

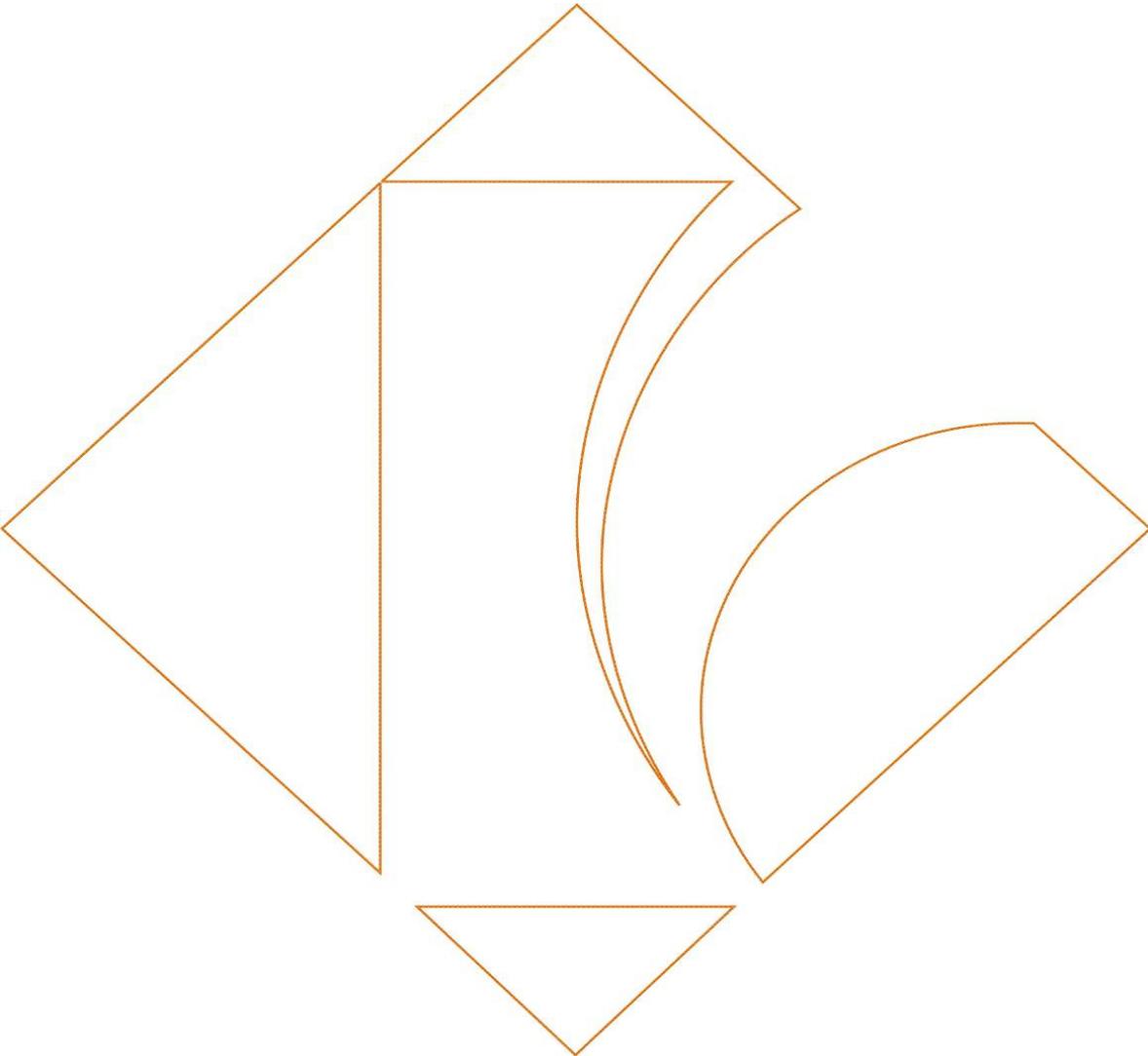


## Weight Indicators and Remote Displays Catalogue

Effective from April 2013  
Goods supplied from Rinstrum Europe

<b>Australian Office:</b>	<b>European Office:</b>	<b>US Office:</b>
41 Success Street Acacia Ridge Queensland 4110 Australia	Rinstrum Europe GmbH Darmstädter Str. 72-76 64354 Reinheim Germany	Rinstrum Inc 1343 Piedmont Troy, Michigan 48083 United States
Ph: +61 (0) 7 3216 7166 Fax: +61 (0) 7 3216 6211	Ph: +49 (0) 6162 9 16 56-0 Fax: +49 (0) 6162 9 16 56-29	Ph: +1 248 680 0320 Fax: +1 248 499 1331
Email: <a href="mailto:sales@rinstrum.com">sales@rinstrum.com</a>	Email: <a href="mailto:info@rinstrum.de">info@rinstrum.de</a>	Email: <a href="mailto:sales.usa@rinstrum.com">sales.usa@rinstrum.com</a>

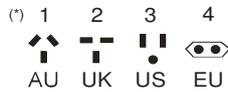
[www.rinstrum.com](http://www.rinstrum.com)



## Table of Contents

R300 Series Compact Indicators	4
R325 Baggage Weighing	9
R300 Series Accessories	10
R400 Series	13
R400 Series General Accessories	22
PC Software	25
Indicators - X Series	26
1203 Weight Transmitter	28
2100 Indicator	29
5200 General Purpose Indicator	31
5230 Truck Weighing Indicator	32
5000 Family Accessories	33
Remote Displays	34
High Visibility Weight Indicator	41
H Scale - Hanging Scale	42
General Accessories	44
Pricing Summary	46
Terms and Conditions	50

\* Country plug denoted by last digit (\*)



### Notes

The packing weight of units is approximate only  
 The external dimensions are approximate only  
 (Opt) - An Option that must be chosen at time of purchase (factory fit)  
 (Acc) - Accessory that is user installable and can be installed at a later date

Prices and Specifications are subject to change at anytime without notice

R300 Series Compact Indicators

R320



R323



Specifications

Approvals

4,000d @ 0.8µV/d NMI (S-420), OIML R76  
C-Tick, CE & FCC

Physical

Display Type LCD display with LED backlight  
Digit Size 20mm (0.8")  
Power Switch Front panel with memory

Loadcell

Excitation 5 VDC  
Drive 4x350Ω (Max 3.5kΩ) Nontrade 8x350Ω  
Sensitivity 30,000d @ 0.25 µV/d

ABS Housing R320

Keypad 6 Key Silicon Keypad  
Housing ABS Plastic (IP65 with M3003)  
Dimensions 164(W) x 77(H) x 30(D) mm  
Weight 0.34 kg (12oz)

Power

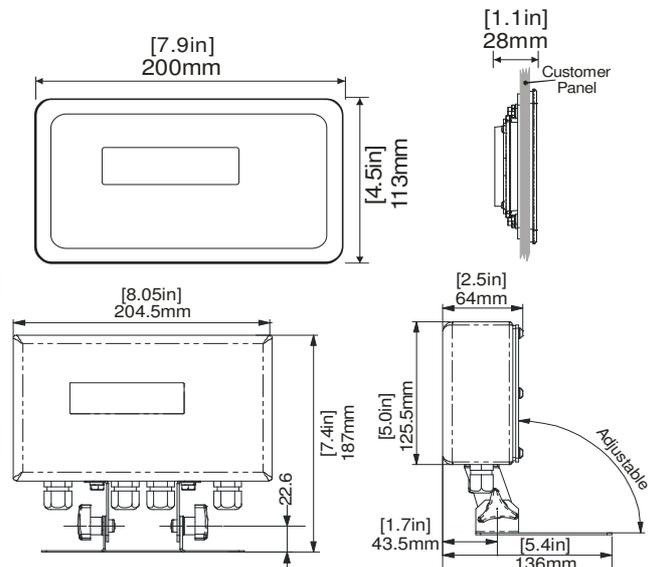
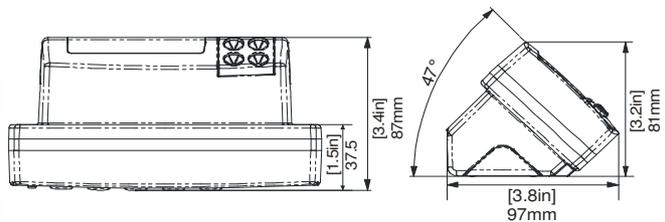
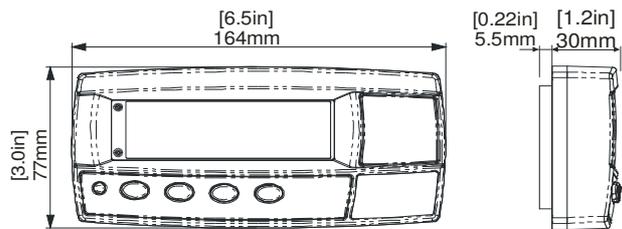
DC 4.8-24 VDC  
AC Plug pack (Acc)  
Battery 4 x AA Alkaline or NiMH (Acc)  
12V 2.5Ah NiMH (Acc)

Stainless Steel R323

Keypad 6 key membrane  
Housing Stainless Steel  
Dimensions 200(W) x 113(H) x 30(D) mm  
Weight 0.49 kg (17oz) -A

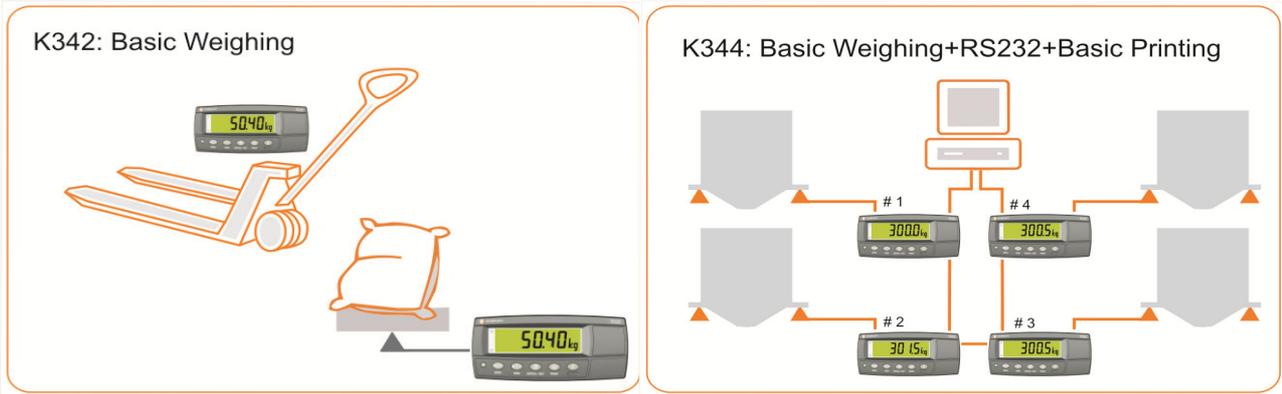
Power

DC 4.8-24 VDC  
AC 110-240 VAC (Opt)  
Battery 12V 2.5Ah NiMH (Opt)



R300 Series Application Software

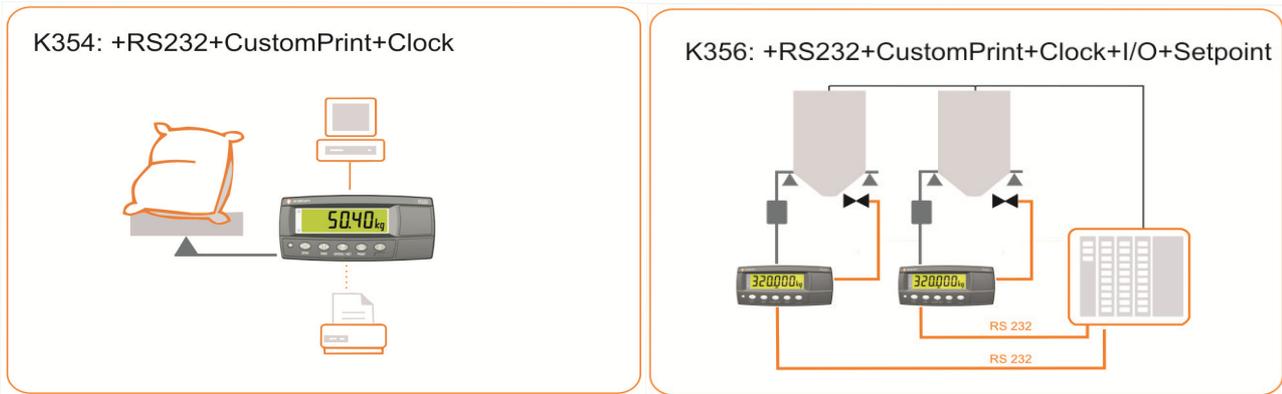
Basic K342 and K344



K342 firmware is the most basic trade approved firmware available on the R300 hardware, offering weight display. It uses the Zero, Gross/Net, Tare buttons and the function key is set to the Hold function.

K344 firmware provides basic weighing with serial RS232 communications. The serial communications allows for basic printing or communication with a remote display. As with the K342 the function key is set to the Hold function.

K354 and K356



K354 and K356 firmware includes the clock calendar and custom printing. The full range of functions are available on the programmable function key. Serial RS232 communications allows for a printer or remote display to be connected. Both are available on both the R320 ABS and R323 Stainless Steel hardware. The programmable function key can be configured to any one of the built-in functions (Unit switching, Counting, Manual Hold, Peak Hold, Live Weight, Totalising). Configurable printing combined with the clock calendar allow for traceable dockets to be printed. They both include the functionality of the one (1) input. K356 firmware builds on the K354 firmware and offers two (2) setpoints in addition to the above features.

R300 Series Compact Indicators

Step 1: Select Housing



Panel mount IP65 ABS housing with silicon keys with protect over the LCD. Select from a range of hardware accessories, including a boot desk stand and mounting brackets.

R320

A

Indicator, ABS,VDC, Panel Mount,



Panel mount IP66 stainless steel housing with membrane keypad - only 4mm deep it is ideal for applications requiring near flush panel mounting

R323

A

Indicator,Stainless Steel,VDC, Panel Mount,



Full stainless steel IP66 housing including stand for post, wall or desk mounting.

R323

C

Indicator,Stainless Steel,VDC, Full Housing,



Full stainless steel IP66 housing including stand for post, wall or desk mounting. Prewired AC power supply with mains lead with country specific pin configuration.

R323

\* D4

Indicator,Stainless Steel,VAC, Full Housing,



Full stainless steel IP66 housing including stand for post, wall or desk mounting with 2.5Ah 12V NiMH rechargeable battery pack with charger.

R323

F

Indicator,Stainless Steel,NiMH, Full Housing,

Step 2: Select Firmware

	K342		Basic,
	K344		Basic,RS232,Standard Print,
	K354		Basic,RS232,CustomPrint,Clock,
	K356		Basic,RS232,CustomPrint,Clock,I/O, Setpoint,
	-	-	

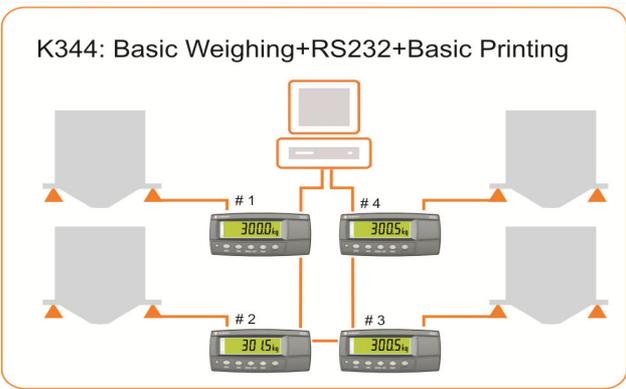
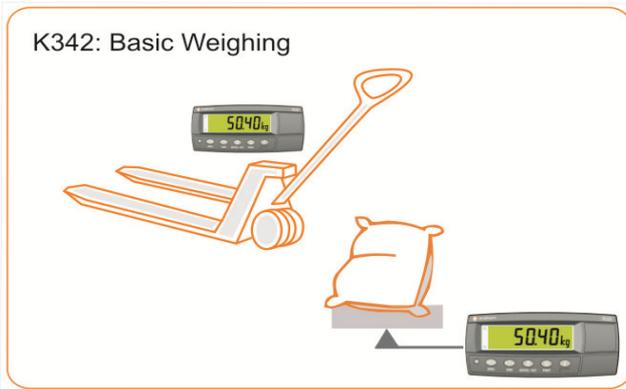
\* Country plug denoted by last digit (\*)

Full Housing options have metal stand included

For Blank variant, with no Rinstrum branding, substitute BL for R in Stock Code. Eg. R420-K401-A to BL420-K401-A

Accessories refer to page

R300 Series - Basic Weighing (K342/K344)



Specifications

Approvals

4,000d @ 0.8µV/d NMI (S-420),OIML R76  
 III/III L NTEP 08-720 A1  
 C-Tick, CE & FCC

Features	K342	K344
Function Keys	5 Fixed	5 Fixed
Clock Calendar	-	-
Serial	-	RS232
Input	-	-
Output	-	-
Set Points	-	-
Linearisation	-	-
Range	Single	Single
Ring Network	-	S

Functions

Counting	-	-
Printing	-	Basic
Hold	Fixed	Fixed
Totalisation	-	-
Unit Switching	-	-

K342 firmware is the most basic trade approved firmware available on the R300 hardware, offering weight display. It uses the Zero, Tare and Gross/Net buttons, and the function key is set to the Hold. function.

K344 firmware provides basic weighing with serial RS232 communications. The serial communications allows for basic printing or communication with a remote display. It uses the Zero, Tare and Gross/Net buttons, and the function key is set to the Hold. function.

The **RS232** communications port is 15kV static protected.

Note: S denotes Standard feature available in the firmware

Basic,



<b>R320</b>	- K342	- <b>A</b>	Indicator, ABS,VDC, Panel Mount,
<b>R323</b>	- K342	- <b>A</b>	Indicator,Stainless Steel,VDC, Panel Mount,
<b>R323</b>	- K342	- <b>C</b>	Indicator,Stainless Steel,VDC, Full Housing,
<b>R323</b>	- K342	- <b>D4</b>	Indicator,Stainless Steel,VAC, Full Housing,
<b>R323</b>	- K342	- <b>F</b>	Indicator,Stainless Steel,NiMH, Full Housing,

Basic,RS232,Standard Print,



<b>R320</b>	- K344	- <b>A</b>	Indicator, ABS,VDC, Panel Mount,
<b>R323</b>	- K344	- <b>A</b>	Indicator,Stainless Steel,VDC, Panel Mount,
<b>R323</b>	- K344	- <b>C</b>	Indicator,Stainless Steel,VDC, Full Housing,
<b>R323</b>	- K344	- <b>D4</b>	Indicator,Stainless Steel,VAC, Full Housing,
<b>R323</b>	- K344	- <b>F</b>	Indicator,Stainless Steel,NiMH, Full Housing,

\* Country plug denoted by last digit (\*)

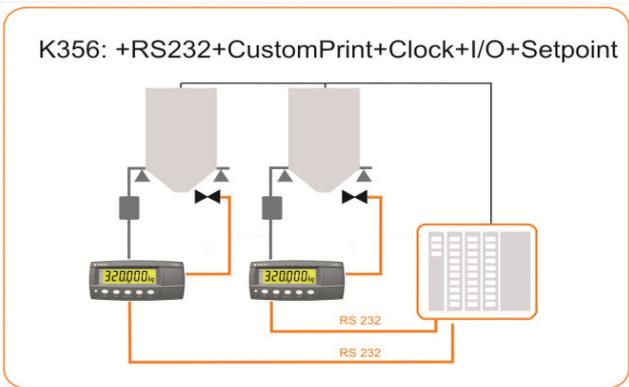
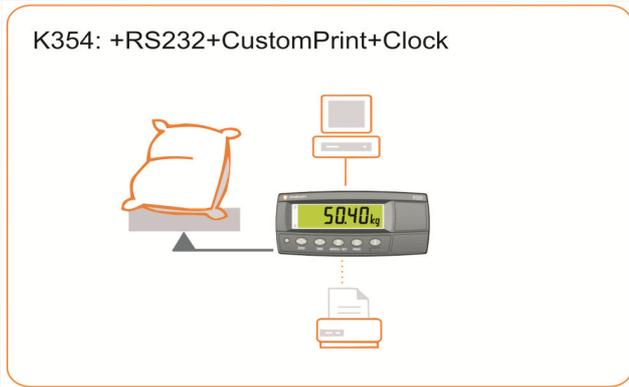
Full Housing options have metal stand included

For Blank variant, with no Rinstrum branding, substitute BL for R in Stock Code. Eg. R420-K401-A to BL420-K401-A

Accessories refer to page

10

R300 Series -Basic Weighing with date/time/custom print(K354/K356)



**Specifications**

**Approvals**

4,000d @ 0.8µV/d NMI (S-420),OIML R76 III/III L NTEP 08-720 A1  
C-Tick, CE & FCC

Features	K354	K356
Function Keys	Prog	Prog
Clock Calendar	S	S
Serial	RS232	RS232
Input	1	1
Output	-	2
Set Points	-	2
Linearisation	-	-
Range	Single	Single
Ring Network	S	S

**Functions**

Counting	S	S
Printing	Custom	Custom
Hold	S	S
Totalisation	S	S
Unit Switching	S	S

K354 and K356 firmware includes the clock calendar and custom printing. The full range of functions are available on the programmable function key. Serial RS232 communications allows for a printer or remote display to be connected. Both are available on both the R320 ABS housing and R323 stainless steel housing with membrane keypad. Also included is one (1) input.

**Programmable function key** configured for any one of the built-in functions (Unit switching, Counting, Manual Hold, Peak Hold, Live Weight, Totalising)

**Configurable printing** combined with the clock calendar allow for traceable dockets to be printed.

**RS232** communications port is 15kV static protected.

**K356 firmware builds on the K354 firmware and offers two (2) setpoints.**

**Two Isolated set point outputs** - high side driver up to 300mA, allowing direct connection to PLCs and for external actuators to be driven directly

Note: S denotes Standard feature available in the firmware

**Basic,RS232,CustomPrint,Clock,**



<b>R320</b>	-	K354	-	<b>A</b>	Indicator, ABS,VDC, Panel Mount,
<b>R323</b>	-	K354	-	<b>A</b>	Indicator,Stainless Steel,VDC, Panel Mount,
<b>R323</b>	-	K354	-	<b>C</b>	Indicator,Stainless Steel,VDC, Full Housing,
<b>R323</b>	-	K354	-	<b>D4</b>	Indicator,Stainless Steel,VAC, Full Housing,
<b>R323</b>	-	K354	-	<b>F</b>	Indicator,Stainless Steel,NiMH, Full Housing,

**Basic,RS232,CustomPrint,Clock,I/O, Setpoint,**



<b>R320</b>	-	K356	-	<b>A</b>	Indicator, ABS,VDC, Panel Mount,
<b>R323</b>	-	K356	-	<b>A</b>	Indicator,Stainless Steel,VDC, Panel Mount,
<b>R323</b>	-	K356	-	<b>C</b>	Indicator,Stainless Steel,VDC, Full Housing,
<b>R323</b>	-	K356	-	<b>D4</b>	Indicator,Stainless Steel,VAC, Full Housing,
<b>R323</b>	-	K356	-	<b>F</b>	Indicator,Stainless Steel,NiMH, Full Housing,

\* Country plug denoted by last digit (\*)

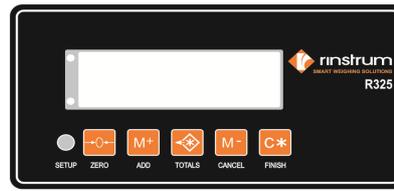
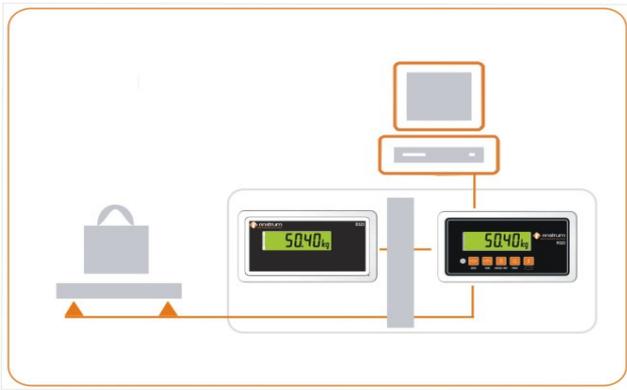
Full Housing options have metal stand included

For Blank variant, with no Rinstrum branding, substitute BL for R in Stock Code. Eg. R420-K401-A to BL420-K401-A

Accessories refer to page

10

**R325 Baggage Weighing**



**Specifications**

**Physical**

Display Type LCD display with LED backlight  
 Digit Size 20mm (0.8")  
 Power Switch Front panel with memory

**Loadcell**

Excitation 5 VDC  
 Drive 4x350Ω (Max 3.5kΩ) Nontrade 8x350Ω  
 Sensitivity 30,000d @ 0.25 μV/d

**Stainless Steel**

Keypad 6 key membrane  
 Housing Stainless Steel  
 Dimensions 200(W) x 113(H) x 30(D) mm  
 Weight 0.49 kg (17oz) -A

**Power**

DC 4.8-24 VDC

**Approvals**

C-Tick, CE & FCC

**Features**

Function Keys 4 Fixed Add/Totals/Cancel/Finish  
 Clock Calendar Standard  
 Serial RS232 automatic transmit for remote display  
 RS485 network or printer connection.  
 Input -  
 Output 1 single pole dual throw relay output (2A Max)  
 Set Points 1

**Functions**

ADD a bag  
 TOTALS number of bags and weight  
 CANCEL to remove a bag  
 FINISH to print and clear totals  
 Configurable print format  
 Unit Switching;

The R325 indicator builds on over 15 years of design experience in the R300 series to create a dedicated baggage handling application:

- Slim line flush mounting on the counter
- Dedicated baggage functions including number of bags and total weight summing.
- Combined with D323 remote display for complete baggage handling systems

The dedicated baggage-weighing functionality allows for easy monitoring of both the total summed weight and the number of bags to ensure preset bag numbers and weight limits are not exceeded.

This information can be transmitted to the optional D323 remote display for passenger viewing. Printing or computer network communications are provided for via the RS485 port.

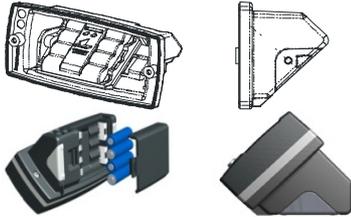
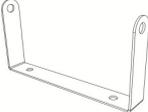
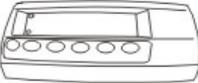
Dedicated key pad functions increase input capabilities and decreases the chance of operator error.

Pre-determined bag and total weight limits prevent excess baggage weights being accepted by the operator.

	Order Code
Indicator,VDC, Luggage, Stainless Steel, Panel Mount,	R325-A

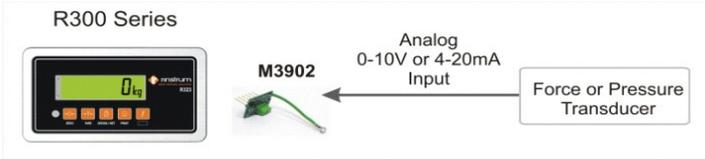
## Rinstrum Catalogue V6.00

### R320 Accessories for ABS housings

Desk Stand Boot	Order Code
 <p><b>H ware, Desk Mount, ABS,</b></p> <p>R320 ABS plastic desk stand with non-slip rubber feet for desktop use. Also holds 4xAA batteries. Includes input jack for A1002* DC plug pack. This input jack is not suitable for charging rechargeable batteries.</p>	<p><b>M3001</b></p>
 <p><b>Plug Pack, 12VDC 2.5A, 2.1mm Socket, Country Plug *</b></p> <p>Food grade stainless steel housing that also seals instrument to IP65. Desk stand also included.</p>	<p><b>A1002*</b></p> <p>(*) 1 2 3 4</p> <p>  </p>
 <p><b>H ware, Rear boot, ABS IP65, Waterproof</b></p> <p>R320 ABS water proof boot. Compatible with M3002, M3007 and M3014 brackets for mounting.</p>	<p><b>M3003</b></p>
 <p><b>Plug Pack 12VDC, Bare Ends and Country Plug denoted by *</b></p> <p>110-240VAC switch mode plug pack with country specific pin configuration to bare wires (12VDC output).</p>	<p><b>A1000*</b></p> <p>(*) 1 2 3 4</p> <p>  </p>
<b>Brackets</b>	
 <p><b>H ware, Swivel Mount, Stainless, 39mm high</b></p> <p>Stainless steel bracket used with M3001 or M3003 boots for wall mounting. 39mm high, knobs and washers supplied</p>	<p><b>M3002</b></p>
 <p><b>H ware, Swivel Mount, Stainless, 64mm high</b></p> <p>Stainless steel bracket used with M3001 or M3003 boots for wall mounting. 64mm high, knobs and washers supplied</p>	<p><b>M3014</b></p>
 <p><b>H ware, Pole Mount, Stainless,</b></p> <p>Stainless steel stand for pole mounting - for use with M3001 or M3003 boot and A10018 pole mount insert.</p>	<p><b>M3007</b></p>
 <p><b>Insert for pole mounting,</b></p> <p>Variable diameter (36-38mm) insert for pole mounting with four holes for cabling.</p>	<p><b>A10018</b></p>
<b>Clear Cover</b>	
 <p><b>H ware, Cover, Clear Protective, Pack of 10</b></p> <p>R320 clear plastic covers to protect instrument face from dirt/scratches while still allowing full functionality, in packs of 10.</p>	<p><b>M3005</b></p>
<b>Trade Sealing Cover</b>	
 <p><b>H ware, Physical Seal,</b></p> <p>Trade sealing cover for use with lead seals or destructible void stickers. Maybe also required for panel mounted units in commercial or trade applications.</p>	<p><b>M3009</b></p>
<b>Rechargeable Battery Option</b>	
 <p><b>Battery Pack, NiMH 12V 2.5AH ABS, IP65</b></p> <p>One M3003 boot with 2.5Ah 12V NiMH batteries, charging socket and internal charger. IP65</p>	<p><b>M3103</b></p>

R300 Series Accessories

R300 Family Converters Order Code



**Module, Converter, 0-10V/4-20mA Input, M3902**  
 Module, Converter, 0-10V/4-20mA, Connects to Load Cell Input on R300 series indicators for a voltage or current input



**Module, Converter, RS232 to RS485, 0080**  
 Converts RS232 to RS485 full duplex four wire for long distance data communications. Requires external power (A1002\*) other than when used with 2100 and 5000 Series. When used with 2100 Series RTS switching for multi-drop compatibility can be selected.



**Module, Converter, RS232 to 20mA Current Loop, 0081**  
 Converts RS232 transmit only to 20mA current loop.

Opto links for temporary connection to a PC for software upgrades and configuration

**Viewer PC software, for R300 Series and X320 Indicators, View300**

PC software for fast simple indicator setup via a PC. It displays the complete menu structure of the indicator on the PC with convenient drop down menus for setting selection. The setup can be stored for maintenance purposes and reloaded onto the indicator if required. Similarly if multiple indicators are to be configured for the same application the setting file can be loaded onto each indicator. Where appropriate calibration settings can be transferred also. Free download from the Rinstrum web site ([www.rinstrum.com](http://www.rinstrum.com)) login and password required.



**Cable, Serial OptoLINK-DB9F, A10005**  
 RS232 to Optolink, service and setup interface cable.



**Cable, Serial OptoLINK-USB, Driver CD A10012**  
 USB to Optolink, service and setup interface cable, drivers for windows operating system supplied.



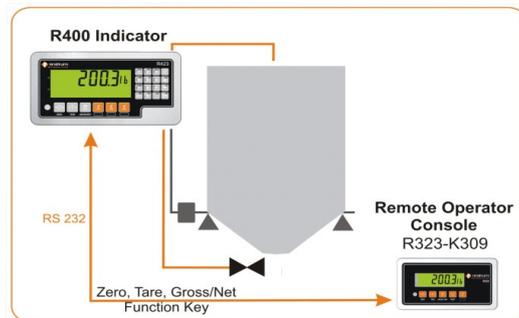
**H ware, 5.5 mm Socket Driver, M3901**  
 Assembly tool for R323 family



R300 Series Accessories

Bluetooth Pairings		Order Code
	<p><b>Paired Bluetooth Accessories for, Indicator and Remote Display</b></p> <p>Bluetooth factory paired accessories for use in an R320 indicator (and M3001 boot) and D320 remote to create a single point to point bluetooth connection for wireless communications.</p>	<b>M3205</b>
	<p><b>Paired Bluetooth Accessories for, Indicator and USB</b></p> <p>PC (USB dongle) bluetooth master factory paired with an accessory card, that is used in an R320 indicator and M3001 boot to create a single point to point bluetooth connection for wireless communications.</p>	<b>M3206</b>
Bluetooth Individual Ends for multi roaming solutions		
	<p><b>Single Bluetooth USB Multi Master,</b></p> <p>Rinstrum Bluetooth USB Multi Roaming Master for use in a PC or laptop to provide a connection to an indicator or remote display using a bluetooth accessory.</p>	<b>M0207</b>
	<p><b>Single Bluetooth Multi Master for, Indicator</b></p> <p>Bluetooth R300 Multi Roaming Master accessory card for use in an R320 indicator and M3001 boot. As a multi roaming master it will establish a communication connect with any multi slave that comes within proximity. (eg. a D320 remote display could use the M3208 multi roaming slave accessory allowing for connection back to the M3207).</p>	<b>M3207</b>
	<p><b>Single Bluetooth Multi Slave for, Indicator</b></p> <p>Bluetooth Multi Roaming Slave accessory card used in either an R300 indicator or D300 display to establish a bluetooth connection to a multi master - for example an M0207 on the PC or M3207.</p>	<b>M3208</b>

Additional Firmware



**K309 X320 or R320/R323, Remote Console to R400**

The K309 software provides the remote console functionality and can be installed on either an X320 or R320/R323.

The operator has Zero, Tare, Gross/Net functions along with a function key available at the X320 (or R320/R323) remote console. The function key and print key can be mapped to trigger one of F1-F3 or IO1-32 on the master R400.

The X320-K309 and R320-K309 will interface with all the software application variants across the R400 Series indicators – K401, K402, K410, K411 and K481.

R400 Series



The R400 series of indicators are designed with both the installer and operator in mind and cover a wide range of applications.

**Flexibility** is the key with its award winning modular accessory design. Modules include: additional serial options, input/outputs, analogue outputs, external buttons, Ethernet, Alibi (Data Storage Device) and battery or AC option.

**Superior housings** - two housing types are available:

- R420 (ABS) rated to IP65
- R423 (stainless steel) rated to IP66

**Simple setup** - use the menu system directly via the alpha numeric keypad or the configuration utility View400 on a PC.

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

**Custom printing** can be tailored with custom record, docket or reports printouts.

**Rugged Load Cell Input** - Designed to take 16x350 ohm load cells; providing flexibility and reducing the need for summing hardware, simplifying the installation and saving money. The load cell input is protected with onboard transorbs to limit damage from external voltage surges.

**Networking Capability** - Support for both Ethernet and Profibus DP for integration into larger control systems .



Specifications

Physical

Display Type	LCD display;LED backlight
Digit Size	29mm Primary 18mm Secondary
Power Switch	Front Panel with Memory
Function Keys	3 Fixed, 3 Programmable

Power

DC	12-24 VDC
AC	110-240 VAC (Acc)
Battery	12V 2.5Ah NiMH (Acc)

Loadcell

Excitation	7.4V DC
Drive	16 x 350 Ω
Sensitivity	100,000d @ 0.25 μV/d
Linearisation	10 points
Range	Single/Dual Range, Dual Interval

Features

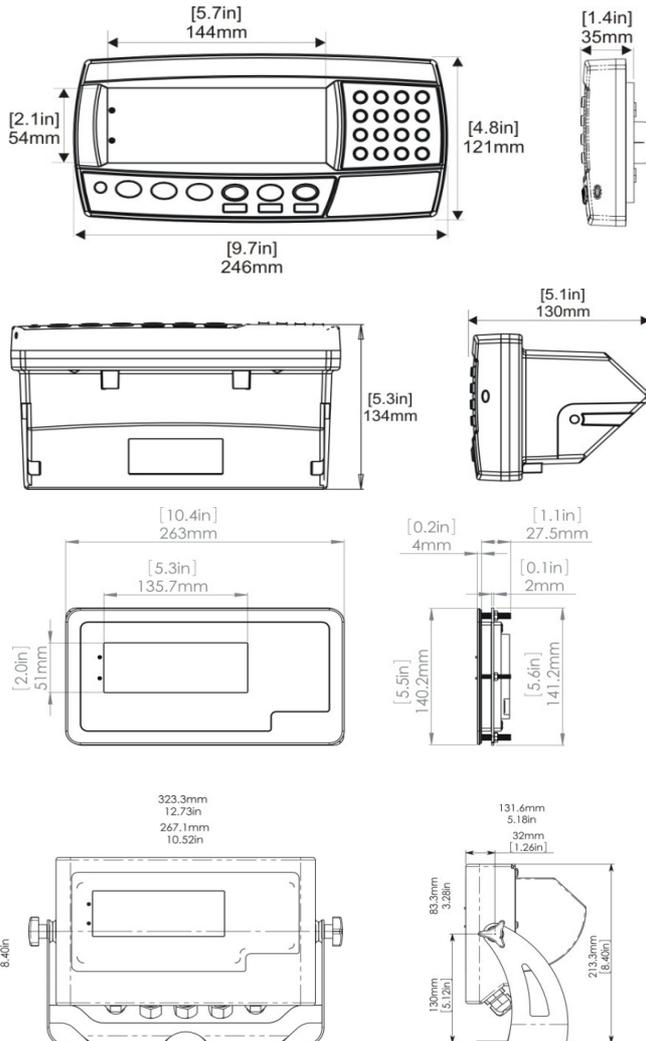
Serial 1A	RS232
Serial 1B	RS485 TX Only
Accessory Slots	4
Input/Output	32 I/O (Opt)
Set Points	8

R420

Keypad	23 Silicon Keys
Housing	ABS Plastic IP65
Weight	1kg (2.2lb)

R423

Keypad	23 Key Membrane
Housing	Stainless Steel IP66
Weight	1.2kg (2.6lb)



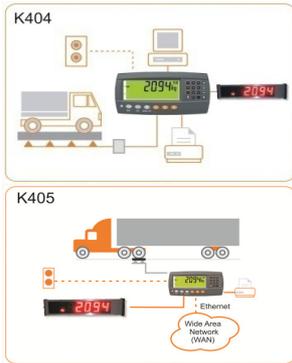
R400 Series Application Software

General Purpose Weighing (K401 1 Product and K402 250 Products)



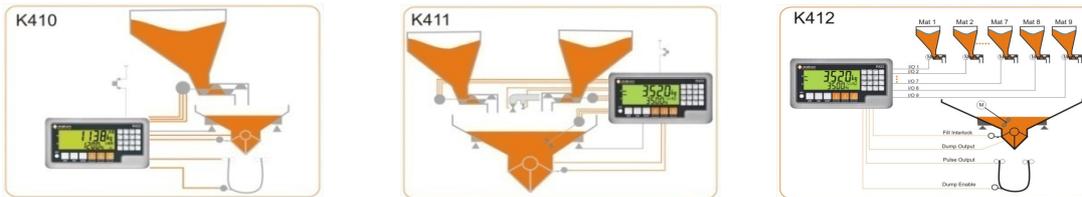
The R400 uses K401 or K402 application firmware for general trade weighing, multiple indicator weighing systems and process control. It supports all the communications and process control accessories. The K402 adds multiple-product configuration to the K401. It supports a product look up table of up to 250 products. Set point targets, piece weight, unit conversion and full accumulation data are stored for each product.

