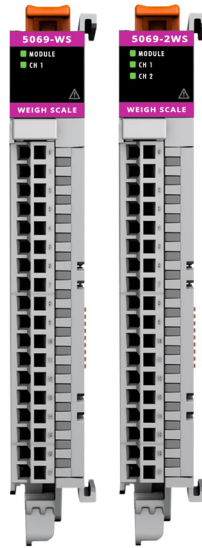


**PROCESS WEIGHING**  
**Applications**

- **Batching/Blending**
- **Filling/Dispensing**
- **Product Inspection**
- **Set-point Control**
- **Level Measurement**



**Technology Partner**

A ROCKWELL AUTOMATION PARTNER

**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.



**Electronic calibration without test weights**



**Weighing system monitoring, diagnostics and troubleshooting**



**Vibration immunity from mechanical noise**



**Easy to configure and setup**  
**Add-on-Profile & FacePlate**

The HI5069-WS series are high performance single or dual channel weigh scale modules that feature a powerful 24-bit sigma-delta ( $\Sigma-\Delta$ ) analog-to-digital converter (ADC). This converter combined with Hardy's WEVERSAVER<sup>®</sup> filtering technology, ensure accurate, fast and stable weight data in even the most adverse conditions where noise and mechanical vibration plague process control.

Designed to plug directly onto the backplane of Rockwell Automation<sup>®</sup> Compact-Logix 5380 controllers, Hardy HI5069 scale modules enable faster system performance by serving as a co-processor to the control system, delivering post-processed (filtered) weigh data at a rate of 250 updates per second directly to the backplane.

**SECURE**

Controller-based change detection, device authentication, firmware encryption and event logging help to protect the entire integrated system against malicious intent. A final layer of protection is provided by Common Industrial Protocol (CIP<sup>™</sup>) Security to prevent attacks commonly carried out over large organizational networks.

**REDUCE TIME TO COMMISSION**

Benefit from tight integration of a scale system by using Add-On-Profiles, Add-On-Instructions and Faceplates available from Hardy and native to Studio 5000 Logix Designer<sup>®</sup>.

Industries such as Chemical, Food & Beverage, Life Sciences, Metals & Mining, Aerospace, Oil & Gas, and Plastics benefit from the Hardy Productivity Toolbox – C2<sup>®</sup> calibration and Integrated Technician<sup>®</sup> scale diagnostics – enabling a proactive maintenance strategy and troubleshooting with the touch of a button.

**SIMPLE SET-UP & CALIBRATION**

Use load sensors with Hardy's exclusive C2<sup>®</sup> Calibration for automatic system calibration saving hours in commissioning and routine maintenance. By reading the calibration with certificate embedded electronically in the C2 sensor, the weigh system can be calibrated with the touch of a button.

**MAINTENANCE & DIAGNOSTICS**

For quick and easy troubleshooting, the HI5069 scale modules feature built in diagnostics that include 3 LEDs per module that indicate Plug-In-Module and weigh scale status. With Integrated Technician<sup>®</sup>, the module monitors and troubleshoots the weighing system by diagnosing individual sensors without the need to disconnect.

## 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



### Weighing Instruments Dedicated to Your Applications

Controllers, Weigh Modules, Transmitters

Allen-Bradley® Compatible Plug-in Weigh Scale Modules



Weight Controllers and Weight Processors



## SPECIFICATIONS

### Performance:

#### Resolution

- Stable processed weight 1:10,000
- Internal resolution 1:8,388,608
- Update rate to backplane: 250 times per second
- A/D conversion rate: up to 4800 times per sec

#### Number of Load Cells:

- Up to 8 350  $\Omega$  per weight processing channel (1 for -WS and two for -2WS modules)

#### Modes:

- Gross, Net

#### Units of Measure:

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

#### Weight Processing

- WAVERSAVER®: .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

#### Output:

- Excitation 5VDC

#### Inputs:

- Signal, -0.3 mV to +15 mV
- Sense, +5 Vdc
- C2® Electronic Calibration

#### Mounting

- Directly to Backplane
- Recommended Terminal Base Cat# 5069-RTB18-SCREW

#### Backplane Ratings:

- MOD Power: 18-32 VDC, 75 mA
- SA Passthrough Max: 10-32 VDC 9.95

#### Mounting

- Directly to Backplane
- Recommended Terminal Base Cat# 5069-RTB18-SCREW

#### Temperature:

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

#### Humidity:

- 5-95% non-condensing

#### Certifications:

- Safety: UL & CUL, CE
- Environment: RoHS3 and REACH Compliant
- Hazardous: Class I, II, III/Div2

#### Warranty:

- Two-year warranty against defects in workmanship

### 5069 Pin Configuration

| RTB | Name  | Desc.             |        |
|-----|-------|-------------------|--------|
| 0   | In-0  | Ch 1 Excitation + | Jumper |
| 1   | In-1  | Ch 1 Sense +      |        |
| 2   | In-2  | Ch 1 Signal +     | Jumper |
| 3   | In-3  | Ch 1 Signal -     |        |
| 4   | In-4  | Ch 1 Sense -      | Jumper |
| 5   | In-5  | Ch 1 Excitation - |        |
| 6   | In-6  | Ch 1 C2+ (Cal)    | Jumper |
| 7   | In-7  | Ch 1 C2 - (Gnd)   |        |
| 8   | In-8  | Ch 1 Frame Gnd    | Jumper |
| 9   | In-9  | Ch 2 Excitation + |        |
| 10  | In-10 | Ch 2 Sense +      | Jumper |
| 11  | In-11 | Ch 2 Signal +     |        |
| 12  | In-12 | Ch 2 Signal -     | Jumper |
| 13  | In-13 | Ch 2 Sense -      |        |
| 14  | In-14 | Ch 2 Excitation - | Jumper |
| 15  | In-15 | Ch 2 C2+ (Cal)    |        |
| 16  | SA +  | Ch 2 C2 - (Gnd)   | Jumper |
| 17  | SA -  | Frame Gnd         |        |

Use Terminal Block: 5069-RTB18-SCREW Series A



**HARDY**  
**PROCESS SOLUTIONS**  
 Measurement ■ Automation ■ Productivity

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HI5069-WS Series 0824  
 0400-5069 RevA