTEGRATED TECHNICIAN®

Weighing system monitoring and troubleshooting

# SMM-SD (Secure Memory Module with SD RAM)

 Expandable automatic backup of configuration data for easy transfer to other instruments or your PC

# **Network Flexibility**

- Connect via common plant networks
- Use it as a DeviceNet Master
- Use it as a gateway between networks

The Hardy HI 3010 can act as standalone controller, or as a sub-routine in your PLC, PC or DCS Ladder Logic system for a variety of applications such as filling, dispensing, or intermediate bulk container (IBC). It powers the scale, controls the speed, evaluates the weight, automatically refills and discharges the desired amount of product and notifies you of errors through its extensive networking capabilities.

#### **FLEXIBLE DESIGN**

- Designed to fit nearly any filling, dispensing, or Intermediate Bulk Container Application
- Handles all materials from all types of feeding mechanisms (gates, feeders, or valves) to all types of destination (packages, containers, vessels, or trucks)

#### **CONFIGURABLE CONTROL**

- No programming required: This Filler/Dispenser provides one-stop application control with less operator intervention and fewer additional hardware requirements. Need a function? Just turn it on, whether it is multi-speed, auto-refill or discharge, auto in-flight comp, material jog, feed timer limits, vibrators... Well, you get the picture.
- Blind Remote: No need for a front console and display for hard-to-access installations. Just use the HI 3010R Blind Remote with an optional built-in junction box. Configure or monitor it from the office or the plant floor, using a web browser on a PC.

• Ease of Networking: Need to communicate to your PLC using a standard control network? The HI 3010 can use all standard protocols. Let the HI 3010 be the subroutine in your PLC Ladder Logic Control. No Network? No Problem! The Filler/Dispenser can operate stand-alone or in conjunction with other 3000 Series controllers in a Hardy Control-Link Network with "Plug and Play" implementation.

#### **SMART CONTROL**

- Efficient and accurate filling control:
  Built-in features such as multiple speeds,
  Auto Fast Feed Adjust, self-adjusting
  preacts, and auto jog functions to auto-tune
  your process. These features continuously
  improve product throughput and let you
  focus on the bigger picture.
- On-board storage and totalizers: Store different setups with total weights and number of fills or discharges. Access this data from the front panel or a web browser to ensure consistency and eliminate operator error.
- Complete Flexibility: With its flexible I/O mapping, you can direct any parameter to a local output or to any point on the plant network. You can even have an event emailed directly to you.

# 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.



# **Hardy C2 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 215IT Series) with INTEGRATED TECHNICIAN

This NEMA 4 rated waterproof enclosure sums from one to four load sensor signals. Its unique design allows for easy electronic

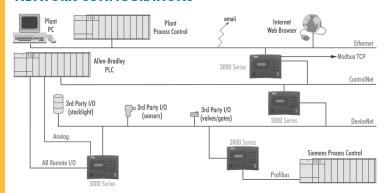
isolation and troubleshooting of the weighing system.







#### **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: 1CP/IP; 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 over DeviceNet

#### **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**

•  $-10^{\circ}$  to  $+50^{\circ}$ C (14° to 122°F)

#### Storage Temperature

•  $-20^{\circ}$  to  $+70^{\circ}$ C (-4° to 158°F)

# Enclosure

- Panel mount
- Swivel mount

#### Dimension

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

#### **Approvals**

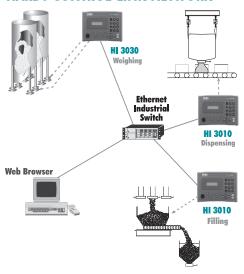
• CE. UL/CUL

#### **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.

#### HARDY CONTROL-LINK NETWORK



#### **MODELS**

HI 3010: Includes keyboard & LCD display
HI 3010R: Blind remote; no keyboard or display

## **OPTIONS**

- Built-in junction box
- Enviromental rear cap
- Swivel mount bracketSmart Diagnostics
- Ethernet /IP
- ControlNet
- Profibus - OPC

- Modbus TCP

- Multiple analog out

PROFI

- DC power
- DC relay outputs

#### **Hardy Process Solutions**

9440 Carroll Park Dr. San Diego, CA 92121 tel. +1-858-278-2900 tel. 800-821-5831 fax +1-858-278-6700 www.hardysolutions.com hardyinfo@hardysolutions.com

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