

## R423 Standard Batch Controller Data Sheet



- 100,000 d @ 0.25  $\mu$ V/d
- Polycarbonate Standard, other housing options\*
- Completed cabling within the unit.
- Viewer Software for configuration and diagnostics.
- Save400 software for cloning applications.
- 8 I/O Standard, up to 32 I/O can be added.
- Internal Free Running setpoints available in addition to the Batching

The R423 Batch controller is designed specifically for filling and dosing applications. It can be used in bag filling as well as negative batching applications. It has the option to show a bag/batch counter on the LCD. The standard unit has 8 IO and 3 front panel operators with 1 mushroom E-stop. A standard 24 VDC power supply is used to power the instrument, relays and buttons. Relay outputs are set for a 24VDC control voltage however they can quickly be toggled to source 120/240 VAC to suit the desired application requirements. Color coded terminals are used to designate 24 VDC versus 120 VAC. A single M4301 is utilized to drive 4 relays and 3 pushbuttons. Adding a M4311 would allow expansion for additional buttons and controls. Up to 32 IO in total can be added using the 4 available expansion slots.

The polycarbonate enclosure is standard. However other size and material options are available and can be selected according to the environment with either the fiberglass rating NEMA4X or polycarbonate rated to IP66.

### A typical configuration would include:

- **DIN rail mounted relays** that are used in conjunction with an I/O module and provide 8 relay outputs rated to 250VAC up to 8A.
- **DIN rail mounted 120-240VAC Power Supply**
- Emergency Stop and coloured buttons configured for Start, Pause & Abort
- Cabled and with a basic configuration for the application firmware that has been selected.

**Flexibility** is the key with its award winning modular accessory design and the ability to utilise the ever-increasing Software Variants of the 400 Series of Indicators.

**Modules include:** M4301 included, M4311 optional. *M4223 can be added to enhance programmability add CSV DSD and other features.*

**Operator friendly** - large multi-segment display that uses logical prompts along with dedicated and programmable function keys.

### Smart Weighing

#### Superior Diagnostics

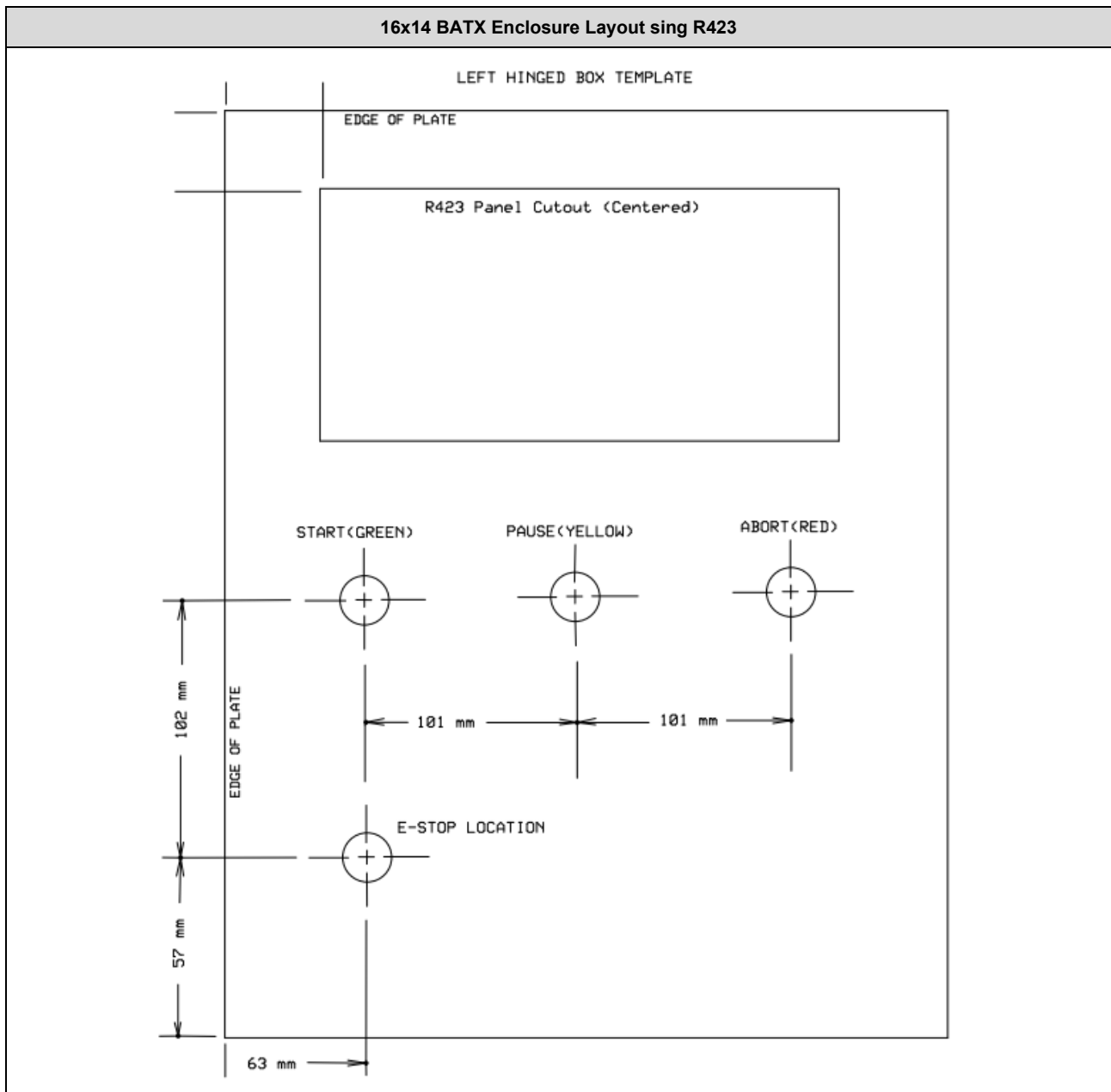
R400 series indicators have a range of diagnostic tools and features that aid system commissioning and maintenance.

