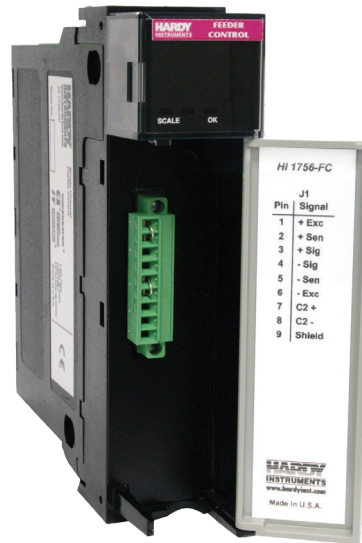


Model HI 1756-FC Weigh Feeder Control Module

Applications

PROCESS WEIGHING

- Gravimetric Feeding
- Continuous and Batch Rate Control



Features & Advantages

Direct Backplane to the ControlLogix® PLC:

- Reduce installation time and system costs with no need for external wiring

Automatic Closed Loop Control:

- Continuously adjusts feeder to deliver desired feed rate

Rockwell ControlLogix Add-On Profile (AOP):

- Quick and easy configuration for your application through PLC software on a PC

Automatic Refill:

- Starts and stops refilling without interrupting the feeding of material

Used in new applications, or to retrofit volumetric feeders or replace outdated controllers in gravimetric systems, the singlescale HI 1756-FC weigh feeder control module mounts directly into your Allen-Bradley® ControlLogix® chassis. By using the PLC rack I/O, it can control many feeding devices, such as auger, vibratory and belt-based feeders, as well as your proprietary designs.

FEATURES

Two bi-color LEDs on the front panel of the module report functional characteristics. Being a true ControlLogix module, the HI 1756-FC supports removal and insertion under power.

MULTIPLE FEEDER CONTROL

The HI 1756-FC is a powerful building block when it comes to multiple feeder systems. It can be a slave to other process inputs through the PLC processor.

WORRY-FREE OPERATION

The HI 1756-FC feeder control module will watch your process and notify you of problems. Prompts on your system's HMI display and PLC alarm relay outputs occur with tolerance errors and other failures. By entering specific control parameters, you decide at which levels to alarm or shut down the application.

AUTOMATIC WEIGHT AND RATE CALIBRATION

A five-point auto rate calibration automatically allows the module to calibrate itself to the characteristics of the feeder and the material being fed. This allows for a higher feed accuracy over a broader range of feed rates.

C2® ELECTRONIC CALIBRATION

C2 enables electronic calibration of the weigh system without test weights. This saves you system start-up costs and aggravation. Of course, even if C2 certified load sensors are not used, the system can still be calibrated the slow, traditional way using certified test weights.

WAVERSAVER®

WAVERSAVER ignores vibration and mechanical noise in feeders and the plant environment by permitting the weigh module to "see" through the unwanted vibration signals - as low as 0.25Hz - while yielding a stable actual reading.

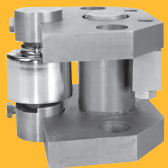
INTEGRATED TECHNICIAN®

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. 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



ANY-WEIGH
Scales

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.



HARDY
PROCESS SOLUTIONS
Measurement • Automation • Productivity

SPECIFICATIONS

Power

- Provided from the backplane of the rack
- +5Vdc
- +24Vdc

Backplane Current

- < 1 Amp @ 5Vdc 5W
- < 0.0125 Amp 0.3W @ 24Vdc with four 350 ohm L.C.

Totalizer

- Keeps track of the amount of ingredient dispensed

Time Units

- Seconds, minutes and hours

Units of Measure

- lb, oz, ton, kg, g, mt

Mode

- Batch, continuous

Inputs

- Signal: -2.5mV through +17.56mVdc
- Sense: + 5Vdc
- C2, Electronic Calibration

Outputs

- Excitation 5Vdc to +8.75Vdc

Common Mode Rejection

- 100dB at or below 60Hz (minimum)

Resolution

- Internal, 1:8,388,608

Conversion Rate

- 50 updates per second

Averages

- 1-255 user selectable in single increments

Vibration Frequency Rejection

- WAVERSAVER
- 0.25 Hz and above in 5 selectable steps, and OFF

I/O Chassis Location

- Any single I/O chassis slot

Environmental Conditions

- Operating Temperature: 0 to 60°C (32 to 140°F)
- Storage Temperature: -40 to 85°C (-40 to 185°F)

Relative Humidity

- 5 to 95% (non-condensing)

Weighing Modes

- Net, Gross

Calibration Techniques

- Electronic (C2)
- Traditional (test weights)

Automatic Rate Calibration

- Five-point

Weight

- 1.1 lb (0.5kg)

Indicators

- "OK", Module Status, LED
- "Scale 1", Functional Data, LED

Approvals

- CE (pending)

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.

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OPTIONS

• Remote Termination Assembly (-RTA)

The weigh scale module optional Remote Termination Assembly provides connection points between the cable assembly to the module and individual wires from the junction box, or load sensors, of up to two scales. The RTA is designed for standard DIN mounting rails or standoffs. With an HI 1756-RTA configuration, the weigh scale modules can be replaced without disturbing the wiring.

• Cable (-C6)

Hardy provides an optional 6-foot cable assembly from the weigh scale module to the remote termination assembly.

• Options Ordering

Options can be ordered at the same time the module is ordered by adding the dash designators to the end of the module number.

For example:

HI 1756-FC-RTA-C6	Single-scale weigh feeder control module with remote termination assembly and cable
HI 1756-FC	Single-scale weigh feeder control module alone
HI 1756-XX-RTA	Remote termination panel alone
HI 1756-XX-C6	Single-scale 6-foot (1.8m) cable alone

To learn more about
the HI 1756-FC
visit our web site for:

- full product specifications
- ordering information
- application notes
- technical description
- operator's manual

www.hardysolutions.com

or call us: 800-821-5831
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