Truck Weighing (K404 Weigh bridges and K405 Static Axle Weighing)



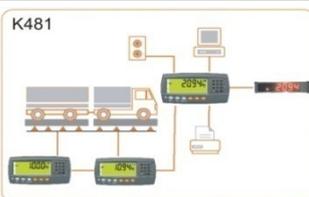
The K404 and K405 are specifically for truck weighing. They allow for a range of operational scenarios all on the one setup, from weigh-in weigh-out to stored truck ids. The dedicated Truck ID button and Print button simplify the operator interface. Additionally the alpha-numeric keypad allows for easy entry of tare weight and Truck IDs. With 250 Truck IDs available they are suitable on a range of sites with truck fleets of up to 250. The K404 is best suited to weighbridge installations, while the K405 provides static axle weighing, recording a weighing per axle and a total truck weight.

Batching and Filling (K410 1 Material, K411 6 Material, K412 20 Material)



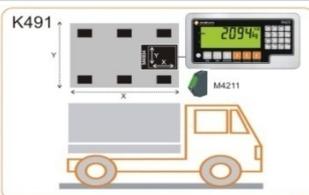
The R400 indicator supports three (3) batching firmware applications to create a powerful and flexible batching controller. The three variants of firmware differ primarily in the number of materials they each support. The K410 is single material and ideal for filling, the K411 supports 6 materials and the K412 20 materials. The K411 and K412 are both suitable for multi-head batching machines and more complex control systems using multiple materials. They feature negative batching, batch suspend and timer based multiple batching using the built in real time clock. Each supports 100 recipes and 10 stages of batching. The batching stages can be defined as fill, dump or pulse. Three (3) speeds of filling can be configured depending on the complexity of the batching system.

K481 Summing Indicator



The K481 Summing Indicator is based on the R400 Series indicator hardware. It shares the same style operator interface and setup menus making it easy for both the operator and the installer. The K481 can sum both R300 Series and R400 Series indicators.

K491 Tilt Indicator



The K491 is a general purpose indicator that uses an accessory module to connect to a 2 axis tilt sensor that provides tilt compensation. The K491 is ideal for specialist truck OEM's requiring electronics for accurate load weighing solutions where the load may be on an angle.

R400 Series

Step 1: Select Housing



Panel mount IP65 ABS housing with silicon keys with protect over the LCD. Select from a range of hardware accessories, including a boot desk stand and mounting brackets.

**R420**

**A** Indicator, ABS,VDC, Panel Mount,



Panel mount IP66 stainless steel housing with membrane keypad - only 4mm deep it is ideal for applications requiring near flush panel mounting

**R423**

**A** Indicator,Stainless Steel,VDC, Panel Mount,



Full stainless steel IP66 housing including stand for post, wall or desk mounting.

**R423**

**C** Indicator,Stainless Steel,VDC, Full Housing,



Full stainless steel IP66 housing including stand for post, wall or desk mounting. Prewired AC power supply with mains lead with country specific pin configuration.

**R423**

\* **D4** Indicator,Stainless Steel,VAC, Full Housing,



Full stainless steel IP66 housing including stand for post, wall or desk mounting with 2.5Ah 12V NiMH rechargeable battery pack with charger.

**R423**

**F** Indicator,Stainless Steel,NiMH, Full Housing,

Step 2: Select Firmware

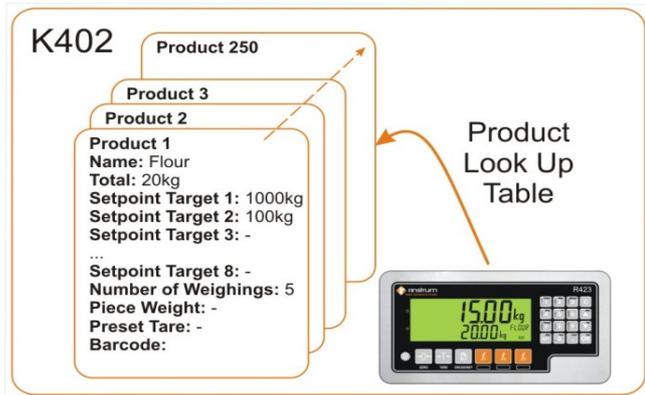
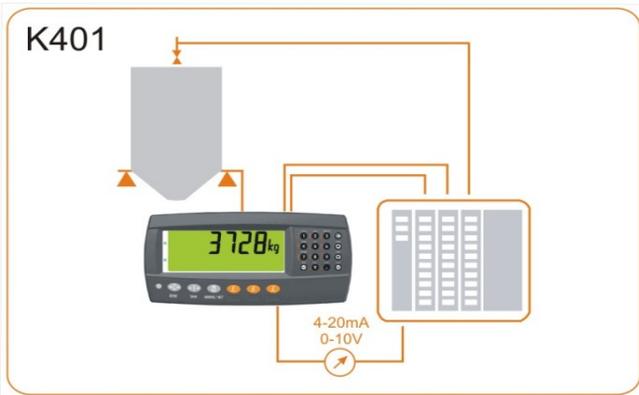
<b>K401</b>	General Weighing, 1 Product,
<b>K402</b>	General Weighing, 250 Products,
<b>K404</b>	Truck Weighing, Weighbridge,
<b>K405</b>	Truck Weighing, Static Axle Weighing,
<b>K410</b>	Batching, 1 Material,
<b>K411</b>	Batching, 6 Material,
<b>K412</b>	Batching, 20 Material,
<b>K481</b>	Summing (R400 and R300 Series),
<b>K491</b>	Tilt Compensation,

\* Country plug denoted by last digit (\*)

For Blank variant, with no Rinstrum branding, substitute BL for R in Stock Code. Eg. R420-K401-A to BL420-K401-A

Accessories refer to page

General Purpose Weighing (K401 1 Product and K402 250 Products)



**Specifications**

**Approvals**

10,000 d @ 0.7µV/d  
 NMI(S-463), OIML R76  
 C-Tick, CE & FCC  
 MID 2004/22/EC - WELMEC 2.1 & 7.2  
 III/III L NTEP 08-720 A1

Features	K401	K402
Products/Recipes	1	250
Clock Calendar, 4/6 Wire	S	S
Custom Printing, Auto Output	S	S
Custom Unit Switching	S	S
Counting with Piece Weight Entry,	S	S
Hold & Peak Hold	S	S
Material	-	-
Batch Stages	-	-

**Module Support**

Analogue	A	A
Data Storage Device (Alibi)	A	A
Ethernet	A	A
extra Serial Ports	A	A
Profibus	A	A
I/O	A	A

Note: S denotes Standard feature available in the firmware  
 Note: A indicates support of optional Accessory module

The K401 and K402 are general purpose indicators suitable for trade weighing, multiple indicator weighing systems and process control.

**Programmable printing** for customized dockets and reports can support two separate printers with separate formats.

- Comprehensive print tokens allow for all instrument data to be printed in a variety of formats.
- Custom print strings can be assigned to multiple instrument events, for example long and short press of a print key.

**Custom Unit Switching** allows for complete flexibility programme for standard weight units (kg, lb, t etc) or define alternative weighing units for your application (litres or force for example)

**Flexible set point configuration** for improved system integration. A set point can be individually configured to instrument status or weight target triggers. Each set point can be:

- independently configured for a given function
- associated with a given output
- configured for high or low logic
- defined to use a given weight source – Gross, Net, Alternate Units or Piece count

The K402 adds a multiple-product database to the K401:

**Powerful product configuration** - For each product store:

- set point targets (up to 8 per product)
- piece weight
- units conversions
- full accumulation data

**General Weighing, 1 Product,**

R420	-	K401	-	A	Indicator, ABS,VDC, Panel Mount,	
R423	-	K401	-	A	Indicator,Stainless Steel,VDC, Panel Mount,	
R423	-	K401	-	C	Indicator,Stainless Steel,VDC, Full Housing,	
*	R423	-	K401	-	D4	Indicator,Stainless Steel,VAC, Full Housing,
R423	-	K401	-	F	Indicator,Stainless Steel,NiMH, Full Housing,	

**General Weighing, 250 Products,**

R420	-	K402	-	A	Indicator, ABS,VDC, Panel Mount,	
R423	-	K402	-	A	Indicator,Stainless Steel,VDC, Panel Mount,	
R423	-	K402	-	C	Indicator,Stainless Steel,VDC, Full Housing,	
*	R423	-	K402	-	D4	Indicator,Stainless Steel,VAC, Full Housing,
R423	-	K402	-	F	Indicator,Stainless Steel,NiMH, Full Housing,	

\* Country plug denoted by last digit (\*)

Full Housing options have metal stand included

For Blank variant, with no Rinstrum branding, substitute BL for R in Stock Code. Eg. R420-K401-A to BL420-K401-A

Accessories refer to page

Truck Weighing (K404 Weigh bridges and K405 Static Axle Weighing)



**Specifications**

**Approvals**

10,000 d @ 0.7µV/d  
 NMI(S-463), OIML R76  
 C-Tick, CE & FCC  
 MID 2004/22/EC - WELMEC 2.1 & 7.2  
 III/III L NTEP 08-720 A1

Features	K404	K405
Products/Recipes	250	250
Clock Calendar, 4/6 Wire	S	S
Custom Printing, Auto Output	S	S
Custom Unit Switching	S	S
Counting with Piece Weight Entry,	-	-
Hold & Peak Hold	-	-
Material	-	-
Batch Stages	-	-

**Module Support**

Analogue	-	-
Data Storage Device (Alibi)	A	A
Ethernet	A	A
extra Serial Ports	A	A
Profibus	A	A
I/O	A	A

**Functions**

Simple Protocol Support  
 Barcode Truck Selection  
 Weigh in/weigh out or weigh out with PT  
 Scale Ready & Scale Exit Setpoints

The K404 and K405 are specifically for truck weighing. They allow for a range of operational scenarios all on the one setup, from weigh-in weigh-out to stored truck IDs. The dedicated Truck ID button and Print button simplify the operator interface. Additionally the alpha-numeric keypad allows for easy entry of tare weight and Truck IDs. With 250 Truck IDs available it is suitable on a range of sites with truck fleets of up to 250.

The following operational scenarios can all be handled on the one setup:

- Weigh a truck in a single pass using its tare weight or just print the weight
- Weigh a known truck with a stored Truck ID and preset tare and accumulate the statistics on that truck ID.
- Two pass weighing with a weigh in followed by a weigh out. The docket with show weigh-in, weigh-out and net weights.
- Automatic allocation of a temporary Truck ID can be used to simplify the two pass weighing scenario. The temporary Truck ID is removed once the weigh-out is complete.
- Additionally the K405 caters for axles and will add each axle weighing to a total.

R400 Indicators are ideal for weigh bridges:

- Isolated communication module, Ethernet module and Alibi (data storage device DSD) module for traceability.
- All accessory modules, including the power supply, can be swapped without recalibration.
- Indicator configuration and setup can be reused and easily uploaded using the opto-link on the front panel.

Note: S denotes Standard feature available in the firmware

Note: A indicates support of optional Accessory module

**Truck Weighing, Weighbridge,**

R420 - K404 - A	Indicator, ABS,VDC, Panel Mount,
R423 - K404 - A	Indicator,Stainless Steel,VDC, Panel Mount,
R423 - K404 - C	Indicator,Stainless Steel,VDC, Full Housing,
* R423 - K404 - D4	Indicator,Stainless Steel,VAC, Full Housing,
R423 - K404 - F	Indicator,Stainless Steel,NiMH, Full Housing,

**Truck Weighing, Static Axle Weighing,**

R420 - K405 - A	Indicator, ABS,VDC, Panel Mount,
R423 - K405 - A	Indicator,Stainless Steel,VDC, Panel Mount,
R423 - K405 - C	Indicator,Stainless Steel,VDC, Full Housing,
* R423 - K405 - D4	Indicator,Stainless Steel,VAC, Full Housing,
R423 - K405 - F	Indicator,Stainless Steel,NiMH, Full Housing,

\* Country plug denoted by last digit (\*)

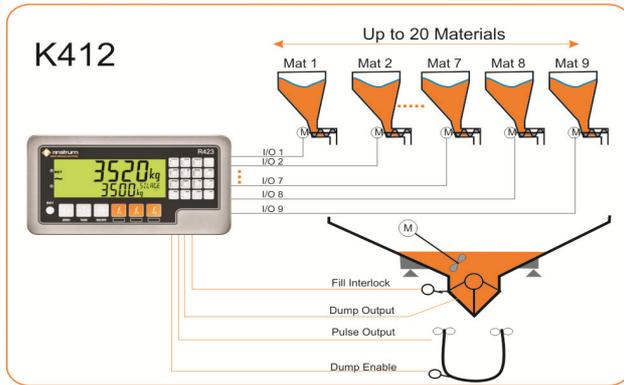
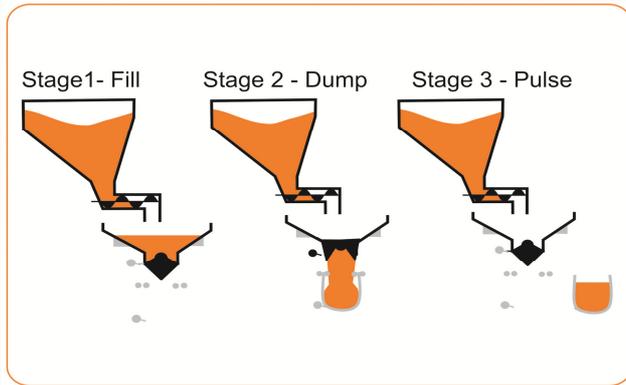
Full Housing options have metal stand included

For Blank variant, with no Rinstrum branding, substitute BL for R in Stock Code. Eg. R420-K401-A to BL420-K401-A

Accessories refer to page

# Rinstrum Catalogue V6.00

## Batching and Filling (K410 1 Material, K411 6 Material, K412 20 Material)



### Specifications

#### Approvals

10,000 d @ 0.7µV/d  
 NMI(S-463), OIML R76  
 C-Tick, CE & FCC  
 MID 2004/22/EC - WELMEC 2.1 & 7.2  
 III/III L NTEP 08-720 A1

Features	K410	K411	K412
Products/Recipes	100	100	100
Clock Calendar, 4/6 Wire	S	S	S
Custom Printing, Auto Output	S	S	S
Custom Unit Switching	-	-	-
Counting with Piece Weight Entry,	-	-	-
Hold & Peak Hold	-	-	-
Material	1	6	20
Batch Stages	10	10	10

#### Module Support

Analogue	-	A	-
Data Storage Device (Alibi)	A	A	A
Ethernet	A	A	A
extra Serial Ports	A	A	A
Profibus	A	A	A
I/O	A	A	A

#### Functions

Batch Suspend, Negative Batching  
 Fill, Dump and Pulse stages  
 In Flight and Jogging  
 Timer (RTC) based batching  
 Auto proportion calculation after first fill  
 3 Speed Fill

#### Batching, 1 Material,

R420	-	K410	-	A	Indicator, ABS,VDC, Panel Mount,
R423	-	K410	-	A	Indicator,Stainless Steel,VDC, Panel Mount,
R423	-	K410	-	C	Indicator,Stainless Steel,VDC, Full Housing,
R423	-	K410	-	D4	Indicator,Stainless Steel,VAC, Full Housing,
R423	-	K410	-	F	Indicator,Stainless Steel,NiMH, Full Housing,

#### Batching, 6 Material,

R420	-	K411	-	A	Indicator, ABS,VDC, Panel Mount,
R423	-	K411	-	A	Indicator,Stainless Steel,VDC, Panel Mount,
R423	-	K411	-	C	Indicator,Stainless Steel,VDC, Full Housing,
R423	-	K411	-	D4	Indicator,Stainless Steel,VAC, Full Housing,
R423	-	K411	-	F	Indicator,Stainless Steel,NiMH, Full Housing,

#### Batching, 20 Material,

R420	-	K412	-	A	Indicator, ABS,VDC, Panel Mount,
R423	-	K412	-	A	Indicator,Stainless Steel,VDC, Panel Mount,
R423	-	K412	-	C	Indicator,Stainless Steel,VDC, Full Housing,
R423	-	K412	-	D4	Indicator,Stainless Steel,VAC, Full Housing,
R423	-	K412	-	F	Indicator,Stainless Steel,NiMH, Full Housing,

For Blank variant, with no Rinstrum branding, substitute BL for R in Stock Code. Eg. R420-K401-A to BL420-K401-A

The R400 indicator supports three (3) batching firmware applications to create a powerful and flexible batching controller. Each supports 100 recipes and 10 stages of batching. The batching stages can be defined as fill, dump or pulse. Three (3) speeds of filling can be configured depending on the complexity of the batching system. For example a Recipe can be defined as a FILL with Material 1 to target, followed by a DUMP, followed by a PULSE to release a bag. The FILL stage can use up to three I/O to control slow, medium and fast filling.

**Negative batching** is supported by setting the fill direction which defines if the weight is increasing or decreasing while batching - ideal for discharge and dosing applications.

**Batch Suspend** can be allocated to a function key - the batch will pause and adjust the tare weight when resuming the batch. Ideal for when a material feeding the batch needs to be topped up during the batch without affecting the batched amount, or when feeding from multiple bulker bags etc.

**Timer based** multiple batching uses the Real Time Clock to control the batch start time and the duration between repeat batches - ideal for bio-fuel applications.

**Detailed reporting** with material usage and batch statistics, along with QA records of every batch run possible when combined with the data logger

Note: S denotes Standard feature available in the firmware

Note: A indicates support of optional Accessory module

R400 Series Custom Consoles

**Build to Order Console**

**Select Console**

Powder Coated|Stainless Steel

**Select Indicator**

R420 ABS | R423 Stainless Steel

**Select Firmware Application**

Filling | Batching | Products

**Select Accessories for Application**

Modules | Relays | Power

Stainless Steel

Powder Coated

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 devices; motors, solenoids etc. The consoles are build to order to suit your site application.

Two consoles are available (stainless steel or powder coated) selected according to the environment with either the R420 (ABS) rated to IP65 or the R423 (stainless steel) rated to IP66 indicator used.

**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.

**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.

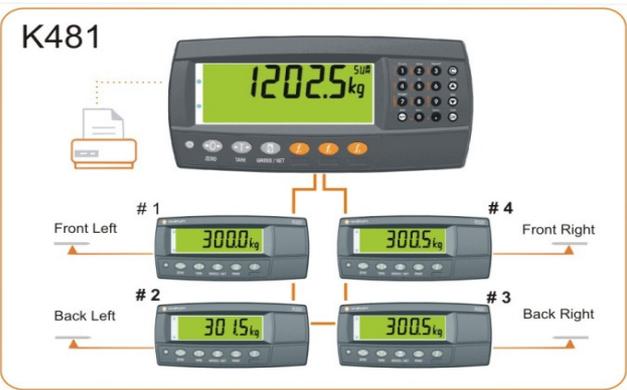
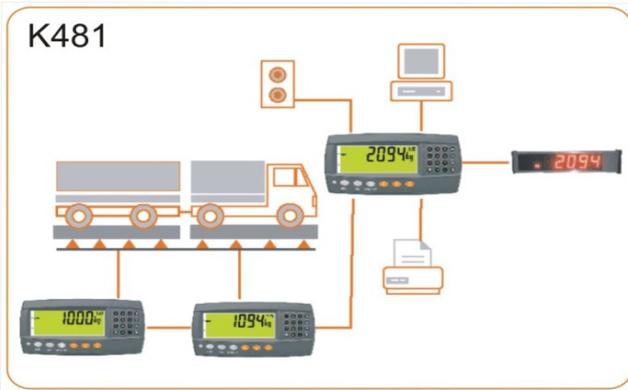
	Order Code
Console, Powder coated, R420 or R423, relays, prewired,	SK-42xx
Console, Stainless Steel,R420 or R423, relays, prewired,	SK-43xx

Batching boxes are built to order for a required configuration, pricing will be calculated according to modules, firmware, housing and indicator selected. An example basic configuration using an R420 (ABS) with K411 batching firmware an I/O module to drive the relays and external buttons mounted on the door.