- **Force Output and Test Input functions** allow the installer to specifically test I/O to assist in site setup
- **Modules can be swapped** in and out without recalibration of the indicator, saving time and effort
- **Status LED** on each I/O, both on I/O module and Relay card.
- **Overload counter** to review if the scale has been overloaded.
- **Viewer Software** connection via **RinLink** to assist with additional configuration and storing applications for future development as well as supporting existing installations.

*...now that's smart weighing.*

## R400 Series Specification Table

<b>Resolution</b>	Up to 100,000 d, minimum of 0.25uV/d		
<b>Approvals</b>	10,000 d @0.7uV/d NMI(S-463), OIML R76 III/III L NTEP 08-720 MID 2004/22/EC - WELMEC 2.1 & 7.2 FCC, CE, C-tick		
<b>Zero Cancellation</b>	+/- 2.0mV/V		
<b>Span Adjustment</b>	0.1mV/V to 3.0mV/V		
<b>Excitation</b>	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		
<b>A/D Type</b>	24bit Sigma Delta with ±8,388,608 internal counts		
<b>Operating Environment</b>	Temperature: -10 to +50°C ambient (14 °F to 122 °F) Humidity: <90% non-condensing		
<b>Display</b>	LCD with 4 alpha-numeric displays and LED backlighting: Primary display: 6 x 28.4mm (1.12") high digits with units and annunciators 2 <sup>nd</sup> display: 9 x 17.6 mm (0.7") digits with units 3 <sup>rd</sup> display: 8 x 6.1 mm (0.2") digits 4 <sup>th</sup> display: 4 x 7.6 mm (0.3") digits		
<b>Setup and Calibration</b>	Full digital with visual prompting in plain messages		
<b>Digital Filter</b>	Sliding window average from 0.1 to 30.0 seconds		
<b>Zero Range</b>	Adjustable from +/- 2% to +/- 20% of full capacity		
<b>Standard Power Input</b>	120/240 VAC (10 A cartridge Fuse w/ 1 spare)		
<b>Input Power</b>	Input: 120/240VAC 50/60Hz Output: 24 VDC 2.5A / 60Watt		
<b>Optical Data Communications</b>	Magnetically coupled infra-red communications		
<b>Correction</b>	10-point linearity correction		
<b>Serial Outputs</b>	Serial 1A: RS-232 serial port for remote display, network or printer supports. Serial 1B: RS485 transmit only for remote display Transmission rate: 2400, 4800, 9600 or 19200 baud		
<b>Assignable Function Keys</b>	3 – Default Setting: F1 = Start F2 = Pause F3 = Abort		
<b>Operating Modes</b>	Single Range, Dual Range and Dual Interval		
<b>Battery Backed Clock Calendar</b>	Battery life 10 years minimum		
<b>Application Software</b>	<b>K410</b>	<b>K411</b>	<b>K412</b>
<b>Functions</b>	1 Material	6 Material	10 Material
	3 fixed batching stages -fill, dump and pulse 3 Speed Fill	Up to 10 Batching Stages 3 Speed Fill, Fill, Dump & Pulse stages	
	Inflight & jogging correction Negative batching Batch suspend		
<b>Products/Recipes</b>	100 Recipes		
<b>Set points*</b>	8 Standard, Expandable to 32*.		
<b>Analogue Output *</b>	1		
<b>Additional Communications *</b>	Module: RS232/RS232 Module: RS232/RS485 Module: RS485/RS485		
<b>Button Input</b>	3: 22mm Buttons/ 24 Volt contacts.		
<b>Data Storage Device *</b>	1		
<b>Ethernet *</b>	1		
<b>Enclosure/Housing Options</b>	<b>POLYCARBONATE</b>		
<b>Case Materials</b>	Polycarbonate, Stainless Steel*, Powder Coated Steel* (*optional)		
<b>Environmental IP Rating</b> (panel mounted or with rear boot)	NEMA4 (IP66)		



Specifications are subject to variation for improvement without notice. Illustrations are for reference only. Layouts may vary based on application.

\*Optional modules

### Console dimensions

Polycarbonate	16 x 14 x 7 (400 mm x 350 mm x 180 mm)
Powder coated steel*	16 in x 14 in x 8 in (400 mm x 350 mm x 200 mm)
Stainless steel*	16 in x 14 in x 8 in (400 mm x 350 mm x 200 mm)

Please contact Rinstrum to discuss your configuration requirements.

\*Optional Enclosures

### Internal Wiring Diagram:

