





Top-of-the-Line Counting Scales for Complex Industrial Applications

The Ranger 7000 offers the highest level of counting features in the OHAUS industrial products lineup. Ranger 7000 boasts the highest weighing and counting resolution, the largest color display, advanced software for both counting and checkcounting, multiple connectivity options, as well as a large memory library for parts management.

Standard Features Include:

- Advanced counting software to increase the accuracy of part average piece weights (APWs), the ability to store up to 2,000 items in the Library, and the ability to support both barcode readers and barcode/label printers for enhanced parts management.
- The most precise scale in its class with one-second stabilization time and internal counting resolutions up to 1:7,000,000.
- Large 109 mm color graphic display clearly shows weights and counts to the operator. The keypad can be used to recall parts by ID number as well as enter tare and APW weights. SoftKeys work with the display to guide users through use all keys can be locked-out to minimize operator key errors.
- Durable cast aluminum housings hold up to daily industrial use.

RANGER®7000 Bench Scales

Advanced Counting Features Take Counting to the Next Level

In addition to eight other application modes, the Ranger 7000 offers advanced counting features for packaging, kitting, inventory control and shipping:

- APW Optimization recalculates the Average Piece Weight for the part during counting, quickly refining APW accuracy within the first few boxes.
- Sample APW Alert warns the operator if the total weight of the part sample is too light, ensuring that the APW accuracy is within 99% of the pieces in the sample.
- APW Auto Save updates the APW in memory for a recalled part, ensuring that the count is always based on the latest average.
- The Library function stores up to 2,000 items for fast recall of part number, name, tare weights, APWs and total count accumulations. All information in the Library can be downloaded to a PC and managed using the new OHAUS ScaleMate[™] software.
- Easy Sampling allows fast changes to sample size, and supports sampling onto the scale (positive sampling) or out of a full box (negative sampling).
- The standard USB Host allows a bar code scanner to quickly recall items based on the barcode on a box. This port can also store data on a flash drive for traceability.
- Barcode Reader and Label Printer can be supported for parts bagging and kitting.
- Smart Sampling feature ensures that when using a reference balance or 2nd platform, sampling will always be done on the higher precision platform.
- Reference Balance automatically accepts higher-precision APW data from an OHAUS scale or balance through the included RS232 port.
- Remote Bases can be connected using the optional board -- even a floor scale base -- for a two-scale counting. Use the Ranger to determine the APW and then use the weight from the external base to quickly get a count for large boxes, bins and skids. This option can even be combined with high-precision APW data from a balance for a system with the precision of a lab analytical balance and an industrial floor scale's capacity.



Floor scale and balance sold separately

RANGER®7000 Bench Scales

SmarText[™] 2.0 Makes the Advanced Ranger 7000 Easy to Configure and Use

The SmarText 2.0 interface makes this advanced scale very simple to use, and will greatly reduce training time for operators.

The large color display clearly shows the number of pieces on the platform, as well as the total weight, tare weight of the box or container, and the APW in memory.

In Counting mode, the graphical bar shows the weight on the scale compared to the scales' capacity; in Checkcounting mode it quickly tells the operator if the count on the platform is under (yellow), over (red) or accept (green).

SoftKeys are available below the display to quickly change the number of pieces used for the sample, to key in a preset APW weight directly without sampling, to use a fast preset sample size, or to accumulate the number of parts on the scale into memory.

The Ranger 7000 can be configured to lock some or all of the keys out to minimize operator errors.

The Ranger 7000 also supports three levels of User Management (Admin, Supervisor and Operator) for 50 users with password protection against accidental changes to the scale.

Standard Connectivity with Flexible Options

The Ranger 7000 comes standard with a RS232 and USB Device port for connecting to printers and additional hardware.

It also has a USB Host port that can be used to store data on a USB drive or connect to a barcode scanner.

Options include a second RS232 or Ethernet port, 2 in/4 out Discrete I/O for driving equipment and relays, a Remote Base Kit for connecting to a 2nd bench or floor base, RS232 cable to connect to a reference balance, internal Li-ion rechargeable battery, a column kit to mount the indicator above the base, a 9 m/27' indicator cable extension kit, indicator in-use cover, and auxiliary display.