**Example Batching Console Kit using an R420**

R420-K411-A	Indicator, Stainless Steel,VDC, Panel Mount, Batching,
M4301	Module, 8 Input/Output, I/O 1-8
A10010	Power Supply, 12VDC, 2A DIN Rail,
M4901	Relay Output PCB, 12V DIN-Rail Kit,
M4902	Cable, Module to M4901 or M4906,
BUTTON - E STOP	Button - Emergency Stop,
BUTTON - Green	Button - Green Panel Mount,
BUTTON - Red	Button - Red Panel Mount,
BUTTON - Yellow	Button - Yellow Panel Mount,

**K481 Summing Indicator**



**Specifications**

**Approvals**

NMI S1/O/A

C-Tick, CE & FCC

**Features**

- Products/Recipes **250**
- Clock Calendar, 4/6 Wire **S**
- Custom Printing, Auto Output **S**
- Custom Unit Switching **-**
- Counting with Piece Weight Entry, **-**
- Hold & Peak Hold **-**
- Material **-**
- Batch Stages **-**

**Module Support**

- Analogue **A**
- Data Storage Device (Alibi) **A**
- Ethernet **A**
- extra Serial Ports **A**
- Profibus **A**
- I/O **A**

**Functions**

- Up to 9 Slaves all one type (R32x or R42x)
- Up to 4 Subtotals

The K481 Summing Indicator is based on the R400 Series indicator hardware. It shares the same style operator interface and setup menus making it easy for both the operator and the installer. The K481 can sum both R300 Series and R400 Series indicators.

**Sum Nine (9) Slave Units:** The K481 can sum up to nine slave indicators from either the R300 on a RS232 ring network or R400 range on a multi-drop serial RS485 bus or RS232 ring network. The summing indicator polls each of the slave units summing all of the weight readings, and displays the resulting total weight.

**Four (4) Subtotals:** Up to 4 subtotals can be defined to add or subtract slave values. Each subtotal can be named to assist the operator and for custom printing.

**Support for R400 Series Modules and Accessories:** The K481 uses the R400 series Accessories and supports many of the R400 series modules – additional communications modules, button module, input/output modules and analogue module.

**Applications:** multiple deck weigh bridges, car balancing systems, aircraft weighing, medical bed weighing applications and shipyard centre of gravity ballast determination.

Note: S denotes Standard feature available in the firmware

Note: A indicates support of optional Accessory module

**Summing (R400 and R300 Series),**

<b>R420</b>	<b>- K481</b>	<b>- A</b>	Indicator, ABS,VDC, Panel Mount,
<b>R423</b>	<b>- K481</b>	<b>- A</b>	Indicator,Stainless Steel,VDC, Panel Mount,
<b>R423</b>	<b>- K481</b>	<b>- C</b>	Indicator,Stainless Steel,VDC, Full Housing,
<b>* R423</b>	<b>- K481</b>	<b>- D4</b>	Indicator,Stainless Steel,VAC, Full Housing,
<b>R423</b>	<b>- K481</b>	<b>- F</b>	Indicator,Stainless Steel,NiMH, Full Housing,

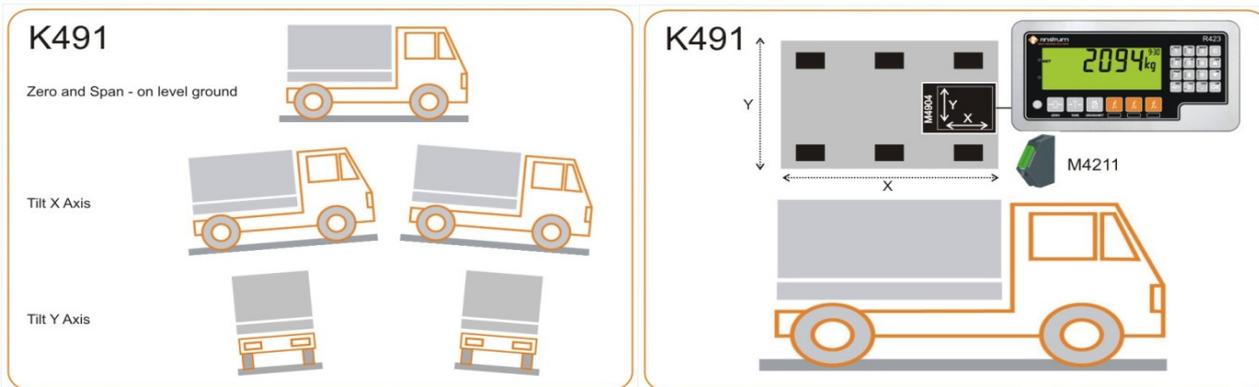
\* Country plug denoted by last digit (\*)

Full Housing options have metal stand included

For Blank variant, with no Rinstrum branding, substitute BL for R in Stock Code. Eg. R420-K401-A to BL420-K401-A

Accessories refer to page

**K491 Tilt Indicator**



**Specifications**

**Approvals**

10,000 d @ 0.7µV/d  
 OIML R76  
 C-Tick, CE & FCC

**Features**

- Products/Recipes -
- Clock Calendar, 4/6 Wire S
- Custom Printing, Auto Output S
- Custom Unit Switching S
- Counting with Piece Weight Entry, S
- Hold & Peak Hold S
- Material -
- Batch Stages -

**Module Support**

- Analogue A
- Data Storage Device (Alibi) A
- Ethernet A
- extra Serial Ports A
- Profibus A
- I/O A

**Functions**

Optional Tilt Compensation

Note: S denotes Standard feature available in the firmware

Note: A indicates support of optional Accessory module

The K491 is a general purpose indicator that uses an accessory module to connect to a 2 axis tilt sensor that provides tilt compensation. The K491 is ideal for specialist truck OEM's requiring electronics for accurate load weighing solutions where the load may be on an angle. Both the ABS R420-K491 and stainless steel R423-K491 are ideal for panel mounting in a truck cab, featuring a large display and programmable function keys. The application is for a truck to have accurate weight readings that can compensate for uneven surfaces where a weight reading might be taken

**Simple calibration:** Zero/Span calibration (at 0 angle) and tilt calibration to generate the four tilt parameters that are used to correct the reading.

- Accessories:** The K491 requires a tilt module and tilt sensor.
- Tilt Module (M4211)
  - Rinstrum tilt sensor (M4) suitable for +/- 10 degree
  - The tilt sensor must be correctly mounted given the axes that are providing data
  - The K491 is compatible with a selection of the other sensors.

**Custom printing:** dockets can be customised for the application. The built in RS232/RS485 port can be configured for printing.

**Tilt Compensation,**

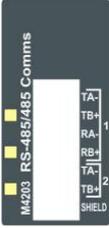
<b>R420</b>	-	<b>K491</b>	-	<b>A</b>	Indicator, ABS,VDC, Panel Mount,
<b>R423</b>	-	<b>K491</b>	-	<b>A</b>	Indicator,Stainless Steel,VDC, Panel Mount,

Module, Tilt Compensation,		M4211	Tilt compensation module. Compatible with Rinstrum M4904 Tilt Sensor and other selected sensors. Power internal.
Tilt Sensor, 10 Deg, Used with K491 and M4211		M4904	10 degree two axis tilt sensor for use with K491, requires M4211 tilt compensation module. 6.5-24V DC
Tilt Sensor, 15 Deg, Used with K491 and M4211		M4905	15 degree, two axis tilt sensor for use with K491, requires M4211 tilt compensation module. 6.5-24V DC

For Blank variant, with no Rinstrum branding, substitute BL for R in Stock Code. Eg. R420-K401-A to BL420-K401-A

Accessories refer to page

R400 Series Modules

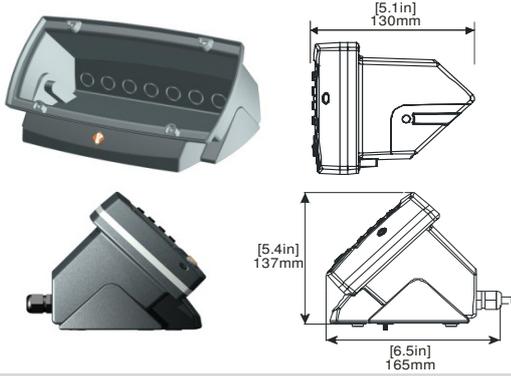
Communications		Order Code
 	<p><b>Module, RS232/RS232,</b></p> <p>Provides 2 fully isolated (&gt;500V) communication ports. One full duplex RS232 with DTR and one transmit only RS232 port.</p>	<b>M4201</b>
	<p><b>Module, RS232/RS485,</b></p> <p>Provides two fully isolated (&gt;500V) communications ports. One full duplex with DTR RS232 port and one transmit only with internal termination RS485 port.</p>	<b>M4202</b>
	<p><b>Module, RS485/485,</b></p> <p>Provides one four wire fully duplex RS485 port and one transmit only RS485 port. Both ports are fully isolated (&gt;500V) and have internal switchable termination.</p>	<b>M4203</b>
 	<p><b>Module, Wired Ethernet,</b></p> <p>One bi-directional server socket to interact with network port on the R400. 10 uni-directional sockets (listening) to interact with auto-output port on the R400. Simple configuration of network settings (DHCP, IP, Subnet mask, Gateway, DNS) from the R400 and web interface. Ability to access indicator as a serial port on a PC using M400-525. DHCP client built in for auto IP negotiation or static IP allocation.</p>	<b>M4221</b>
	<p><b>Profibus Interface Module,</b></p> <p>Profibus-DP Gateway allows connection of up to two Indicators or Display devices via indicator networking protocols to Profibus-DP. Supports weight indicators - 5000, 5100 and R400 Series. And the 6500 Remote Display.</p>	<b>1400</b>

Input/Output Modules		Order Code
 	<p><b>Module, 8 Input/Output, I/O 1-8</b></p> <p>Provides 8 isolated (&gt;500V) digital I/O ports. Each I/O is limited to maximum input voltage of 30V and can drive up to 400mA. Maps to I/O 1-8</p>	<b>M4301</b>
	<p><b>Module, 8 Input/Output, I/O 9-16</b></p> <p>As above, maps to I/O 9-16</p>	<b>M4311</b>
	<p><b>Module, 8 Input/Output, I/O 17-24</b></p> <p>As above, maps to I/O 17-24</p>	<b>M4321</b>
	<p><b>Module, 8 Input/Output, I/O 25-32</b></p> <p>As above, maps to I/O 25-32</p>	<b>M4331</b>
	<p><b>Module, 4 Button Input,</b></p> <p>Provides 4 voltage free inputs for use with switches or thumbwheels. These inputs are not isolated. Maps to I/O 17-20</p>	<b>M4302</b>
	<p><b>Module, Analogue Output,</b></p> <p>Provides one isolated (&gt;500V) 4-20mA or 0-10V analog output. Update rates of up to 400Hz possible with 1/65,000 resolution. Two digital I/O the same specifications as on the M4301 are provided that map to I/O 1-2.</p>	<b>M4401</b>

Data Storage Module		Order Code
 	<p><b>Module, Data Storage Device,</b></p> <p>Data Storage Module provides non volatile alibi memory storage (6M bytes) according to WELMEC 7.2 L . Power internal. Compatible firmware K402 V 1.35 or later; K491 V1.01 or later. K411's V2 and above, K411 allows for DSD to record and capture batch details it uses end of batch as the trigger to send data.</p>	<b>M4501</b>

Accessories for R420 ABS Housing

**Desk Mounting** **Order Code**



**H ware, Desk Mount, ABS IP65,**

**M4001**

Rear boot with supplied glands seals instrument to IP65. Includes desk stand with non-slip feet and provision for permanent mounting.

**Wall Mounting**



**H ware, Wall Mount, Stainless,**

**M4003**

Stainless steel bracket for wall mounting - for use with M4001 boot.

**Pole Mounting**



**H ware, Pole Mount, Stainless,**

**M4004**

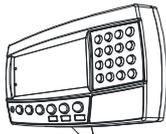
Stainless steel stand for pole mounting - for use with M4001 boot and A10018 pole mount insert.

**Insert for pole mounting,**

**A10018**

Variable diameter (36-38mm) insert for pole mounting with four holes for cabling.

**Clear Cover**



**H ware, Cover, Clear Protective,**

**M4005**

Clear plastic covers to protect R420 ABS instrument face from dirt/scratches while still allowing full functionality, in packs of 10.

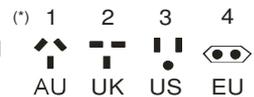
**AC Power kit for R420**



**Power Supply, VAC, IP65, Desk Mount, Country Plug\***

**M411\***

Boot and desk stand (M4001) and prewired AC power supply with mains lead with country specific pin configuration. IP65 rated. Country plug denoted by last digit (\*)



**Stainless Steel Housing Accessories**

**H ware, Cover Clear Protective, 10 Pack, for R423 Stainless**

**M4006**

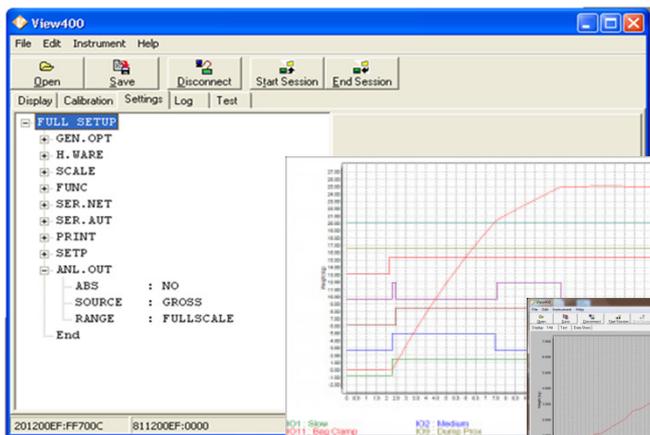
Clear plastic covers to protect R423 Stainless Steel instrument face from dirt/scratches while still allowing full functionality, in packs of 10.

# Rinstrum Catalogue V6.00

## R400 Series General Accessories

Trade Sealing		Order Code
	<p><b>H ware, Physical Seal,</b></p> <p>Trade sealing cover for use with lead seals or destructable void stickers.</p>	<b>M4009</b>
Power Accessories		
	<p><b>Power supply, VAC, 12VDC Aux Output</b></p> <p>90-260VAC to 12VDC power supply module to power R4xx series instrument. 12VDC auxiliary output to provide power for a relay board</p>	<b>M4104</b>
	<p><b>Battery Pack, NiMH 2.5AH IP65 For R42x ,</b></p> <p>2.5Ah 12V NiMH rechargeable battery pack supplied with charger.</p>	<b>M4103</b>
	<p><b>Power Supply, 12VDC, 2A DIN Rail,</b></p> <p>110-240VAC 12VDC 2A output, DIN rail mountable switch mode power supply</p>	<b>A10010</b>
	<p><b>Power Supply, 24VDC, 2A DIN Rail,</b></p> <p>110-240VAC 24VDC 2A output, DIN rail mountable switch mode power supply</p>	<b>A10055</b>
External Relays and Cabling		
	<p><b>Relay Output PCB, 12V DIN-Rail Kit,</b></p> <p>Used with M4301, M4311,M4321 and M4331. Provides 8 voltage free relay outputs rated to 250VAC and 8A. DIN rail mountable. Provides N/O (normally open) and N/C (normally closed) contacts for each output. Suitable 12V 500mA supply is required</p>	<b>M4901</b>
	<p><b>Relay Output PCB, 24V DIN-Rail Kit,</b></p> <p>Used with M4301, M4311,M4321 and M4331. Provides 8 voltage free relay outputs rated to 250VAC and 8A. DIN rail mountable. Provides N/O (normally open) and N/C (normally closed) contacts for each output. Suitable 24V 500mA supply is required</p>	<b>M4906</b>
	<p><b>Cable, Module to M4901 or M4906,</b></p> <p>Connects I/O modules with a M4901 or M4906</p>	<b>M4902</b>
	<p><b>Kit: 12V DIN Power Supply (A10010), Relay Board (M4901), Cable (M4902)</b></p>	<b>M4901-K</b>
	<p><b>Kit: 4V DIN Power Supply (A10055), Relay Board (M4906), Cable (M4902)</b></p>	<b>M4906-K</b>
Converter for Analogue Input		
	<p>R400 Series</p> <p>1500 kg 2000 kg</p>	
	<p><b>Module, Converter,0-10V/4-20mA Input,</b></p> <p>Module, Converter,0-10V/4-20mA, Connects to Load Cell Input on R400 series indicators for a voltage or current input.</p>	<b>M4903</b>
	<p><b>Viewer PC software for R400 Series Indicators,</b></p> <p><b>Cable, Serial OptoLINK-USB, Driver CD</b></p> <p>USB to Optolink, service and setup interface cable, drivers for windows operating system supplied.</p>	<b>View400</b> <b>A10012</b>

PC Software



**Viewing and Modifying Indicator Setup**

**Viewer PC software for R400 Series Indicators, View400**  
**Viewer PC software, for R300 Series and X320 Indicators, View300**

PC software for fast simple indicator setup via a PC. It displays the complete menu structure of the indicator on the PC with convenient drop down menus for setting selection. The setup can be stored for maintenance purposes and reloaded onto the indicator if required. Similarly if multiple indicators are to be configured for the same application the setting file can be loaded onto each indicator. Where appropriate calibration settings can be transferred also. Free download from the Rinstrum web site ([www.rinstrum.com](http://www.rinstrum.com)) login and password required.

**Saving and Updating Indicator setup**

**Save400 - Reading and writing Indicator setup, Save400**

Save400 is a software tool that reads and writes R400 indicator setup and configuration - this allows for a setup to be exported for update and then reimported. It is ideal for the setup of multi product installations and batching recipes as it allows CSV files to be imported. Additionally it should be used for software version upgrades to assist in a simpler migration to the new version.

Save400 generates RIS2 files which store more information about an indicator setup than RIS files. There is a command line version as well as the GUI version - both are packaged in the installer. Save400 doesn't allow for settings to be changed directly as with View400. It is a save and load tool

**Opto links for temporary connection to a PC for software upgrades and configuration**

**Cable, Serial OptoLINK-DB9F, A10005**



RS232 to Optolink, service and setup interface cable.

**Cable, Serial OptoLINK-USB, Driver CD A10012**



USB to Optolink, service and setup interface cable, drivers for windows operating system supplied.

**Specialist PC Software**

**PC Truck Software Dongle S1000**



PC software for truck weighbridge management. Handles input from up to 3 weight indicators with multiple truck IDs, multiple customer IDs and multiple products. Supports transaction completion for multi weigh bridge sites. Compatible with Rinstrum indicators (2100 Series, 5000 Series, R320/R323, X320 and R400 Series) and certain other manufacturers indicators.

**X320 Indicator**



**Specifications**

**Approvals**

4,000d @ 0.8µV/d NMI (S-420),OIML R76  
C-Tick, CE & FCC

**Physical**

Display Type LCD display with LED backlight  
Digit Size 20mm (0.8")  
Keypad 6 key capacitive keyboard  
Power Switch Front panel with memory  
Housing Composite alloy IP68 and IP69K  
Weight 2.0 kg (4.4lb)  
Function Key 4 Fixed Add/Totals/Cancel/Finish

**Power**

DC 12-24 VDC (Option)  
AC 110-240 VAC (Option)  
Battery 12V 2.5Ah NiMH (Option)

**Loadcell**

Excitation 5 VDC  
Drive 4x350Ω (Max 3.5kΩ) Nontrade 8x350Ω  
Sensitivity 30,000d @ 0.25 µV/d  
Linearisation 10 Points (K304 only)  
Range K304 Single - K306 Dual

**Features**

Serial RS232 automatic transmit for remote display  
Input/Output 1 Input/3 Outputs  
Set Points 3 band check weigh

**Functions**

Configurable print format  
Counting; Live Weighing;  
Unit Switching; Totalising  
Peak & Hold  
3 Isolated High Side Driver Outputs  
Check weighing Over/Under/Ok  
3 High Intensity Coloured LEDs for bands

The **X320** combines innovation in **industrial design** and **engineering excellence** to create an instrument that is ideal for use in food processing, automotive, chemical or pharmaceutical applications or applications that require **reliable operation in harsh environmental conditions**. The X320 indicator builds on Rinstrum's already successful R320 indicator.

