



Multi-line Display



Configure for your application and environment

R400 SERIES

Industrial Weight Controller

- Versatility that enables:
 - Connectivity
 - Traceability
 - Process Control
 - Simple Filling
 - Single Ingredient Batching
- ABS or Stainless Steel Models
- Configurable & Flexible
 - No need to write sophisticated programs or learn proprietary programming languages



CAS

R400 SERIES | Industrial Weight Controller

TOTAL WEIGHING SOLUTION™

FEATURES

Panel Mount		•	•
Desk Mount/Enclosure		•	•
		IP65 Rated	IP66 Rated
Enclosure	Hi Tech Plastic Alloy	•	-
	Stainless Steel	-	•
Power	110-240 VAC	•	•
	12-24 DC	Optional	Optional
# of Load Cells	@ 350 Ohm	16	
	@ 700 Ohm	32	
Supplied Communication Port		RS232 Bidirectional & RS485 Transmit Only	
Optional Modules (Max of four modules can be used)	C4201*	RS232 Bidirectional & RS232 Transmit Only	
	C4202*	RS232 Bidirectional & RS485 Transmit Only	
	C4203*	RS485 Bidirectional & RS485 Transmit Only	
	C4221	Wired Ethernet	
	C1400	Profibus Interface	
	C4401	Analog Output	
	C0200	Bluetooth	
	C0081	20mA Converter	
	C4901	Relay Output PCB	
	C4301	8 Input/Output (1-8)	
	C4311	8 Input/Output (9-16)	
	C4321	8 Input/Output (17-24)	
	C4302	8 Input/Output (25-32)	
		K401/K402 use a max of 8 inputs & 8 outputs	
Function Inputs		Up to 8	
Weight Related Set Points		Up to 8	
Networking		•	
Clock Calendar		•	
Custom Printing		•	
Clear Protective Covers		Optional (R420)	

*If you use the supplied communication port, you can only add one serial communication module. If you do not use the supplied communication port, you can add up to two serial communication modules.



Simply build your controller's capabilities by selecting the indicator with the appropriate application software. Populate up to four slots on the main pc board to include modular capabilities such as serial output options, Ethernet, Profibus, Bluetooth, analog output, and up to eight weight related setpoints (with external relay output options available). Also available are up to 32 isolated digital I/O ports.

It's as easy as 1,2,3....
Build your controller's capabilities

- 1 Select an indicator/enclosure to meet your application's environmental needs**
High Tech Plastic Alloy IP65 Rated R420
Stainless Steel IP66 Rated R423
- 2 Choose the appropriate application software**
K401 - General Weighing with 1 Product Database
K402 - SMART Weighing with 250 Product Database
K410 - SMART Filling Indicator with 100 Recipes (Products)
- 3 Populate up to four slots on the main pc board to provide modular communication capabilities, process control, single ingredient filling, or data management**

Modular Accessories Include:

Serial output	Bluetooth
Ethernet	Up to 8 weight related set points
Profibus	External relay outputs
Analog Output	Up to 32 isolated digital I/O
20 mA	8 Inputs/Outputs

Application Software	K401	K402	K410
Unit Switching	•	•	-
Dual Range %	•	•	•
Products/Recipes	1	250	100
Hold & Peak Hold	•	•	-
Counting	•	•	-
Report Printing	•	•	•
Totalizing Printing	•	•	•
Logic Setpoints	•	•	•
Positive/Negative Batching	-	-	•
Time Based Batching	-	-	•
Batch Suspend	-	-	•
Fill, Dump, & Pulse Stages	-	-	•
Inflight Jogging	-	-	•
Batching	-	-	3 Stages
Materials	-	-	1
Speeds for Fill	-	-	3

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Superior Housings: To provide flexibility to fit the environment, two housing types are available: the R420 (high tech plastic alloy) and R423 (stainless steel). Both housings are designed with extra attention to detail to increase their reliability in the field, thereby reducing unplanned downtime and servicing costs. A high impact polycarbonate lens protects the LCD on each housing.

Panel, Desk, or Wall Mount:

The R420 and R423 are available as a panel mount or a desk/wall mount with enclosure. Choose the design type based on your needs.



R423 w/Stainless Enclosure and Desk/Wall Mount



Panel Mount



R420 with Desk Mount

Multi-Line Display: Assist the operator by displaying information such as current weight, count, piece weight, total weight, and product name.

Simple setup: Use the easy to navigate front panel alpha-numeric keypad for configuration or CASLink, which consists of a magnetically coupled infrared port on the controller's front panel and CAS PC configuration software.



Multi-line Display

Robust I/O: Designed for direct connection into PLC's, or direct drive up to 400mA each with up to 32 I/O control points.

Networking Capability: Support for both Ethernet and Profibus to improve integration into larger control systems.

Application Software

• K401 - General Weighing with 1 Product Database

The K401 is a versatile general purpose indicator. Its modular design can be simply configured to meet connectivity, traceability, process control, and simple ingredient filling needs.

- One product database
- Counting w/piece weight entry
- PLC Integration
- Optional serial outputs, Ethernet, Profibus, & Bluetooth
- Analog output
- Set points
- Reporting
- Custom printing

• K402 - SMART Weighing with 250 Product Database

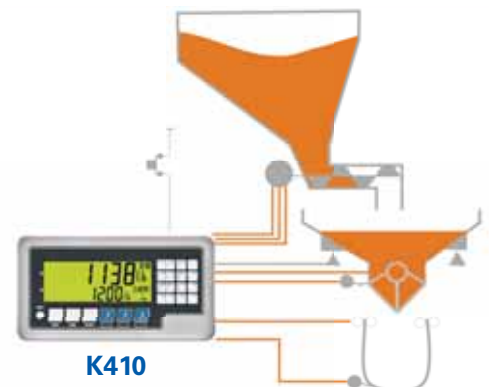
The K402 adds multiple-product databases - up to 250 - to the capabilities of the K401. It is ideal for applications where there are a variety of products that have product parameters that need to be recalled. Powerful product configuration allows for parameters to be stored for each product.

- Set point target (up to 8 per target)
- Piece weight
- Unit conversions
- Full accumulation data

• K410 - SMART Filling Indicator with 100 Recipes (Products)

The K410 is a single material filling application used for dosing, bagging, and silo discharge.

- 100 recipes (products)
- 3 set batching stages - fill, dump, & pulse
- 1 material/3 speed fill
- Fill correction using jogging or in-flight
- Negative/positive batching
- Batch suspend
- Dump to time or weight



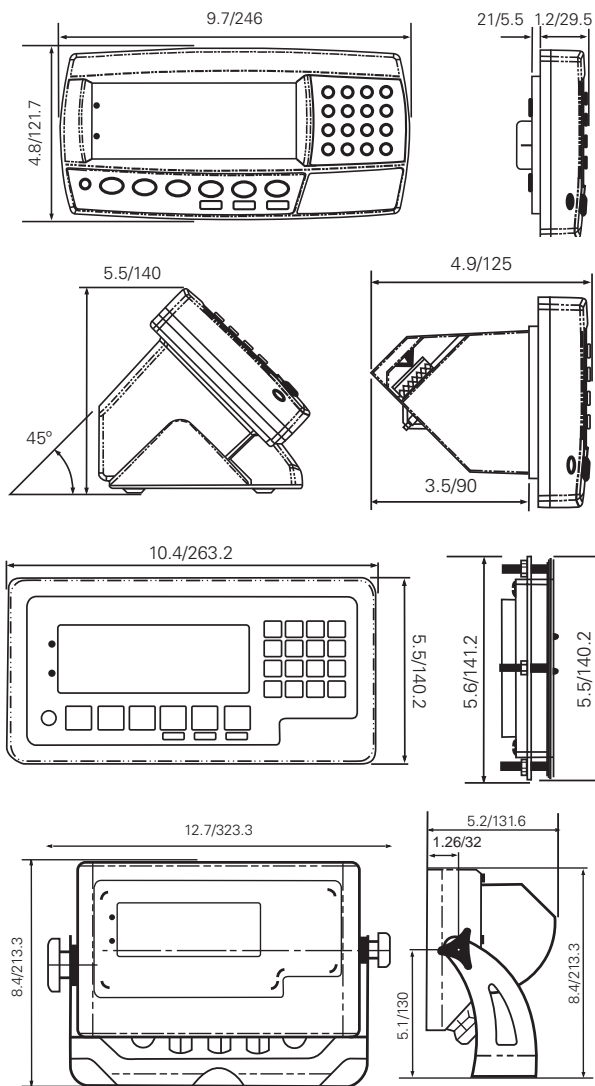
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SPECIFICATIONS

Housing	High tech plastic alloy	Stainless steel
Environmental IP Rating	IP65	IP66
Resolution	Up to 100,000 divisions, min - 0.25 μ V/d	
Zero Cancellation	± 2.0 mV/V	
Span Adjustment	0.1mV/V to 3.0mV/V	
Excitation	7.4V for up to 16 x 350 or 32 x 700 ohm load cells (4-wire or 6-wire plus shield) Maximum total load cell resistance: 1,000 ohms	
A/D Type	24 bit Sigma Delta with $\pm 8,388,608$ internal counts	
Operating Environment	Temperature: $-10^{\circ} \sim +50^{\circ}\text{C}$ / $4^{\circ}\text{F} \sim 122^{\circ}\text{F}$ Humidity: <90% non-condensing	
Display	LCD with 4 alpha-numeric displays & LED backlighting	
	Primary display: 6 x 28.4mm (1.12") high digits with units and annunciators	
	2nd display: 9 x 17.6 mm (0.7") digits with units	
	3rd display: 8 x 6.1 mm (0.2") digits	
	4th display: 4 x 7.6 mm (0.3") digits	
Setup & Calibration	Full digital with visual prompting in plain messages	
Digital Filter	Sliding window average from 0.1 to 30.0 seconds	
Zero Range	Adjustable from $\pm 2\%$ to $\pm 20\%$ of full capacity	
Standard Power Input	12 to 24VDC (15 VA max)-ON/OFF key w/mem. feature	
Power	AC	AC power supply Input: 110/240VAC 50/60Hz Output: 12VDC 15VA
	Battery	2.5AH NiMH rechargeable battery pack Charger Input: 110/240VAC 50/60Hz Output: 12VDC
Optical Data Communications	Magnetically coupled infra-red communications Conversion cables available for RS232 or USB	
Correction	10 point linearity correction	
Serial Outputs	Included - Serial 1A: RS-232 serial port for remote display, network or printer supports.	
	Included - Serial 1B: RS485 transmit only for remote display	
	Transmission rate: 2400, 4800, 9600 or 19200 baud	
Assignable Function Keys	3	
Operating Modes	Single Range, Dual Range and Dual Interval	
Clock Calendar	Battery life 10 years minimum	
Packaging Weights	Indicator: 1kg (35 oz)	Indicator: 1.2kg (42 oz)
Approvals	NTEP: 11-050	
Warranty	2 Years	

DIMENSIONS

Units: Inches/mm



OPTIONS

- Wall Mount - Stainless
- Clear Protective Covers (R420)
- Battery Pack NiMH
- CASLink USB Cable
- Physical Seal
- RS232/485 Modules
- Ethernet
- Profibus
- Analog Output
- Input/Output Modules
- Relay Outputs



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Specifications are subject to change for improvement without prior notice.

