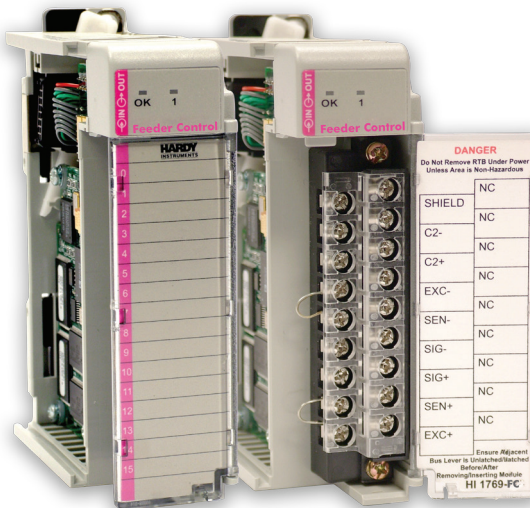


Applications

PROCESS WEIGHING

- Gravimetric Feeding
- Continuous and Batch Rate Control



Features

Direct Backplane to the Allen-Bradley® CompactLogix™ and MicroLogix™ 1500 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 CompactLogix and MicroLogix 1500 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

The HI 1769-FC Feeder Controller module is a self-contained, microprocessor-based CompactLogix™ and MicroLogix™ 1500 I/O solution that automatically calculates and adjusts tuning parameters typically required to maintain desired flow rates in a dispensing or filling system. It is used in a variety of material-flow applications, such as auger, belt, and vibration-based feeders. It can be operated in batch, automatic, or manual mode.

Algorithms contained in the HI 1769-FC compare user defined flow rates to the actual flow rates by continuously monitoring changes in the system weight over short intervals of time; the 1769-FC then calculates the adjustments necessary to achieve the user defined rate and instructs the PLC to adjust the speed of the feeding or dispensing device.

The 1769-FC updates 100 times per second and is capable of 8,388,608 counts of resolution, enabling the instrument to precisely determine target flow rates and tolerate large “dead” loads in a weigh system.

WORRY-FREE OPERATION

The HI 1769-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.



SPECIFICATIONS

Power

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

Backplane Current

- < 1 Amp @ 5Vdc 5W

Totalizer

- Keeps track of the amount of ingredients dispensed

Time Units

- Seconds, minutes and hours

Units of Measure

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

Mode

- Batch, continuous

Inputs

- Signal: -0.3mV through +15.3mVdc
- Sense: +5Vdc
- C2 Electronic Calibration

Outputs

- Excitation 5Vdc

Common Mode Rejection

- 120dB from 59 to 61Hz

Resolution

- Internal, 1:8,388,608

Conversion Rate

- 100 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, Rate

Calibration

- Electronic (C2)
- Traditional (test weights)

Weight

- 0.61 lb (0.27kg)

Indicators

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

Certifications

- UL/CUL/CE (pending)

Hazardous Location

- Class 1, Div 2 Groups A,B,C,and D (pending)

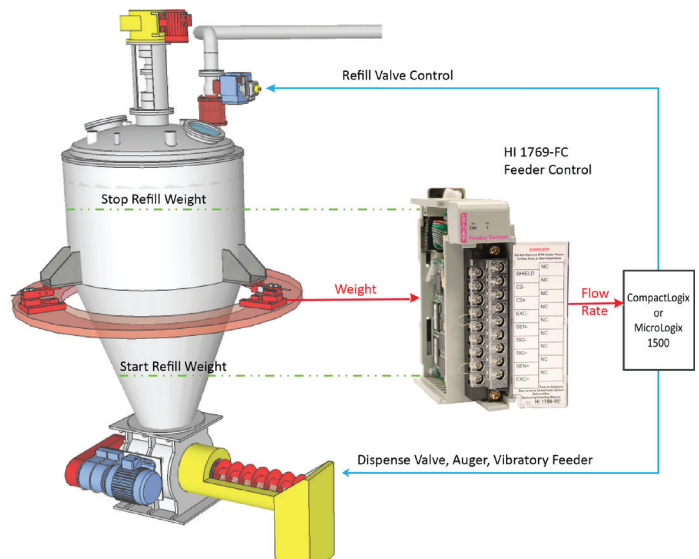
Warranty

- 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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APPLICATION



MODELS AND OPTIONS

- | | |
|-------------------|---|
| HI 1769-FC | Single-scale weigh feeder control module alone |
| HI 1769-XX-C6 | Single-scale 6-foot (1.8m) cable alone |
| HI 1769-XX-RTA | Remote termination panel alone |
| HI 1769-FC-RTA-C6 | Single-scale weigh feeder control module with remote termination assembly and cable |

To learn more about
the HI 1769-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
+1-858-278-2900

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