Constructed of a high tech plastic alloy that is:

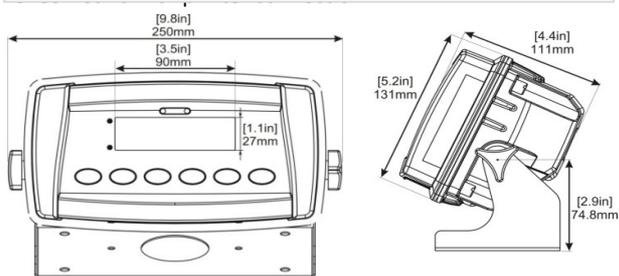
- Food grade
- Chemical resistant
- Temperature resistant
- Impact resistant

**Double 'o' ring seal** which provides superior performance over traditional stainless steel enclosures.

**IP69K rating:** the industry's highest environmental protection rating - designed to withstand cleaning with high pressure water jets (1400psi) at high temperatures (up to 80°C) from multiple angles.

**Built-in check weigh function** - low and 3 coloured high intensity status LEDs

**Isolated outputs** - Over, Under, OK. High side driver up to 400mA, allowing for example, direct connection to PLCs and for external actuators to be driven directly



**X320, Standard OIML**

<b>X320</b>	-	<b>K304</b>	-	<b>C</b>	Indicator, Washdown, IP69K, IP68, VDC, Full Housing,
<b>* X320</b>	-	<b>K304</b>	-	<b>D4</b>	Indicator, Washdown, IP69K, IP68, VAC, Full Housing,
<b>X320</b>	-	<b>K304</b>	-	<b>F</b>	Indicator, Washdown, IP69K, IP68, NiMH, Full Housing,

\* Country plug denoted by last digit (\*)

Full Housing options have metal stand included

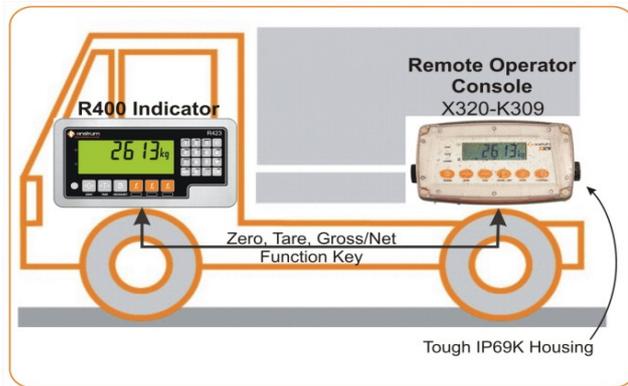
Accessories refer to page

22



**X320 Accessories**

		Order Code
	<p><b>Insert for pole mounting,</b></p> <p>Variable diameter (36-38mm) insert for pole mounting with four holes for cabling.</p>	<b>A10018</b>
Opto links for temporary connection to a PC for software upgrades and configuration		
	<p><b>Viewer PC software, for R300 Series and X320 Indicators,</b></p> <p>PC software for fast simple indicator setup via a PC. It displays the complete menu structure of the indicator on the PC with convenient drop down menus for setting selection. The setup can be stored for maintenance purposes and reloaded onto the indicator if required. Similarly if multiple indicators are to be configured for the same application the setting file can be loaded onto each indicator. Where appropriate calibration settings can be transferred also. Free download from the Rinstrum web site (<a href="http://www.rinstrum.com">www.rinstrum.com</a>) login and password required.</p>	<b>View300</b>
	<p><b>Cable, Serial OptoLINK-DB9F,</b></p> <p>RS232 to Optolink, service and setup interface cable.</p>	<b>A10005</b>
	<p><b>Cable, Serial OptoLINK-USB, Driver CD</b></p> <p>USB to Optolink, service and setup interface cable, drivers for windows operating system supplied.</p>	<b>A10012</b>



**X320 or R320/R323, Remote Console to R400**

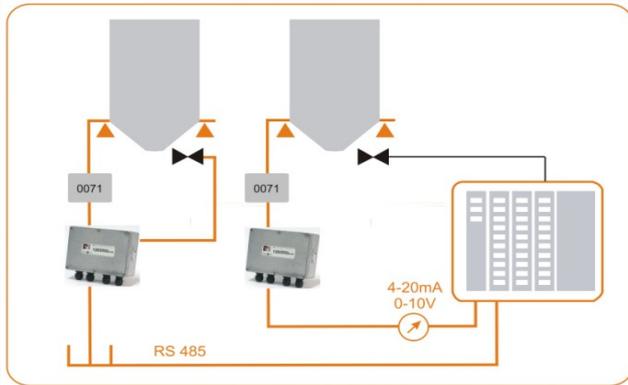
**K309**

The K309 software provides the remote console functionality and can be installed on either an X320 or R320/R323.

The operator has Zero, Tare, Gross/Net functions along with a function key available at the X320 (or R320/R323) remote console. The function key and print key can be mapped to trigger one of F1-F3 or IO1-32 on the master R400.

The X320-K309 and R320-K309 will interface with all the software application variants across the R400 Series indicators – K401, K402, K410, K411 and K481.

1203 Weight Transmitter



Specifications

Approvals

RoHS  
C-Tick, CE, FCC

Physical

Display Type LED (Opt)  
Power Switch Nil  
Housing Cast Aluminium

Power

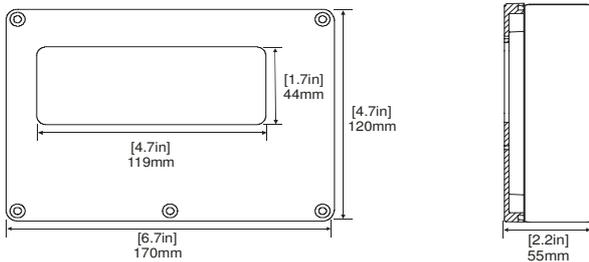
DC 12-24 VDC

Loadcell

Excitation 8 VDC  
Drive 6x350 ohm  
Sensitivity 100,000 d @ 0.25 µV/d

Features

Serial RS232/485 Unit Addressable  
Input/Output 2 Isolated Low Side Driver Outputs  
1 Isolated Input  
Analogue Output Scalable across -10 to 10V & 4-20mA  
Setup PC using Viewer Software  
Onboard buttons (Opt)  
IP65 Sealing on Metal Housings



The 1203 weight transmitter is an economical, robust instrument that provides fast and accurate weight readings.

**2 Isolated Outputs : Built-in** outputs can drive alarms or can be used for simple level control applications. Drive capability is 300mA at up to 30VDC which allows for direct control of most DC powered actuators and relays

**1 Isolated Input : Built-in** input for remote zero, clear of peak value, or to enable PLCs to control serial transmission frequency

**Configurable Analogue Output : Built-in** 16-bit isolated analogue output for connection into PLCs  
4-20mA, 0-24mA, 0-20mA  
-10-10V, 0-10V, 2-10V, 0-5V, 1-5V

**Built-in RS232 DB9** serial connection allows easy setup using the free Viewer software on a PC – allows for configuration to be saved and loaded onto other units.

**RS232 and RS485 Serial Outputs : Built-in** serial communications for connection to PLC controllers, PCs or score boards. Both are full duplex with RS485 supporting multi-drop networks of up to 30 units

**100Hz updates** : For smooth analogue performance

**Flexible Calibration** : Zero and Span calibration is completely independent.

- **Built-in** mV/V display mode allows for high accuracy direct mV/V calibrations.
- Calibration is possible with partially filled vessels without the need to empty the vessel or use test weights

**Peak hold capability** : Can be linked to a set point output, serial communications, display or analogue output

Order Code

Transmitter, VDC, Wall Mount, Aluminium IP65	1203
Transmitter, VDC, PCB Only,	1203-B
Transmitter, VDC, Display, Wall Mount, Aluminium IP65	1203-D

Accessories

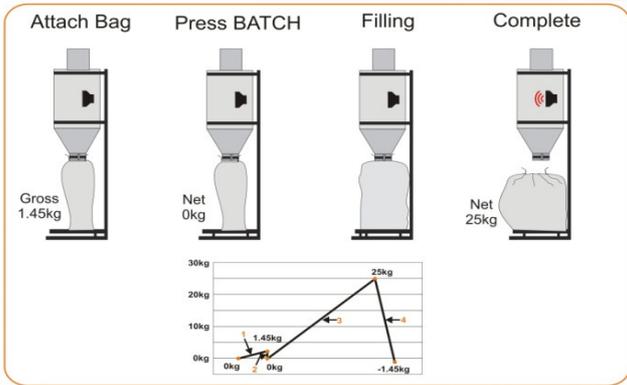
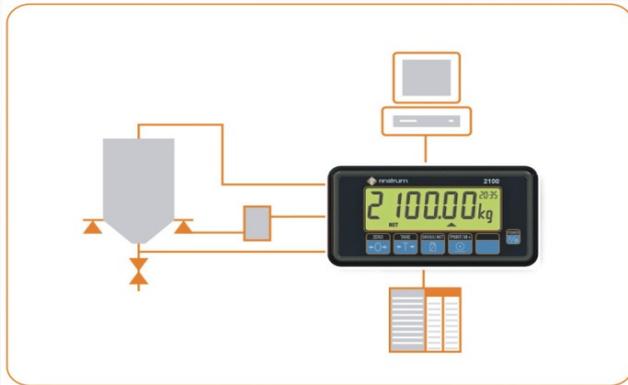
Order Code



Transmitter, VDC, Service Module,

1203-SM

2100 Indicator



Specifications

Approvals

- 
- 
- CE,C-Tick & FCC

Physical

- Display Type 27mm LCD display;LED backlight
- Keypad 6 Key Membrane
- Power Switch Front Panel
- Housing Powder Coated Aluminium
- Weight 0.83 kg (1.8lb)
- Function Key 4 Fixed, 1 Programmable

Power

- DC 12 VDC
- DC 12-24 VDC (Opt)
- AC 110-240 VAC (Opt)
- Battery 12V 2.5Ah NiMH (Opt)

Loadcell

- Excitation 8.5V DC
- Drive 8 x 350 ohm
- Sensitivity 30,000 d @ 0.25 µV/d
- Linearisation 5 point
- Range Single

Features

- Serial 1 RS232
- Input/Output 3
- Set Points 3

Functions

- Batching - 1 Material, 2 Speed and Dump
- Basic Check Weighing - Low/OK/High

The 2100 Series indicators and remote have been modified with the Version 3 release due to end of life on one of the components. The 2100 V3 is not valid for trade stamping and no longer is covered by NSC (S-403) nor OIML (R76) due to the excitation changing from 8V to 8.5V.

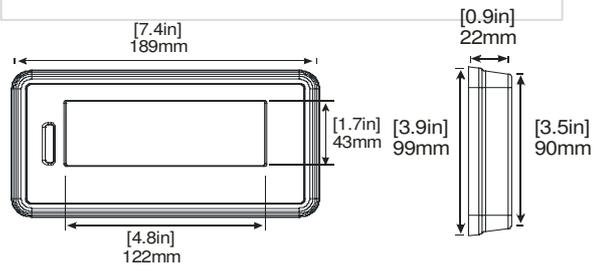
The 2100 is a general purpose indicator with specialised weighing functions, such as: lb/kg Switching, Live-Weight, Hold & Peak Hold, Totalising and Counting. The unit is versatile with 3 isolated (open collector) input/outputs provided standard. These can be used as setpoints or external keys.

**Built-in applications:** Basic check (catch) weighing (low/correct/high) and batching functionality for 1 material with single or dual speeds and dump are provided standard.

**Suitable in various lighting conditions:** The large 27mm high LCD display and LED backlighting make for improved visibility in all lighting conditions.

**Flexible power options:** The unit is available in four powering options, two DC variants, AC and battery.

**Serial Output:** The RS232 serial output is provided standard for use with a remote display, printer or connection back to a PC.

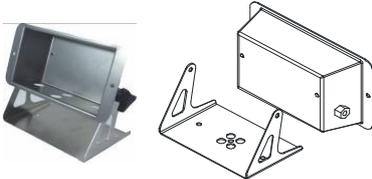
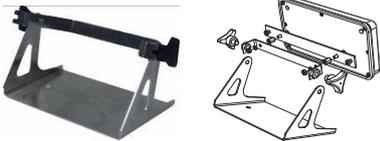


	0329	0330	0331	0340	Order Code
Indicator, 12VDC, Panel Mount, Aluminium					<b>2100</b>
Indicator,12VDC, Desk Mount, Stainless IP65		<b>x</b>			<b>2100-H</b>
Indicator, VDC, Desk Mount, Stainless IP65			<b>x</b>		<b>2100-DC</b>
Indicator, VAC, AU, Desk Mount, Stainless IP65		<b>x</b>			<b>2100-AC</b>
Indicator, Battery, Desk Mount, Stainless IP65				<b>x</b>	<b>2100-B</b>

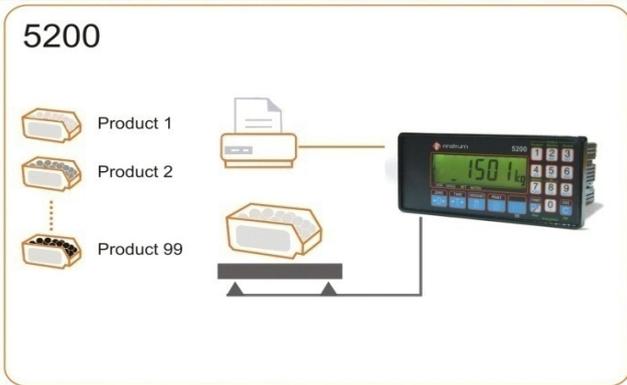
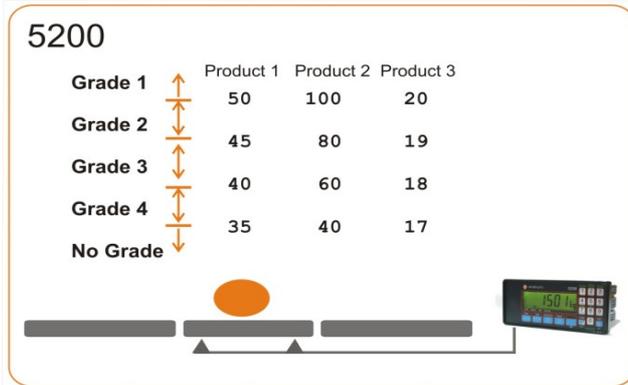
# Rinstrum Catalogue V6.00

## 2100 Family Accessories



	Order Code
<p><b>Module, Converter, RS232, to RS232+RS232/RS485,</b></p> <p>The 0082 splitter works with the 2100 indicator to split out two separate data streams from the standard RS232. It uses the RTS line from the 2100 to detect which port to direct the transmission.</p>	<b>0082</b>
<p><b>Module, Converter, RS232 to RS232+RS485,</b></p> <p>The 0083 splitter works with the 2100 indicator to split out two separate data streams from the standard RS232:</p> <ol style="list-style-type: none"> <li>1. RS485 network port</li> <li>2. RS232 transmit only port</li> </ol>	<b>0083</b>
 <p><b>Module, Relay, 12VDC, for 21xx</b></p> <p>Provides 3 voltage free N/O and N/C 250V 8A relay contacts for use with the 21xx outputs. Compatible with 0329 - not compatible with 0330, 0331 and 0340.</p>	<b>0227</b>
 <p><b>H ware, Gasket, Panel Mount, for 21xx</b></p> <p>Use when panel mounting 21xx for neat IP55 sealing on lightly textured surfaces.</p>	<b>0348</b>
 <p><b>Hware, Housing, Stainless IP65, for 21xx</b></p> <p>Supplied with 0348 gasket and desk stand for enclosing wiring and providing a neat desk or wall mounted finish. Stainless steel housing suitable for use in food service applications.</p>	<b>0329</b>
 <p><b>Hware, Housing, Stainless IP65, Power Supply, VAC, AU for 21xx</b></p> <p>Australian plug top 240VAC-12VDC power supply. Includes 0329 housing for electrical safety and easy desk/wall mounting. Note that the 0227 relay card cannot be used with this power supply.</p>	<b>0330</b>
 <p><b>Hware, Housing, Stainless IP65, Power Supply, VDC, for 21xx</b></p> <p>DC-DC converter for 12-24V input and 12V output. Suitable for use on trucks etc, also includes 0329 housing. Note that the 0227 relay card cannot be used with this power supply.</p>	<b>0331</b>
 <p><b>H ware, Desk Mount, Stainless, for 21xx</b></p> <p>When sealing or enclosing wiring is not necessary this option provides for convenient desk/wall mounting.</p>	<b>0333</b>
  <p><b>Battery Pack, NiMH 2.5AH IP65, for 21xx</b></p> <p>2.5Ah 12V NiMH rechargeable battery pack with 0329 enclosure, supplied with charger. Note that 0227 relay card is incompatible with the battery pack.</p>	<b>0340</b>

5200 General Purpose Indicator



Specifications

Approvals

NMI 6000 d @ 0.5µV/d  
 OIML 6000 d @ 0.5µV/d  
 C-Tick, CE

Physical

Display Type 20mm(0.8")LCD display;LED backlight  
 Keypad 17 Key Membrane Keypad  
 Power Switch Nil  
 Housing Powder Coated Aluminium  
 IP65 Stainless Steel (Acc)  
 Dimensions 175(W) x 80(H) x 115(D)mm  
 Weight 1.16 kg (2.6lb)  
 Function Key 4 Fixed, 1 Programmable

Power

DC 12-24 VDC (Opt)  
 AC 110-240 VAC (Opt)

Loadcell

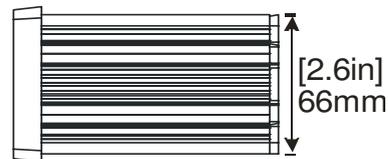
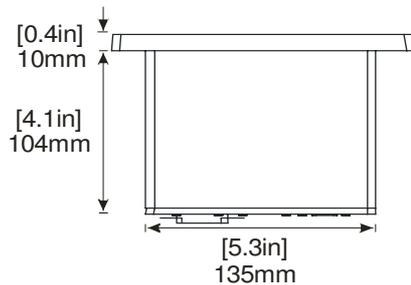
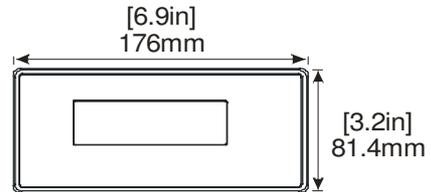
Excitation 8V DC  
 Drive 12 x 350 ohm  
 Sensitivity 100,000 d @ 0.25 µV/d  
 Linearisation 5 points  
 Range Single/Dual Range, Dual Interval

Features

Serial 1/2 RS232/485 and RS232  
 Accessory Slots 1  
 Input/Output 4 In/4 Out (Acc 0241)  
 1 In/2 Out (Acc 0240)  
 Analogue 1 (-10 to10V, 4-20mA) (Acc 0240)  
 Set Points 4

Function

Totalising, Counting, Grading  
 Catchweighing/Checkweighing  
 99 Products  
 Configurable serial outputs/printing

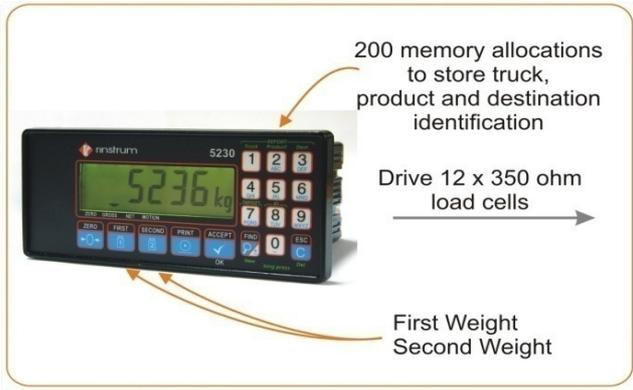


	Order Code
Indicator, VDC, Panel Mount, Aluminium	5200-DC
Indicator, VAC, Panel Mount, Aluminium	# 5200-AC
Cable, Mains, IEC to Plug, 2m, Country Plug *	A1003*

# Country specific IEC lead to be ordered separately

\* Country plug denoted by last digit (\*)

