R400 Series Build to Order Console – Data Sheets

- 100,000 d @ 0.25 µV/d
- Powder Coated or stainless steel options.
- Completed cabling within the unit.
- Viewer Software for configuration and diagnostics.
- Save400 software for cloning applications.
- FELS operations via DX40 software in optional D640/D740 remote displays.
- Internal Logic relays in 400 Series allow for additional I/O control beyond the standard weight triggered I/O.

The R400 series of indicators are ideal for mounting in consoles for a wide variety of applications including filling, batching and process control just to name a few. The console houses the power supply and relays that are used to control external devises; motors, solenoids etc. The R400 series modularity makes it ideally suited for build to order applications where the modules and accessories can be easily specified to be incorporated in one unit to suit your applications.

Two consoles are available selected according to the environment with either the R420 (ABS) rated to IP65 or the R423 (stainless steel) 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 voltage free relay outputs rated to 250VAC up to 8A.
- DIN rail mounted **240VAC Power Supply**
- Emergency Stop and coloured buttons configured as required
- 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: Additional RS232/RS485 Serial options, Input/Outputs, Analogue outputs, voltage free inputs for buttons etc. Ethernet, Alibi (Data Storage Device) as well as battery or AC options.

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

Printing can be tailored with custom record, docket or reports printouts. Primary display is 29mm (1.1") and secondary display 18mm.

Smart Weighing

Superior Diagnostics

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

Hardware configuration report summarises how the indicator hardware is setup, providing a record for maintenance purposes or fault finding

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

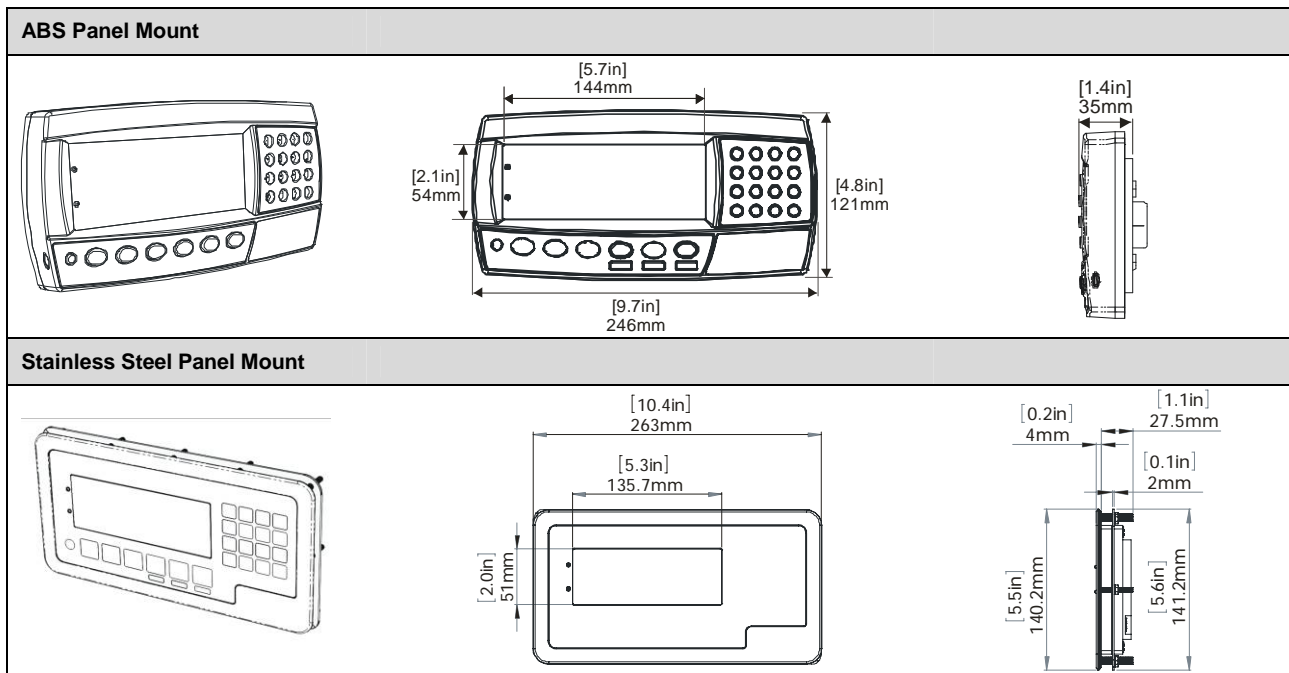**Status LED** on each I/O, both on I/O module and Relay card.

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

Resolution	Up to 100,000 d, minimum of 0.25uV/d					
Approvals	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					
Zero Cancellation	+/- 2.0mV/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	24bit Sigma Delta with ±8,388,608 internal counts					
Operating Environment	Temperature: –10 to +50°C ambient (14 °F to 122 °F) Humidity: <90% non-condensing					
Display	LCD with 4 alpha-numeric displays and 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 and 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 +/- 2% to +/- 20% of full capacity					
Standard Power Input	12 to 24VDC (15 VA max) - ON/OFF key with memory feature					

Variants	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	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					
Assignable Function Keys	3					
Operating Modes	Single Range, Dual Range and Dual Interval					
Battery Backed Clock Calendar	Battery life 10 years minimum					

Application Software	**K401**	**K402**	**K404**	**K410**	**K411**	**K412**
Functions	Custom printing, custom unit switching, counting, manual hold, peak hold, auto output totalising		Single pass weighing Two pass weighing Dedicated truck key Custom printing Temporary Truck IDs Preset Tare Specialised truck dockets	1 Material 3 fixed batching stages - fill, dump and pulse 3 Speed Fill	6 Material Up to 10 Batching Stages 3 Speed Fill, Fill, Dump & Pulse stages	10 Material
				Inflight & jogging correction, Negative batching, Batch suspend, Timer (RTC) based multiple batching		
Products/Recipes	1	250	250 Trucks	100 Recipes		
Set points*	8 Standard, Expandable to 32*.					
Analogue Output *	1					
Additional Communications *	Module: RS232/RS232 Module: RS232/RS485 Module: RS485/RS485					
Button Input *	4 Buttons dry input contacts.					
Data Storage Device *	1					
Profibus-DP*	Used with Rinstrum 1400 Profibus-DP Module					
Ethernet *	1					

Indicator Options	**R420**	**R423**
Case Materials	ABS	Stainless Steel
Environmental IP Rating (panel mounted or with rear boot)	IP65	IP66

ABS Panel Mount

[5.7in]
144mm

[2.1in]
54mm

[4.8in]
121mm

[9.7in]
246mm

[1.4in]
35mm

Stainless Steel Panel Mount

[10.4in]
263mm

[5.3in]
135.7mm

[2.0in]
51mm

[0.2in]
4mm

[1.1in]
27.5mm

[0.1in]
2mm

[5.5in]
140.2mm

[5.6in]
141.2mm

Specifications are subject to variation for improvement without notice. Illustrations are indications only and variation may be evident between products.

*Optional modules

Console dimensions

Powder Coated Console	300 x 380 x 200
Stainless Steel Console	300 x 380 x 200

Please contact Rinstrum to discuss your configuration requirements.