

PROCESS WEIGHING Applications

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

Weight Processing Modules . Ε



HI5069-WS and HI5069-2WS

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

INTEGRATED[®] TECHNICIAN

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 (Σ - Δ) analog-to-digital converter (ADC). This converter combined with Hardy's WAVERSAVER® 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® Compact-Logix 5380 controllers, Hardy HI5069 scale modules enable faster system performance by serving as a co-processer to the control system, delivering postprocessed (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™) 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®.

Industries such as Chemical, Food & Beverage, Life Sciences, Metals & Mining, Aerospace, Oil & Gas, and Plastics benefit from the Hardy Productivity Toolbox - C2® calibration and Integrated Technician® 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[®] 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 guick 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®, 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







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 Ω 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

<u>Mounting</u>

- 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

Temperature:

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

<u>Humidity:</u>

• 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	ln-1	Ch 1 Sense +	Jumper
2	In-2	Ch 1 Signal +	
3	In-3	Ch 1 Signal -	
4	In-4	Ch 1 Sense -	Jumper
5	In-5	Ch 1 Excitation -	Jumper
6	In-6	Ch 1 C2+ <mark>(</mark> Cal)]
7	In-7	Ch 1 C2 - <mark>(</mark> Gnd)]
8	In-8	Ch 1 Frame Gnd	
9	In-9	Ch 2 Excitation +	Jumper
10	In-10	Ch 2 Sense +	Jumper
11	In-11	Ch 2 Signal +	
12	In-12	Ch 2 Signal -	
13	In-13	Ch 2 Sense -	Jumper
14	In-14	Ch 2 Excitation -	Jumper
15	In-15	Ch 2 C2+ (Cal)	
16	SA +	Ch 2 C2 - <mark>(</mark> Gnd)]
17	SA -	Frame Gnd]

Use Terminal Block: 5069-RTB18-SCREW Series A





10075 Mesa Rim Road San Diego, CA 92121 tel. +1-858-278-2900 tel. 800-821-5831 www.hardysolutions.com hardyinfo@hardysolutions.com



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