**5230 Truck Weighing Indicator**



**Specifications**

**Approvals**

NMI 6000 d @ 0.5µV/d  
 OIML 6000 d @ 0.5µV/d  
 C-Tick, CE

**Physical**

Display Type 20mm(0.8")LCD display;LED backlight  
 Keypad 17 Key Membrane Keypad  
 Power Switch Nil  
 Housing Powder Coated Aluminium  
 IP65 Stainless Steel (Acc)  
 Dimensions 175(W) x 80(H) x 115(D)mm  
 Weight 1.16 kg (2.6lb)  
 Function Key 5 Fixed

**Power**

DC 12-24 VDC (Opt)  
 AC 110-240 VAC (Opt)

**Loadcell**

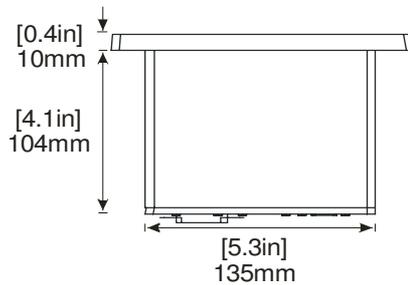
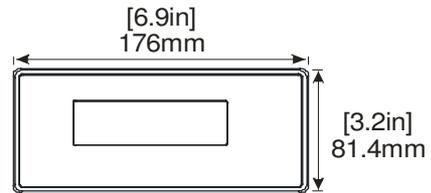
Excitation 8V DC  
 Drive 12 x 350 ohm  
 Sensitivity 100,000 d @ 0.25 µV/d  
 Linearisation 5 points  
 Range Single/Dual Range, Dual Interval

**Features**

Serial 1/2 RS232/485 and RS232  
 Accessory Slots 1  
 Input/Output 4 In/4 Out (Acc 0241)  
 1 In/2 Out (Acc 0240)  
 Analogue 1 (-10 to10V, 4-20mA) (Acc 0240)  
 Set Points 4

**Function**

Single & Split Weighings  
 200 Memory Allocations  
 On-Scale Product Filling



	Order Code
Indicator, VDC, TruckWeighing, Panel Mount, Aluminium	5230-DC
Indicator, VAC, TruckWeighing, Panel Mount, Aluminium	# 5230-AC
Cable, Mains, IEC to Plug, 2m, Country Plug *	A1003*

# Country specific IEC lead to be ordered separately

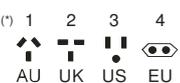
\* Country plug denoted by last digit (\*)

5000 Family Accessories

		Order Code
	<p><b>Module, Relay, 12VDC, DIN Rail, for 5xxx</b></p> <p>Used with the setpoint card 0241 provides N/O and N/C voltage free 250VAC 8A rated contacts for each of the four outputs. DIN rail mountable and supplied with wiring harness to simplify connection to 0214.</p>	<b>0215</b>
	<p><b>Module, Relay, 24VDC, DIN Rail, for 5xxx</b></p> <p>Similar to 0215 but for use in 24VDC systems.</p>	<b>0216</b>
	<p><b>Acc Card, Analogue I/O, for 5xxx</b></p> <p>5xxx accessory card that provides optically isolated -10 to 10V or 4-20mA analog output as well as two outputs and one input as per 0241 below.</p>	<b>0240</b>
	<p><b>Acc Card, Setpoint I/O, or 5xxx</b></p> <p>This card provides 4 isolated inputs and 4 isolated outputs for use by the instrument. The outputs must be externally powered and are limited to 500mA and &lt;28VDC while the inputs will register with 5-28VDC.</p>	<b>0241</b>

		Order Code
	<p><b>H ware, Bracket, Panel Mount, for 5xxx &amp; 6700</b></p> <p>Clamp brackets for use when panel mounting 5xxx or 6700 series instruments.</p>	<b>0301</b>
	<p><b>H ware, Desk Mount, Fixed, for 5xxx &amp; 6700</b></p> <p>Stainless steel bracket for fixed angle desk mounting of 5xxx and 6700. Also provides for permanent fixing.</p>	<b>0303</b>
	<p><b>H ware, Desk Mount, Inc Slides, inc. slides, for 5xxx &amp; 6700</b></p> <p>Stainless steel bracket allowing adjustable viewing angle. Supplied with non slip feet, knobs and mounting hardware and provides for permanent mounting.</p>	<b>0305</b>
	<p><b>H ware, Wall Mount, Inc Slides, inc. slides, for 5xxx &amp; 6700</b></p> <p>Stainless steel bracket to wall mount 5xxx and 6700 indicators. Supplied with knobs and mounting hardware.</p>	<b>0306</b>
	<p><b>H ware, Housing, Stainless IP65, for 5xxx &amp; 6700</b></p> <p>Food grade stainless steel housing that also seals instrument to IP65. Desk stand also included.</p>	<b>0318</b>
	<p><b>Profi-Bus Interface Module,</b></p> <p>Profibus-DP Gateway allows connection of up to two Indicators or Display devices via indicator networking protocols to Profibus-DP. Supports weight indicators - 5000, 5100 and R400 Series. And the 6500 Remote Display.</p>	<b>1400</b>

		Order Code
	<p><b>Cable, Mains, IEC to Plug, 2m, Country Plug *</b></p> <p>IEC Mains lead, 2m long with moulded country specific plug (denoted by *) for use with 5000 series only</p>	<b>A1003*</b>



Remote Displays

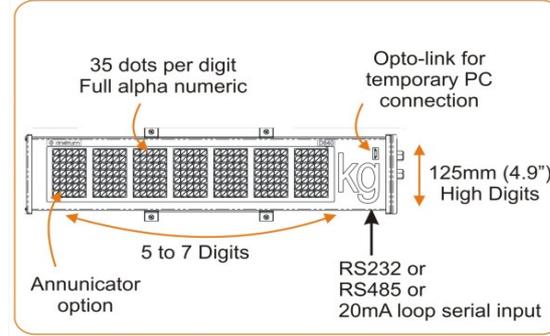
D320/D323 Remote Display



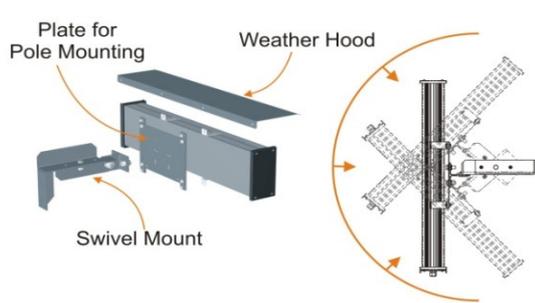
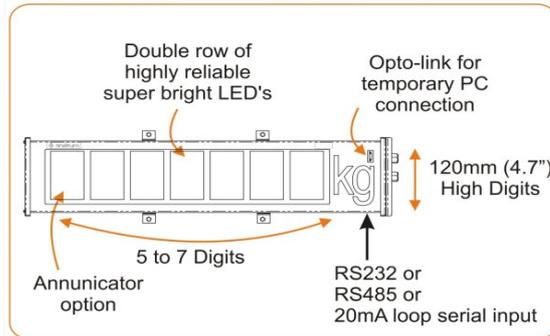
2101 Remote Display



D64x Remote Display - 7x5 Electromechanical Dot Matrix



D74x Remote Display - Ultra Bright LED



**Tough Housings**

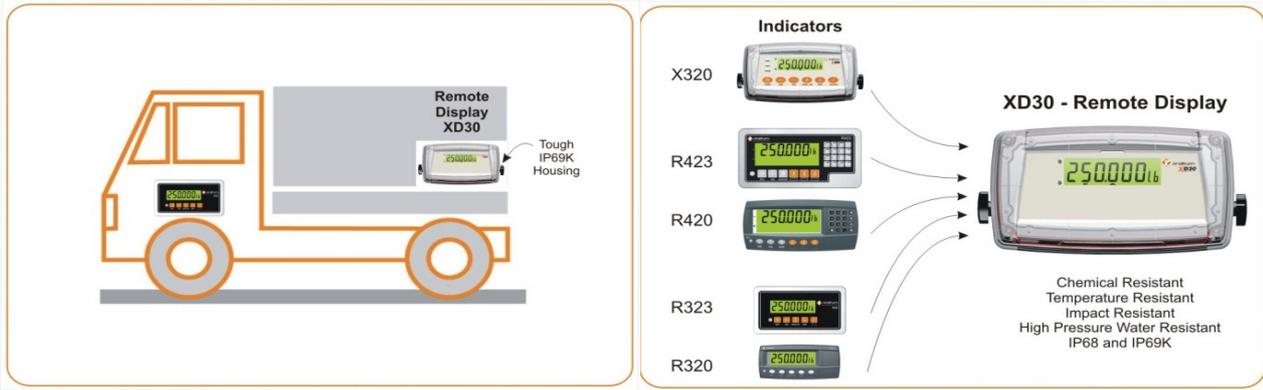
The housing are designed and built for industrial environments with accessories for versatile mounting.

- Shatterproof laminated glass
- Powder coated aluminum extrusion
- Weatherhood
- Swivel arm for directional wall or pole mounting

This combination of features ensures the displays will reliably work in rugged environments with reduced safety concerns and reduced risk of damage from weather or knocks.

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

**XD30 Remote Display**



**Specifications**

**Approvals**

C-Tick, CE & FCC

**Physical**

Display Type LCD display with LED backlight

Digit Size 20mm (0.8")

Power Switch Front panel with memory

Housing Composite alloy IP68 and IP69K

Dimensions 250(W) x 131(H) x 119(D) mm

Weight 2.0 kg (4.4lb)

**Power**

DC 12-24 VDC (Option)

AC 110-240 VAC (Option)

**Functions**

Compatible with most indicators

Auto-Detecting Setup

Numeric and semi-alpha characters

3 Annunciators

RS232

The XD30 combines innovation in industrial design and engineering excellence to create a remote display that is ideal for use in food processing, automotive, chemical or pharmaceutical applications or applications that require reliable operation in harsh environmental conditions. The XD30 remote builds on Rinstrum's already successful X320 indicator.

Constructed of a high tech plastic alloy that is:

- Food grade
- Chemical resistant
- Temperature resistant
- Impact resistant

The flexible mounting options (panel, desk, and wall) allow for fitting into these applications and the LCD display is LED backlit catering for a range of lighting conditions.

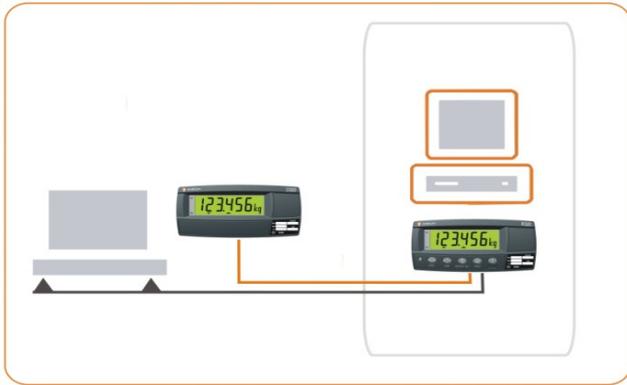
**Double 'o' ring seal** which provides superior performance over traditional stainless steel enclosures.

**IP69K rating:** the industry's highest environmental protection rating - designed to withstand cleaning with high pressure water jets (1400psi) at high temperatures (up to 80°C) from multiple angles.

	<b>Order Code</b>
<b>Display,VDC,IP69K,IP68,</b>	<b>XD30 - C</b>
<b>Display,VAC,IP69K,IP68,</b>	<b>* XD30 - D4</b>

\* Country plug denoted by last digit (\*)

**D320/D323 Remote Display**



**Specifications**

**Approvals**

C-Tick, CE & FCC

**Physical**

Display Type LCD display;LED backlight  
 Number Digits 6  
 Digit Size 20mm (0.8")

**ABS Housing D320**

Housing ABS Plastic (IP65 with M3003)  
 Weight 0.34 kg (12oz)

**Power**

DC 4.8-24 VDC  
 AC Plug pack (Acc)  
 Battery 4 x AA Alkaline or NiMH (Acc)  
 12V 2.5Ah NiMH (Acc)

**Stainless Steel D323**

Housing Stainless Steel  
 Weight 0.49 kg (17oz) -A

**Power**

DC 4.8-24 VDC

**Features**

Compatibility Compatible with most indicators  
 Setup Auto-Detecting Setup  
 Characters Numeric and semi-alpha characters  
 Annunciators 3 Annunciators  
 Serial Input RS232

The D320 and D323 are compact six digit remote displays based on the R300 series indicators. They make a cost effective display solution for a variety of applications; including freight / airport scales, and mobile feedlot mixers.

The setup is auto-detecting to selected indicators and the unit has an RS232 serial input. Available in ABS and stainless steel housings:

- D320 IP65 ABS housing
- D323 IP65 stainless steel housing.

The flexible mounting options (panel, desk, and wall) allow for fitting into these installations and the LCD display is LED backlit catering for a range of lighting conditions.

**Compact housings:** Allows for the unit to be readily mounted on small control panels or equipment, reducing costly modifications to the units they are being installed into.

**Magnetically coupled link on front fascia** - Easy access in situ for updates/setup of the unit, saving the installer time and effort.

**IP65 rated housings** - Dust and water tight, increasing reliability and unit life time.

**Wide DC operation (7 -24V)** to suit a variety of onboard OEM applications -Eliminates the need for third party power supplies saving on system complexity and cost.

	Order Code
Remote, VDC, 6x20mm LCD, Panel Mount, ABS	D320
Remote, VDC, 6x20mm LCD, Panel Mount, Stainless	D323

Accessories for ABS housings	Order Code
H ware, Desk Mount, ABS,	M3001
H ware, Swivel Mount, Stainless, 39mm high	M3002
H ware, Rear boot, ABS IP65, Waterproof	M3003
H ware, Cover, Clear Protective, Pack of 10	M3005
H ware, Pole Mount, Stainless,	M3007
Battery Pack, NiMH 12V 2.5AH ABS, IP65	M3103

Stainless Steel Housing Accessories	Order Code
Housing, Stainless Steel IP65, with DC Input for R323	M3006
Housing, Stainless Steel IP65, with VAC supply for R323	M3106
H ware, 5.5 mm Socket Driver,	M3901

2101 Remote Display



Specifications

Approvals

C-Tick, CE

Physical

Display Type LCD display;LED backlight  
 Number Digits 6  
 Digit Size 27mm (1.1")  
 Weight 0.76 kg (1.2lb)  
 Housing Powder Coated Aluminium

Power

DC 12 VDC or 12-24 VDC (Acc)  
 AC 110-240 VAC (Acc)

Features

Compatibility Rinstrum Indicators  
 Setup Auto-Detecting Setup  
 Characters Numeric and semi-alpha characters  
 Annunciators 3 Annunciators  
 Serial Input RS232

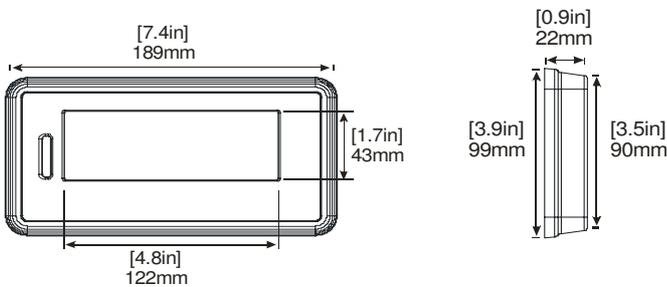
The 2101 remote display features a large 6 digit LCD display in a compact slim line housing. With a viewing distance of approximately 15 metres it is suitable for use in freight/airport scales and mobile applications.

**Suitable in various lighting conditions:** The large 27mm (1.1") high LCD display and LED backlighting make for improved visibility in all lighting conditions.

**Flexible power options:** The unit is available in four powering options, two DC variants, AC and battery.

**Multiple housing options,** available standard as panel mount or optionally with a stainless steel housing if a desk mounted IP65 solution is required.

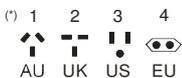
**Only 22mm (0.9in) deep,** mounts directly on a surface with small cut outs only required for cabling to pass through.



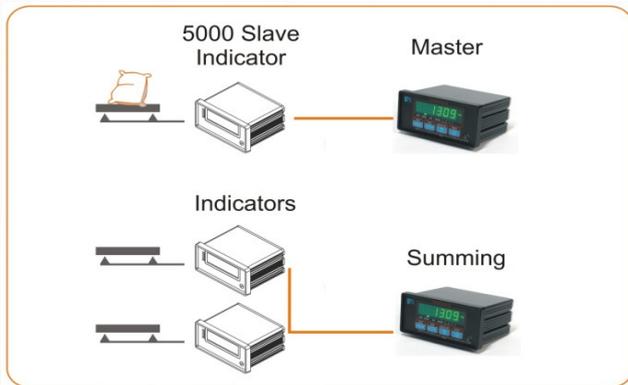
	Order Code
Remote, 12VDC, 6x27mm LCD, Panel Mount	2101-BLANK
Remote Display,12VCD,6x27mmLCD, Panel Mount	2101

2100 Family Accessories

	Order Code
H ware, Gasket, Panel Mount, for 21xx	0348
Hware, Housing, Stainless IP65, for 21xx	0329
H ware, Desk Mount, Stainless, for 21xx	0333
Hware, Housing, Stainless IP65, Power Supply, VAC, AU for 21xx	0330
Hware, Housing, Stainless IP65, Power Supply, VDC, for 21xx	0331
Cable, Serial RS232 DB9F-DB9F,	0351
Plug Pack 12VDC, Bare Ends and Country Plug denoted by *	A1000*
Plug Pack,24VDC 1.25A, Bare ends, Country Plug *	A1005*



## 6700 Remote Display



### Specifications

#### Approvals

C-Tick

#### Physical

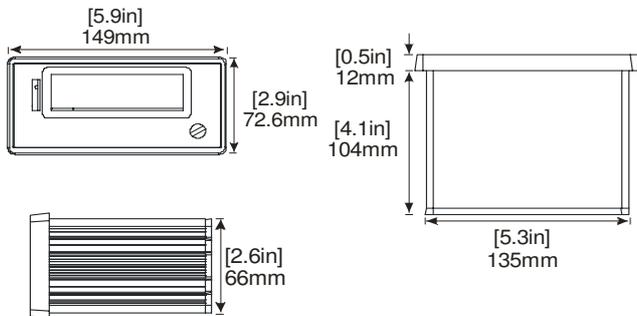
Display Type LED  
 Number Digits 6  
 Digit Size 14.5mm (0.6")  
 Unit Dim 150(W) x 72(H) x 100(D) mm  
 Weight 1.05 kg (2.2lb)  
 Housing Powder Coated Aluminium

#### Power

DC 12-24 VDC (Opt)  
 AC 110-240 VAC (Opt)

#### Features

Compatibility Compatibility with most indicators  
 Setup Front panel menu  
 Characters Numeric and semi-alpha characters  
 Annunciators 3 Annunciators  
 Serial Input RS232/485  
 Addressing Unit addressing (up to 31 addresses)  
 Master/Slave mode to 5000  
 Serial Summing with 5xxx indicators  
 Programmable Input Strings



The 6700 may be configured to operate as a:

- Remote display
- Master of a 5000 or
- Summer of several 5000s.

The 6700 operates like a 5000 indicator except that the weight information does not come from the load cell interface but from serially transmitted readings.

**Analogue Output** - 4-20mA or 0-10V with 1/65,000 resolution

**High current outputs** - Reduces wiring and the need for external relays, saving installation cost and reducing overall system size.

**Isolated outputs** - Eliminates the possibility of the external control systems influencing the weighing process, therefore simplifying system design and installation.

**Robust I/O** - Reduces unplanned outages due to component failure and reduced life time costs for the installation.

#### Summing Master Mode

The 6700 acts as a master controller for a number of slave 5000 units connected together on a multi-drop serial RS422/RS485 bus.

The 6700 polls each of the slave units and sums all of the weight readings.

The resulting total weight is displayed on the 6700.

