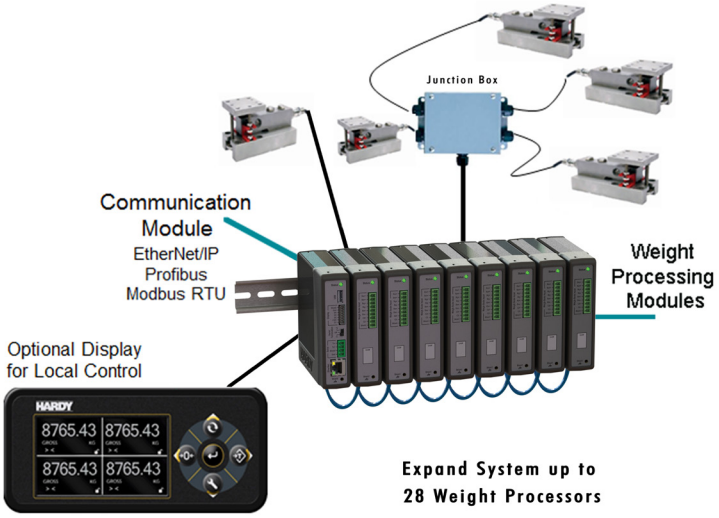
HARDY
PROCESS SOLUTIONS
Measurement ▪ Automation ▪ Productivity

HI 6600 Series
Modular Sensor System

PROCESS WEIGHING
Applications

- ***Inventory Measurement***
- ***Level Measurement***
- ***Batching/Blending***
- ***Filling/Dispensing/ Dosing***



Rockwell Automation
Encompass™ Product Partner
Global

Features

THE HARDY PROCESS TOOLBOX

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

PROCESS TOOLBOX

Electronic calibration without test weights

C2® eCAL™

Weighing system monitoring, diagnostics and troubleshooting

IT INTEGRATED TECHNICIAN®

Vibration immunity & faster scale settling time

WAVERSAVER®

Easy to configure and setup with a Rockwell Automation PLC

Rockwell EDS_Add-on-Profile

The HI 6600 series is a modular system of weight processors that deliver up to 28 channels of fast, stable, high-resolution weight readings to PLCs, PACs and DSCs over a single fieldbus network. Ideal for applications that require more than one channel of weight, such as inventory tank farms, batching systems and multi-head filling machinery; each channel of the HI 6600 processes signals from up to four connected load cells then outputs the entire system's weight data over EtherNet/IP, Ethernet TCP/IP, Modbus RTU, or Modbus TCP.

SOLID PERFORMANCE

The HI 6600 enhances productivity of manufacturing systems by digitally suppressing noise and dramatically reducing scale settling time. Even in noisy environments with excessive amounts of mechanical vibration, the HI 6600 provides a steady 1:10:000 resolution in oz, lb, ton, g, and kg with 110 updates per second over its variety of communications protocols.

EASY INSTALLATION

Just snap the number of weight channels you need onto a DIN rail, connect power, cable the units together to the Gateway Module using standard Cat5e cable, connect sensors, power up and press DISCOVER. The system will automatically identify all the modules connected together and make them addressable for set-up and calibration through the PLC, embedded Webserver or optional display. A Rockwell EDS_AOP simplifies integration using RSLogix.

SIMPLE SET-UP & CALIBRATION

The embedded webserver enables access to setup and calibration from anywhere on your network. An optional display adds front panel keys, simple menus and help text to make local control elementary. Use Hardy's exclusive C2® for automatic system calibration to save hours in commissioning and routine maintenance.

QUICK MAINTENCE & DIAGNOSTICS

With INTEGRATED TECHNICIAN®, maintain and troubleshoot the weighing system from anywhere in the world or use Hardy's intuitive local display that supports multiple languages. Store all the system parameters on a USB, clone settings between channels, and restore settings with the press of a button. Quick-disconnects on all wiring makes hot swapping damaged channels a snap!

OPTIONAL DISPLAY

Hardy's big, bright display allows local set-up, calibration and troubleshooting of the weight system without the need to access parameters via a PC or PLC – basic monitoring and maintenance can be done by anyone through its IP66 rated keypad. The display can show weight from up to 28 connected weight modules, displaying up to 4 channels simultaneously. Name weight channels for easy ID and arrange them to show in any order.

ULTRA LOW POWER CONSUMPTION

At just 1watt of power per channel and 3.5 watts per Gateway Module, eliminate the cost of cooling in the control cabinet and create high-density cabinet designs to save space and money.

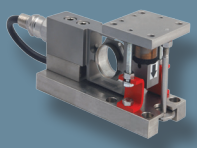
VIBRATION IMMUNITY

Hardy's WAVERSAVER® supresses vibration and mechanical noise, dramatically reducing scale settling time and increasing the speed of stable weight readings.

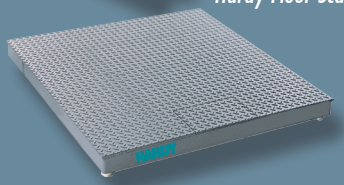
COMPONENTS TO COMPLETE YOUR HARDY SYSTEM

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 Floor Scales

Weighing Instruments Dedicated to Your Applications

Controllers, Weigh Modules, Weight Processors & Transmitters

Allen-Bradley® Compatible Plug-in Weigh Scale Modules

HI 3000 & HI 4000 Controllers and HI 6000 Series Weight Processors

SPECIFICATIONS

Weight Processing Module (WPM)

Resolution

- Stable processed weight 1:10,000
- Maximum displayed resolution: 1:999,999
- Internal resolution 1:8,388,608

Update Rate

- Processed weight, display, comm: 110 times per sec.
- Unprocessed weight (A/D conversion): 4800 Hz

Modes:

- Gross, Net

Units of Measure:

- Ounce, Pound, Ton, Gram, Kg, Metric Ton

Weight Processing

- WAVERSAVER®: 0.25 Hz to 7.5 Hz
- Averaging:1 to 255 User-selectable in single increments

Calibration Methods:

- C2® calibration without test weights
- Traditional calibration with test weights

Excitation:

- 5VDC

Number of Load Cells:

- Up to 4 at 350 Ω per weight processing module

Power:

- HI 6610: 24 VDC, Class 2 Source, max 1.72 Watts

Hardy Gateway Module (HGM)

Expansion

- Up to 28 weight processing modules per system*
- Maximum System Span: 500 ft (150 m) *
  *May require external 24 VDC power. See User Guide for details

HGM Available Protocols:

- EtherNet/IP
- Ethernet TCP/IP (Embedded Webserver)
- Modbus RTU and Modbus TCP

Communication Interface:

- Terminal (serial), RJ-45
- USB setup and configuration saving

Power:

- HI 6600: 24 VDC, Class 2 Source, max 3.9 Watts

Common Specifications

Dimensions:

- 4.55" D x 4.75"H x 1.25" W

Housing:

- High Strength ABS-Polycarbonate Blend

Mounting:

- DIN Rail with integrated clip

Interconnect Cable:

- RJ45 / Cat5e

Temperature:

- -10°C to +60°C (14° F to 160°F)

Humidity:

- 0-90% non-condensing

Environmental:

- IP30 rated

Certifications:

- Safety: UL & CUL
- EtherNet/IP ODVA Certification Level 3

Warranty:

- Two-year warranty against defects in workmanship

Optional Multi-channel Display:

- 80:1 contrast ratio with 4.3" effective viewing area
- 140° viewing angle
- Control, configure, and view all WPMs on one front panel
- Display keypad: IP66 5-Button Tactile
- Display bezel rated to NEMA 4 when panel-mounted in a NEMA 4 or 4X enclosure
- Dimensions: 0.75" D x 3.25"H x 7.5" W

MODEL NUMBERS

HI 6600 SERIES

HI6610-WP	Weight Processing Module, no display
HI6600-EIP	HardyNet Gateway Module - EtherNet/IP
HI6110	Optional Multi-Channel Display

Get more information about the HI 6600 Series at
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or 1-800-821-5831

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6600 Rev. C 0117