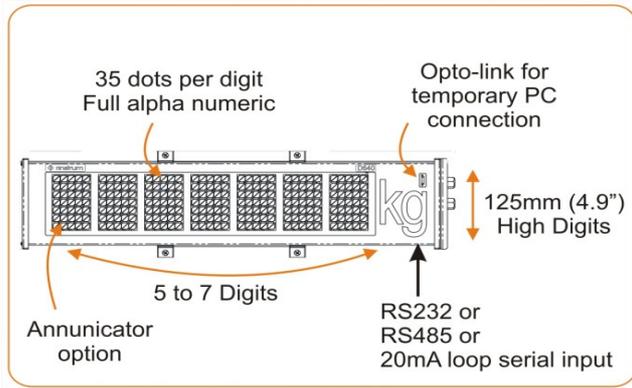
The set pointing and printing facilities and accessory cards are all driven from the total weight so the 6700 behaves like an indicator reading the total weight directly from the load cell base.

	Order Code
Remote, VDC, 6x15mm LED, Panel Mount, Aluminium	6700A-DC
Remote, VAC, 6x15mm LED, Panel Mount, Aluminium	# 6700A-AC
Cable, Mains, IEC to Plug, 2m, Country Plug *	A1003*

# Country specific IEC lead to be ordered separately

\* Country plug denoted by last digit (\*)

D64x Remote Display - 7x5 Electromechanical Dot Matrix



**Specifications**

**Approvals**

C-Tick, CE & FCC

**Physical**

Display Type 7x5 Electromechanical Dot Matrix  
 Number Digits Up to 7  
 Digit Size 125mm (4.9")  
 Weight 10 kg (22lb)  
 Housing Powder Coated Aluminium

**Power**

DC 12-24 VDC (Opt)  
 AC 110-240 VAC (Opt)

**Features**

Compatibility Compatible with most indicators  
 Setup Auto-Detecting Setup  
 Characters Full alpha numeric characters  
 Annunciators 3 Annunciators (Opt)  
 Serial Input RS232/485 and 20mA Current Loop  
 Addressing Unit addressing (up to 8 addresses)  
 Font selectable for curved or block  
 Shatterproof Glass Window  
 Weatherproof Sealing  
 Display timeout selectable

The D640 is an ALPHA-Numeric electromechanical remote display for both indoors and out.

- Isolated RS232, RS485 and 20mA loop serial input;
- 3 annunciators;
- Shatterproof laminated glass window;
- Compatibility with a wide range of indicators.

The meaningful display, with annunciators and numeric and alpha characters, and the highly visible digits allow for precise reading across long distances in work sites.

**The D640 features:**

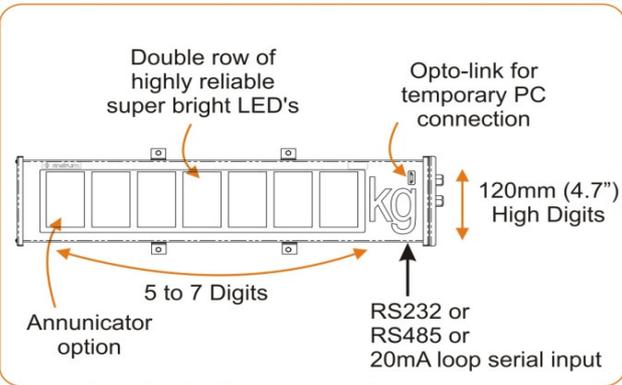
- 125mm (4.9in) electromechanical flip-flop digits for easy reading under all lighting conditions at a range of angles.
- 7x5 electromechanical dot matrix for each digit (35 dots per digit), allowing full alpha numeric characters to be displayed for even greater clarity.
- Easy PC setup or firmware upgrades using the magnetically coupled infra-red communications on the front pane.



	Order Code
Remote, VAC, 5x125mm E/M, Wall Mount, Aluminium	D640-50-D
Remote, VAC, 6+Ann x125mm E/M, Wall Mount, Aluminium	D640-6A-D
Remote, VAC, 7x125mm E/M, Wall Mount, Aluminium	D640-70-D
Remote, VDC, 5x125mm E/M, Wall Mount, Aluminium	D640-50-C
Remote, VDC, 6+Ann x125mm E/M, Wall Mount, Aluminium	D640-6A-C
Remote, VDC, 7x125mm E/M, Wall Mount, Aluminium	D640-70-C

Accessories	Order Code
 H ware, Weather Hood, for 120/125mm Remote	0317
 H ware, Swivel Mount & Plate, for 120/125mm Remote	0312
 H ware, Plate only for pole mount, for 120/125mm Remote	0314
Cable, Serial OptoLINK-DB9F,	A10005
Cable, Serial OptoLINK-USB, Driver CD	A10012

**D74x Remote Display - Ultra Bright LED**



**Specifications**

**Approvals**

C-Tick, CE & FCC

**Physical**

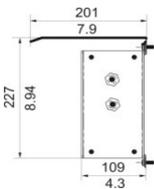
Display Type Ultra Bright LED (68 LEDs per digit)  
 Number Digits Up to 7  
 Digit Size 120mm (4.7")  
 Weight 10 kg (22lb)  
 Housing Powder Coated Aluminium

**Power**

DC 12-24 VDC (Opt)  
 AC 110-240 VAC (Opt)

**Features**

Compatibility Compatible with most indicators  
 Setup Auto-Detecting Setup  
 Characters Numeric and semi-alpha characters  
 Annunciators 3 Annunciators (Opt)  
 Serial Input RS232/485 and 20mA Current Loop  
 Addressing Unit addressing (up to 8 addresses)  
 Selectable brightness  
 Shatterproof Glass Window  
 Weatherproof Sealing  
 Display timeout selectable



The D740 is a super bright LED remote display for both indoors and out.

- Isolated RS232, RS485 and 20mA loop serial input;
- 3 annunciators;
- Shatterproof laminated glass window;
- Compatibility with a wide range of indicators.

The meaningful display, with annunciators and numeric and alpha characters, and the highly visible digits allow for precise reading across long distances in work sites.

**The D740 features:**

- Double row of highly reliable super bright LED's to create a display that is visible in all lighting conditions, even in direct sunlight.
- 120mm (4.7in) digits for easy reading under all lighting conditions.
- Easy PC setup or firmware upgrades using the magnetically coupled infra-red communications on the front pane



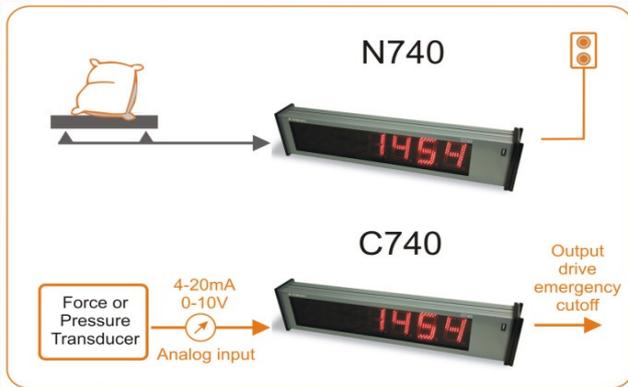
	Order Code
Remote, VAC, 5x120mm LED, Wall Mount, Aluminium	D740-50-D
Remote, VAC, 6+Ann x120mm LED, Wall Mount, Aluminium	D740-6A-D
Remote, VDC, 5x120mm LED, Wall Mount, Aluminium	D740-50-C
Remote, VDC, 6+Ann x120mm LED, Wall Mount, Aluminium	D740-6A-C

**Accessories** Order Code



H ware, Weather Hood, for 120/125mm Remote	0317
H ware, Swivel Mount & Plate, for 120/125mm Remote	0312
H ware, Plate only for pole mount, for 120/125mm Remote	0314
Cable, Serial OptoLINK-DB9F,	A10005
Cable, Serial OptoLINK-USB, Driver CD	A10012

High Visibility Weight Indicator



Specifications

Approvals

C-Tick, CE & FCC

Physical

- Display Type Ultra Bright LED (68 LEDs per digit)
- Number Digits 5
- Digit Size 120mm (4.7")
- Pack Weight 10 kg (22lb)
- Housing Powder Coated Aluminium
- Features Shatterproof Glass Window
- Weatherproof Sealing
- Selectable brightness
- Input/Output 1 Input/2 Outputs
- Set Points 2

**N740 Load Cell Input**

Excitation 5VDC @ 4x350Ω (Max 3.5kΩ)

Power

DC 12-24 VDC (28W) (Option)

AC 110-240 VAC (25W) (Opt)

**C740 0-10V/4-20mA Input**

Voltage input range Min -11V Max 11V

Current input range Min -22mA Max 22mA

Error <0.1%

Input Ω (voltage input) 100kΩ

Input Ω (current input) 433Ω

Power

AC 110-240 VAC

The D740 and R320 have been combined to create a high visibility weight indicator that can take either a **load cell input** or **analogue input**. They are ideal for displaying the load on large cranes to assist operators in not overloading the crane – and can be used on large bins or silos to display the weight so as it's visible from a distance.

**N740 – Load Cell Input**

- Load cell input (4x350Ω)
- AC or DC power option
- 120mm high digits
- Super bright LEDs

**C740 – Analogue Input**

- 0-10V/4-20mA Input
- AC power option
- 120mm high digits
- Super bright LEDs

These high visibility weight indicators feature:

- Double row of highly reliable super bright LED's that are visible in all lighting conditions, even in direct sunlight.
- Two outputs are built in that can be used for connection to light indications or overload cutoff in crane installations, for example.
- PC programmable using View300

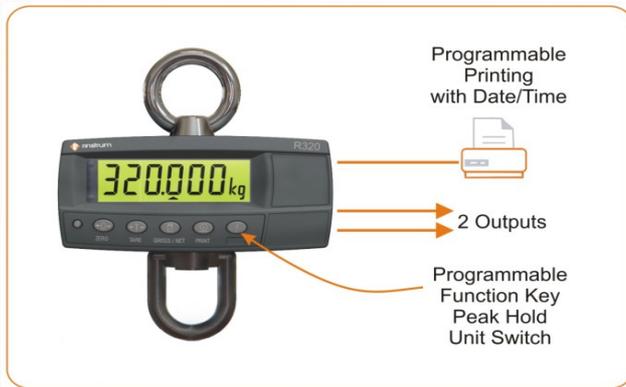
	Order Code
Indicator, VDC, 5x120mm LED,	N740-5-C
Indicator, VAC, 5x120mm LED,	N740-5-D
Indicator, VAC, 5x120mm LED,	C740-5-D

Accessories



	Order Code
H ware, Weather Hood, for 120/125mm Remote	0317
H ware, Swivel Mount & Plate, for 120/125mm Remote	0312
H ware, Plate only for pole mount, for 120/125mm Remote	0314
Cable, Serial OptoLINK-DB9F,	A10005
Cable, Serial OptoLINK-USB, Driver CD	A10012

H Scale - Hanging Scale



Specifications

Approvals

**Pattern Approval** NMI 6/13/3 3,000d  
**R320 Indicator** C-Tick, CE & FCC  
 4,000d @ 0.8µV/d NMI (S-420), OIML R76

**Load Cell** OIML C3 300kg  
 C-Tick, CE & FCC

General

Capacity (kg) 300kg (300 x 0.01kg)  
 Repeatability +/- 1 division  
 Linearity +/- 1 division  
 Hooks/Eyes Stainless Steel (316)  
 Load Cell Stainless Steel

Physical

Display Type LCD display with LED backlight  
 Digit Size 20mm  
 Keypad 6 Key Silicon Keypad  
 Power Switch Front panel with memory  
 Housing IP65 ABS Plastic  
 Pack Weight 3 kg  
 Function Key 4 Fixed, 1 Programmable

Power

DC 4.8-24 VDC (Option)  
 AC Plug pack (Option)  
 Battery 12V 2.5Ah NiMH (Option)

Features

Serial RS232 Serial Output  
 Input/Output 1 Input/2 Outputs  
 Set Points 2

Functions

Counting; Live Weighing;  
 2 Isolated High Side Driver Outputs  
 Configurable print format  
 Unit Switching; Totalising  
 Peak & Hold

The H series hanging scales combine the proven R320 indicator with an S cell in an extended enclosure creating a compact trade approved sling scale – ideal for a wide range of weighing applications from tea, flour to steel merchants, recycling and competition fishing - applications that require suspended weighing.

**Peak hold** functionality makes for an excellent load testing, cable pulling or tension device. Pivoting mount arrangement makes swivelling the assembly and load simple.

Physical features:

- Stainless steel load cell
- Stainless steel hook and eyes
- Dust and water tight (IP65 rated), increasing reliability and unit lifetime.
- Protective lens over the LCD to reduce risk of damage from knocks
- Long life rechargeable battery options ideal for mobile applications.

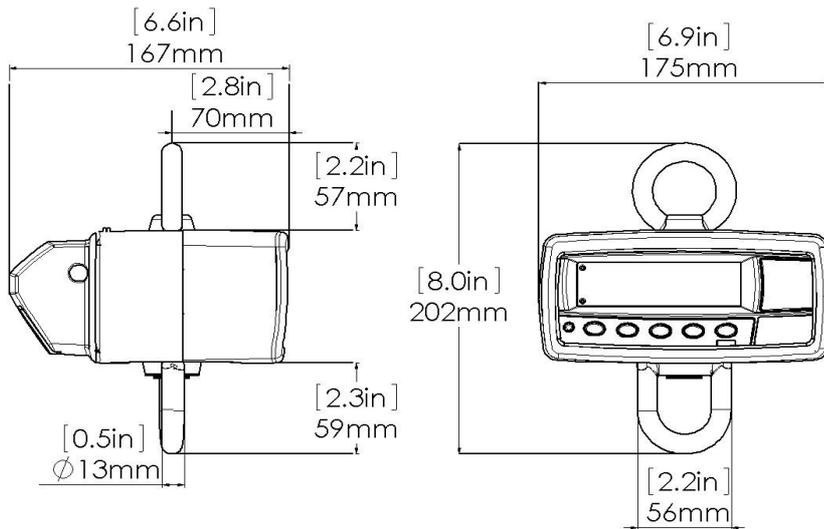
**Communications and outputs:**

**Built in RS232** communications port for connection to printer or PC  
**Two outputs** – isolated high side driver up to 300mA

**Ideal for trade approved applications:**

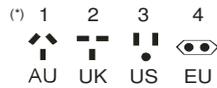
- Programmable function key – Unit switching, Counting, Manual Hold, Peak Hold, Live Weigh
- **Configurable printing** combined with the **clock calendar** allow for traceable dockets to be printed.
- **Live weigh** functionality for weighing animals.
- **High performance** based on a 4,000d trade approved indicator

H Scale - Hanging Scale

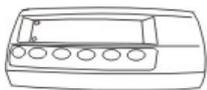


HS300A-R320	-	K356	-	C*	Hanging Scale,300kg,DC, ,
HS300A-R320	-	K356	-	D*	Hanging Scale,300kg, AC,
HS300A-R320	-	K356	-	F*	Hanging Scale,300kg,NiMH Internal Battery,
HS300A-R320	-	K356	-	G*	Hanging Scale,300kg,4 AA Battery (R300),

\* Country plug denoted by last digit (\*)

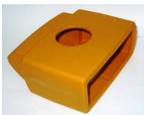


Order Code



M3005 **H ware, Cover, Clear Protective, Pack of 10**

R320 clear plastic covers to protect instrument face from dirt/scratches while still allowing full functionality, in packs of 10.



M3015 **H ware, Silicone Boot**

Silicone boot to encase H scale for increased protection of the indicator against knocks.



A10005 **Cable, Serial OptoLINK-DB9F,**

RS232 to Optolink, service and setup interface cable.

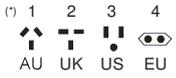


A10012 **Cable, Serial OptoLINK-USB, Driver CD**

USB to Optolink, service and setup interface cable, drivers for windows operating system supplied.

## Rinstrum Catalogue V6.00

### General Accessories

		Order Code
	<b>Plug Pack 12VDC, Bare Ends and Country Plug denoted by *</b> 110-240VAC switch mode plug pack with country specific pin configuration to bare wires (12VDC output).	A1000*
	<b>Plug Pack, 24VDC 1.25A, Bare ends, Country Plug *</b> 110-240VAC switch mode plug pack with country specific pin configuration to bare wires (24VDC 1.25A output).	A1005*
<b>For use with M3001 boot</b>		
	<b>Plug Pack, 12VDC 2.5A, 2.1mm Socket, Country Plug *</b> 110-240VAC switch mode plug pack with country specific pin configuration to a 2.1mm DC connector (12VDC 2.5A output) - for use with the R300 Series M3001 boot and converters 0080 and 0085.	A1002* (1) 1 2 3 4 
<b>For use with 5000 series indicators only</b>		
	<b>Cable, Mains, IEC to Plug, 2m, Country Plug *</b> IEC Mains lead, 2m long with moulded country specific plug (denoted by *) - for use with 5000 series only	A1003*
<b>* Country plug denoted by last digit (*)</b>		
	<b>Power Supply, 12VDC, 2A DIN Rail,</b> 110-240VAC 12VDC 2A output, DIN rail mountable switch mode power supply	A10010
	<b>Power Supply, 24VDC, 2A DIN Rail,</b>	A10055
		Order Code
	<b>Module, Converter, RS232 to RS485,</b> Converts RS232 to RS485 full duplex four wire for long distance data communications. Requires external power (A1002*) other than when used with 2100 and 5000 Series. When used with 2100 Series RTS switching for multi-drop compatibility can be selected.	0080
	<b>Module, Converter, RS232 to 20mA Current Loop,</b> Converts RS232 transmit only to 20mA current loop.	0081
	<b>Module, ESD Protection, for Serial Ports &amp; L/C Input</b> Protects load cell and comm port inputs against ESD (electrostatic discharge) damage when correctly grounded.	0084
	<b>Module, Opto Isolated, RS232, for Serial Ports</b> Provides a fully isolated RS232 comms port interface. Useful for eliminating ground loops or protecting ports in particularly harsh electrical environments. Requires external power (A1002*) other than when used with 2100 and 5000 Series.	0085
	<b>Module, Converter, 0-10VDC, for L/C Input</b> Conditions a 0-10VDC or 4-20mA input for use with Rinstrum instruments. Use your weight indicator as a voltmeter, or read any sensor that has a DC output.	0086
	<b>Bluetooth serial adapter, single master end</b> M0200 cable replacement master end used with M0201 cable replacement slave device. The M02xx range are all compatible with Rinstrum Indicators that support RS232 serial comms.	M0200
	<b>Bluetooth serial adapter, single slave end</b> M0201 cable replacement slave device used with M0200 master device	M0201
	<b>Bluetooth serial adapter, multi roaming master end</b> M0202 Multi-roaming master device used with M0203	M0202
	<b>Bluetooth serial adapter, multi roaming slave end</b> M0203 Multi-roaming slave device - can be used with M0202 or any other Bluetooth SPP master such as a PC, smart phone or PDA	M0203

General Accessories

		Order Code
	<b>I/H Cable, Adapter 7WAY/DB9, for L/C Input</b> Adapts the load cell input between Ranger family and R family.	<b>A10009</b>
	<b>Data Logger, 4MB, RS232, S/W V2.0d</b> Data Capture using the RS-232 serial output of the indicator; 4MB non-volatile flash memory; External Power - 10V to 32V DC.	<b>A10017</b>
	<b>Load Cell Simulator, Variable,</b> 0-2.0mV/V simulator with 5 fixed steps and a constantly variable setting with course and fine adjustment.	<b>0051</b>
	<b>Batching Simulator,</b> The 0090 can be used to simulate multiple material, multiple speed batching and provides up to seven fill inputs and one dump input. The loadcell signal will increase while a fill input is active and decrease while the dump input is active. Multiple fill inputs may be active simultaneously, allowing a variety of batching systems to be simulated.	<b>0090</b>
	<b>Summing Box, 6 L/C Input Expan,</b> 6 load cell input summing junction with jumper switchable excitation adjusting corner balance pots. Housed in a durable IP55 aluminium case. Signal trimming pots for corner balancing.	<b>0071</b>
	<b>Profi-Bus Interface Module,</b> Profibus-DP Gateway allows connection of up to two Indicators or Display devices via indicator networking protocols to Profibus-DP. Supports weight indicators - 5000, 5100 and R400 Series. And the 6500 Remote Display.	<b>1400</b>

**Demo Kits (limit of one per customer)** Order Code

	<b>R320 Launch Kit, Plug pack, Country Plug C1 AU, C2 UK, C3 US, C4 EU</b> Includes: R320, Desk stand boot (M3001) and brackets, AC adaptor specified by C* - C1 AU, C2 UK, C3 US, C4 EU, load cell simulator (0051), optolink cable (A10012), 4x AA batteries and USB stick with documentation.	<b>R320-C*-L</b>
	<b>R420 Launch Kit, Plug pack, Country Plug C1 AU, C2 UK, C3 US, C4 EU</b> Includes: R420 ABS housing fitted with desk stand, AC adaptor specified by C* - C1 AU, C2 UK, C3 US, C4 EU, 3 Modules, optolink cable, load cell simulator. Includes passcodes for all R4 firmware ranging from basic weighing, batching, summing, truck weighing. USB stick with documentation.	<b>R420-C*-L</b>
	<b>R423 Launch Kit, VAC, Country Plug D1 AU, D2 UK, D3 US, D4 EU</b> Includes: R423 in full stainless steel housing AC, country specific AC adaptor specified by D* - D1 AU, D2 UK, D3 US, D4 EU, 2 Modules (M4301 I/O, M4401 Analog), optolink cable, load cell simulator (0051), external relay board (M4901) and cable (M4902). Includes passcodes for all R4 firmware ranging from basic weighing, batching, summing, truck weighing. USB stick with documentation.	<b>R423-D*-L</b>
	<b>X320 Launch Kit, VAC, Country Plug D1 AU, D2 UK, D3 US, D4 EU</b> Includes: X320 AC, Country specific AC adaptor specified by D* - D1 AU, D2 UK, D3 US, D4 EU, desk stand (M3012), optolink cable and load cell simulator. USB stick with documentation.	<b>X320-D*-L</b>

Pricing Summary

R300 Series Compact Indicators



R320	A	Indicator, ABS,VDC, Panel Mount,
R323	A	Indicator,Stainless Steel,VDC, Panel Mount,
R323	C	Indicator,Stainless Steel,VDC, Full Housing,
R323	D4	Indicator,Stainless Steel,VAC, Full Housing,
R323	F	Indicator,Stainless Steel,NiMH, Full Housing,
	K342	Basic,
	K344	Basic,RS232,Standard Print,
	K354	Basic,RS232,CustomPrint,Clock,
	K356	Basic,RS232,CustomPrint,Clock,I/O, Setpoint,
	K	

R300 Family Converters

0080	Module, Converter, RS232 to RS485,
0081	Module, Converter, RS232 to 20mA Current Loop,
M3902	Module, Converter, 0-10V/4-20mA Input,

Desk Stand Boot

M3001	H ware, Desk Mount, ABS,
A1002*	Plug Pack,12VDC 2.5A, 2.1mm Socket,Country Plug *

IP65 Waterproof Boot

M3003	H ware, Rear boot, ABS IP65, Waterproof
A1000*	Plug Pack 12VDC, Bare Ends and Country Plug denoted by *

Brackets

M3002	H ware, Swivel Mount, Stainless, 39mm high
M3014	H ware, Swivel Mount, Stainless, 64mm high
M3007	H ware, Pole Mount, Stainless,
A10018	Insert for pole mounting,

R320 Accessories for ABS housings

M3005	H ware, Cover, Clear Protective, Pack of 10
M3009	H ware, Physical Seal,
M3103	Battery Pack, NiMH 12V 2.5AH ABS, IP65

X320 Indicator



X320	C	Indicator,Washdown,IP69K,IP68,VDC, Full Housing,
X320	D4	Indicator,Washdown,IP69K,IP68,VAC, Full Housing,
X320	F	Indicator,Washdown,IP69K,IP68,NiMH, Full Housing,
	K304	X320, Standard OIML
	K306	X320, Dual Range OIML
	K307	X320, Dual Range NTEP
	K309	X320 or R320/R323,Remote Console to R400
	K	



1203	Transmitter, VDC, Wall Mount, Aluminium IP65
1203-B	Transmitter, VDC, PCB Only,
1203-D	Transmitter, VDC, Display, Wall Mount, Aluminium IP65

Opto links for temporary connection to a PC for software upgrades and configuration

A10005	Cable, Serial OptoLINK-DB9F,
A10012	Cable, Serial OptoLINK-USB, Driver CD

PC Software

View300	Viewer PC software, for R300 Series and X320 Indicators,
View400	Viewer PC software for R400 Series Indicators,
S1000	PC Truck Software Dongle

Pricing Summary

R400 Series



R420	A	Indicator, ABS,VDC, Panel Mount,
R423	A	Indicator,Stainless Steel,VDC, Panel Mount,
R423	C	Indicator,Stainless Steel,VDC, Full Housing,
R423	D4	Indicator,Stainless Steel,VAC, Full Housing,
R423	F	Indicator,Stainless Steel,NiMH, Full Housing,
K401		General Weighing, 1 Product,
K402		General Weighing, 250 Products,
K404		Truck Weighing, Weighbridge,
K405		Truck Weighing, Static Axle Weighing,
K410		Batching, 1 Material,
K411		Batching, 6 Material,
K412		Batching, 20 Material,
K481		Summing (R400 and R300 Series),
K491		Tilt Compensation,
	K	

R400 Series Modules

M4201	Module, RS232/RS232,
M4202	Module, RS232/RS485,
M4203	Module, RS485/485,
M4221	Module, Wired Ethernet,
M4301	Module, 8 Input/Output, I/O 1-8
M4302	Module, 4 Button Input,
M4311	Module, 8 Input/Output, I/O 9-16
M4321	Module, 8 Input/Output, I/O 17-24
M4331	Module, 8 Input/Output, I/O 25-32
M4401	Module, Analogue Output,
M4501	Module, Data Storage Device,
1400	Profi-Bus Interface Module,
M4211	Module, Tilt Compensation,
M4904	Tilt Sensor, 10 Deg, Used with K491 and M4211
M4905	Tilt Sensor, 15 Deg, Used with K491 and M4211

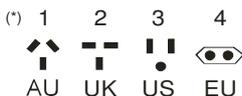
Accessories for R420 ABS Housing

A10018	Insert for pole mounting,
M4001	H ware, Desk Mount, ABS IP65,
M4003	H ware, Wall Mount, Stainless,
M4004	H ware, Pole Mount, Stainless,
M4005	H ware, Cover, Clear Protective,

General R400 Accessories

M4006	H ware, Cover Clear Protective, 10 Pack,for R423 Stainless
M4009	H ware, Physical Seal,
M4903	Module, Converter,0-10V/4-20mA Input,

Power and Relay Accessories



A10010	Power Supply, 12VDC, 2A DIN Rail,
A10055	Power Supply, 24VDC, 2A DIN Rail,
M4103	Battery Pack, NiMH 2.5AH IP65 For R42x ,
M4104	Power supply, VAC, 12VDC Aux Output
M411*	Power Supply, VAC, IP65, Desk Mount, Country Plug*
M4901	Relay Output PCB, 12V DIN-Rail Kit, Kit: 12V DIN Power Supply (A10010), Relay Board (M4901), Cable (M4902)
M4901-K	Cable, Module to M4901 or M4906,
M4902	Cable, Module to M4901 or M4906,
M4906	Relay Output PCB, 24V DIN-Rail Kit, Kit: 4V DIN Power Supply (A10055), Relay Board (M4906), Cable (M4902)
M4906-K	Cable, Module to M4901 or M4906,

Pricing Summary

2100 Indicator



<b>2100</b>	Indicator, 12VDC, Panel Mount, Aluminium
<b>2100-H</b>	Indicator, 12VDC, Desk Mount, Stainless IP65
<b>2100-DC</b>	Indicator, VDC, Desk Mount, Stainless IP65
<b>2100-AC</b>	Indicator, VAC, AU, Desk Mount, Stainless IP65
<b>2100-B</b>	Indicator, Battery, Desk Mount, Stainless IP65
<b>0227</b>	Module, Relay, 12VDC, for 21xx
<b>0329</b>	Hware, Housing, Stainless IP65, for 21xx
<b>0330</b>	Hware, Housing, Stainless IP65, Power Supply, VAC, AU for 21xx
<b>0331</b>	Hware, Housing, Stainless IP65, Power Supply, VDC, for 21xx
<b>0333</b>	H ware, Desk Mount, Stainless, for 21xx
<b>0340</b>	Battery Pack, NiMH 2.5AH IP65, for 21xx
<b>0348</b>	H ware, Gasket, Panel Mount, for 21xx

Remote Displays

<b>XD30</b>	- <b>C</b>	Display, VDC, IP69K, IP68,
<b>XD30</b>	- <b>D4</b>	Display, VAC, IP69K, IP68,
<b>D320</b>		Remote, VDC, 6x20mm LCD, Panel Mount, ABS
<b>D323</b>		Remote, VDC, 6x20mm LCD, Panel Mount, Stainless
<b>2101</b>		Remote Display, 12VDC, 6x27mm LCD, Panel Mount

D64x Remote Display - 7x5 Electromechanical Dot Matrix



<b>D640-50-D</b>	Remote, VAC, 5x125mm E/M, Wall Mount, Aluminium
<b>D640-6A-D</b>	Remote, VAC, 6+Ann x125mm E/M, Wall Mount, Aluminium
<b>D640-70-D</b>	Remote, VAC, 7x125mm E/M, Wall Mount, Aluminium
<b>D640-50-C</b>	Remote, VDC, 5x125mm E/M, Wall Mount, Aluminium
<b>D640-6A-C</b>	Remote, VDC, 6+Ann x125mm E/M, Wall Mount, Aluminium
<b>D640-70-C</b>	Remote, VDC, 7x125mm E/M, Wall Mount, Aluminium

D74x Remote Display - Ultra Bright LED



<b>D740-50-D</b>	Remote, VAC, 5x120mm LED, Wall Mount, Aluminium
<b>D740-6A-D</b>	Remote, VAC, 6+Ann x120mm LED, Wall Mount, Aluminium
<b>D740-50-C</b>	Remote, VDC, 5x120mm LED, Wall Mount, Aluminium
<b>D740-6A-C</b>	Remote, VDC, 6+Ann x120mm LED, Wall Mount, Aluminium
<b>0317</b>	H ware, Weather Hood, for 120/125mm Remote
<b>0312</b>	H ware, Swivel Mount & Plate, for 120/125mm Remote
<b>0314</b>	H ware, Plate only for pole mount, for 120/125mm Remote

High Visibility Weight Indicator

<b>N740-5-C</b>	Indicator, VDC, 5x120mm LED,
<b>N740-5-D</b>	Indicator, VAC, 5x120mm LED,
<b>C740-5-D</b>	Indicator, VAC, 5x120mm LED,

General Accessories

<b>0080</b>	Module, Converter, RS232 to RS485,
<b>0081</b>	Module, Converter, RS232 to 20mA Current Loop,
<b>0084</b>	Module, ESD Protection, for Serial Ports & L/C Input
<b>0085</b>	Module, Opto Isolated, RS232, for Serial Ports
<b>0086</b>	Module, Converter, 0-10VDC, for L/C Input
<b>M0200</b>	Bluetooth serial adapter, single master end
<b>M0201</b>	Bluetooth serial adapter, single slave end
<b>M0202</b>	Bluetooth serial adapter, multi roaming master end
<b>M0203</b>	Bluetooth serial adapter, multi roaming slave end
<b>0051</b>	Load Cell Simulator, Variable,
<b>0071</b>	Summing Box, 6 L/C Input Expan,
<b>0090</b>	Batching Simulator,
<b>A10009</b>	I/H Cable, Adapter 7WAY/DB9, for L/C Input
<b>A10017</b>	Data Logger, 4MB, RS232, S/W V2.0d

Pricing Summary



<b>5200-DC</b>	Indicator, VDC, Panel Mount, Aluminium
<b>5200-AC</b>	Indicator, VAC, Panel Mount, Aluminium
<b>5230-DC</b>	Indicator, VDC, TruckWeighing, Panel Mount, Aluminium
<b>5230-AC</b>	Indicator, VAC, TruckWeighing, Panel Mount, Aluminium
<b>0215</b>	Module, Relay, 12VDC, DIN Rail, for 5xxx
<b>0216</b>	Module, Relay, 24VDC, DIN Rail, for 5xxx
<b>0240</b>	Acc Card, Analogue I/O, for 5xxx
<b>0241</b>	Acc Card, Setpoint I/O, or 5xxx
<b>0301</b>	H ware, Bracket, Panel Mount, for 5xxx & 6700
<b>0303</b>	H ware, Desk Mount, Fixed, for 5xxx & 6700
<b>0305</b>	H ware, Desk Mount, Inc Slides, inc. slides, for 5xxx & 6700
<b>0306</b>	H ware, Wall Mount, Inc Slides, inc. slides, for 5xxx & 6700
<b>0318</b>	H ware, Housing, Stainless IP65, for 5xxx & 6700
<b>1400</b>	Profi-Bus Interface Module,
<b>A1003*</b>	Cable, Mains, IEC to Plug, 2m, Country Plug *

(\*) 1 2 3 4  
  
 AU UK US EU

# Rinstrum Catalogue V6.00

RINSTRUM EUROPE GmbH

## TERMS AND CONDITIONS OF SALE

**Please note: This version in the English language is provided for informational purposes only. It does – to the best of our knowledge – accurately reflect the German version of our standard terms and conditions, but only the German version shall constitute the legally binding agreement.**

The following terms and conditions of Rinstrum Europe GmbH (hereinafter referred to as “we”) apply to all – also future – sales and deliveries, as far as not agreed on differently in written terms.

Any terms and conditions of the customer will be rejected unless we have expressly agreed to their application in writing.

1 Our offers are not binding and are freely revocable. In order to be of legal effect, any agreements reached between us and the customer concerning the performance of a contract must be memorialised in a written contract or by delivery. Our sales employees are generally not authorised to reach any ancillary agreement or make representations, which go beyond the content of the written contract or which change these general terms and conditions to be disadvantageous to us. Any details about technical data, illustrations, sketches, form and dimensions are only binding if confirmed in writing. We reserve the right to modifications in construction. It's the responsibility of the customer to check the use of our goods for his own purposes.

2 The delivery time starts with the order confirmation but not before having clarified all details of the order execution as well as receipt of all documents and permissions to be brought by the customer and the deposit agreed on. The delivery time is kept if the goods are put to disposal at work or if notice of ability to deliver has been given until running out of the deadline.

3 We reserve the right to reasonable instalment deliveries.

4 Reasonable extensions of time of delivery and performance might be caused by changes requested by the customer as well as any not predictable events not to be influenced by us i.e. especially force majeure, strikes, lockouts, interruption of operation, difficulties in obtaining material or energy, delays in delivery, government decrees and late or no delivery by our supplier.

We reserve the right to withdrawal in case the hindrance is not of a temporary nature. The customer has the right to withdraw from the contract in written terms if, because of the delay, he can not reasonably be expected to accept the delivery. In that case claims of damage will be rejected.

5 In case of a delay in delivery caused by negligence by our legal representatives or accomplices, our liability is limited to 5 % of the value of goods. The claim of damage instead of performance stays untouched according to Sec. 10.

6 We choose the to our estimation safest and most favourable way of dispatch. The customer has to carry costs and risks ex works. In case of a delay in delivery caused by the customer

- the risk of giving notice of dispatch is taken over by the customer
- we take the goods on stock at the expense of the customer; in case of storage at works we have the right to charge at least 0,5 %/month of the invoiced amount per month for storing and safe guarding the goods.
- after expiry of a reasonable deadline period we reserve the right to rescind the contract or to claim damages instead of performance,
- the customer has to carry costs and risks caused by the its defaults in accepting contract performances or if he breaches its other duties in cooperation.

7 Our prices are net and exclude packing, freight etc. Should our prices generally been raised or reduced in between date of completion of contract and delivery, the price valid at day of delivery applies.

A payment will be deemed to have been made when we can exercise control over the funds. If payment is made by cheque or bill of exchange, then it will be deemed to have been made only after its clearance; the customer has to carry bank rates and expenses. They are due immediately. In case of a delay in payment we generally charge, without further notice, interest of 8% above the base interest rate, but at least 10% from passing of date of settlement.

## Rinstrum Catalogue V6.00

Are there reasonable doubts in the solvency of the customer caused e.g. by delays in payment or a protested cheque or bill of exchange, we may at our discretion demand that additional security is being provided within a reasonable period or that payment has to be made against each delivery. If the customer does not meet this demand within a reasonable period, we will have the right to rescind the agreement without thereby waiving any other potential statutory claims. This period is dispensable if the customer obviously is not able to provide any additional security e.g. if insolvency has been applied for.

The customer has the right to set-off, only if its counterclaims have been reduced to final, non-appealable judgement, if such claims are uncontested, or if they have been recognised by us. In case of complaints not agreed on concerning goods, the customer is not allowed to withhold or reduce the amount of invoices due.

8 We will retain title to the delivered items until receipt of all payments arising from the business relationship with the customer. If the delivered good is co-mingled, combined or otherwise processed with items owned by other persons, we shall acquire joint ownership of the new property in a proportion equal to the value of the delivered item (final invoice amount incl. VAT) to those other processed items as of the time the items were co-mingled, combined or otherwise processed together. The customer is only entitled to resell the goods in the ordinary course of business, if a third party attaches or otherwise seizes the goods, the customer must promptly inform us in writing. On our demand the customer is obliged to insure the goods against loss and damages, any claims occurring from these insurance contracts are to be ceded to us in advance.

For safeguarding the customer assigns to us any and all claims in the amount of the final invoice (incl. VAT), which he will be entitled to collect upon resale to a purchaser or third party. He is entitled to collect the outstanding amounts. We will be authorised, however, to collect the receivables ourselves, if the customer no longer discharges its payment obligations from the collected proceeds, defaults in its payment, files for insolvency or suspends payments. In that case the customer no longer has the right to process the goods.

The customer has to enable us to take back the goods, to inform his debtors of the assignment of their accounts and to hand over all necessary information and documents. We are entitled to inform his customers about the assignment. Taking back of the goods does not mean a withdrawal from the contract. We are entitled to sell the delivered goods, following repossession. We agree, at the customer's demand, to release the collateral to which we are entitled when the value of our collateral exceeds the secured receivables by more than 10%. We reserve all proprietary rights and copyrights in the illustrations, sketches, calculations and other documents. These types of documents may not be disclosed to third parties.

9 The customer must notify us in writing of any discovered defects promptly after inspection within 8 days after receipt of goods and of any latent defects promptly after their discovery. After passing of this period the claims become invalid. This also applies if the defect is caused by improper treatment or processing. Claims become invalid 24 month after receipt of the goods. In case of justifiable complaints we must be granted an opportunity to conduct substitute contract performance within a reasonable period of time. If our substitute contract fails or is otherwise unreasonable for the customer, the customer may rescind the agreement or reduce the consideration to be paid and may claim damages instead of performance according to Sec. 10.

10 Subject to Sec. 5 any claims of damage against us – no matter what kind – are invalid if we, our legal representative or accomplices have acted with negligence. This exclusion of liabilities is not valid in case of bodily harm, or acceptance of contractual guarantee or breach of contract which endangers the realization of the contract purposes. Our liability however is limited to the extend of guarantee or in case of negligent breach of contract to the extend of foreseeable damages or damages subject to the contract. Any claims subject to product liability act stay untouched.

In case the customer rescinds from the contract without reason or does not fulfill the contract from his part we have the right to claim damage of 25% of the order amount. Both parties have the right of assertion of a provable different damage.

11 Packing material and second-hand equipment will be taken back from us at customers costs, if not renounced by the customer.

Packing material and second-hand equipment have to be given back clean, free of foreign substances and sorted according to variety. Otherwise the customer has to carry the additional costs.

12 Place of performance of delivery and payment is Darmstadt. The relationship of the parties will be governed exclusively by German law. The UN Convention of the International Sale of Goods (CISG) does not apply. Our principal place of business will be the judicial forum for any and all claims arising from or related to this agreement.

Should any provisions of the agreement of these Standard Terms of Sales be invalid, validity of the remaining provisions hereof or thereof will not be affected thereby.