Image for illustration purpose only

RANGER[®]7000 Bench Scales **General Specifications**

Weighing Units	kg, g, lb, oz, lb:oz, Custom Unit
Application Modes	Weighing with Statistics, Parts Counting, Percent Weighing, Check Weighing/Counting, Dynamic Weighing (Display Hold),
	Filling, Formulation, Differential Weighing, Density Weighing, Sieve Analysis
Display	109 mm / 4.3 in TFT Graphic LCD
Keypad	8 function, 5 soft, 12 numeric membrane keys
Construction/Protection	Stainless Steel Platform / IP54 Die Cast Housing
Stabilization Time	1 second
Zeroing Range	2% or 10% of Capacity
Safe Overload Capacity	150% of Capacity
Interface	Standard RS232, USB Device, USB Host
	Optional Ethernet, 2 nd RS232, 2 nd scale, 2 In/4 Out Discrete I/O
Power	100-240 VAC / 50/60 Hz Universal Power Supply, Rechargeable Lithium Battery (Optional)
Display Dimensions ($W \times D \times H$)	267 × 118 × 72 mm

Technical Specifications

Model	R71MD3	R71MD6	R71MD15	R71MD35	R71MD60	
Capacity × Readability	3 kg × 0.00005 kg 3,000 g × 0.05 g 6 lb × 0.0001 lb 96 oz × 0.002 oz	6 kg × 0.0001 kg 6,000 g × 0.1 g 15 lb × 0.0002 lb 240 oz × 0.005 oz	15 kg × 0.0002 kg 15,000 g × 0.2 g 30 lb × 0.0005 lb 480 oz × 0.01 oz	35 kg × 0.0005 kg 35,000 g × 0.5 g 70 lb × 0.001 lb 1,120 oz × 0.02 oz	60 kg × 0.001 kg 60,000 g × 1 g 150 lb × 0.002 lb 2,400 oz × 0.05 oz	
Minimum Recommended APW	0.0025 g	0.005 g	0.01 g	0.025 g	0.05 g	
Minimum Recommended Sample Weight	1 g	2 g	4 g	10 g	20 g	
Maximum Displayed Resolution	1:60,000	1:75,000		1:70,000	1:75,000	
Internal Counting Resolution	1:1,200,000	1:1,500,000		1:1,400,000	1:1,500,000	
Base Housing Dimensions ($W \times D \times min.H$)	280 × 280 × 114 mm		377 × 311 × 128 mm			
Platform Dimensions (W \times D \times H)	280 × 280 × 31 mm		377 × 311 × 48 mm			
Net Weight	6.8 kg		9.9 kg			
Shipping Weight	8.5 kg		13.4 kg			
Shipping Dimensions	605 × 405 × 244 mm		665 × 525 × 330 mm			
Calibration	Span or Linear					
Optional Battery Life	12 hours continuous use					

Model	R71MHD3	R71MHD6	R71MHD15	R71MHD35	
Capacity x Readability	$\begin{array}{c} 3 \text{ kg} \times 0.00001 \text{ kg} \\ 3,000 \text{ g} \times 0.01 \text{ g} \\ 6 \text{ lb} \times 0.00002 \text{ lb} \\ 96 \text{ oz} \times 0.0005 \text{ oz} \end{array}$	6 kg × 0.00002 kg 6,000 g × 0.02 g 15 lb × 0.00005 lb 240 oz × 0.001 oz	15 kg × 0.0001 kg 15,000 g × 0.1 g 30 lb × 0.0002 lb 480 oz × 0.005 oz	35 kg × 0.0001 kg 35,000 g × 0.1 g 70 lb × 0.0002 lb 1,120 oz × 0.005 oz	
Min. Recommended APW	0.0005 g	0.001 g		0.005 g	
Min. Recommended Sample Weight	0.2 g	0.4 g	2 g		
Maximum Displayed Resolution	1:300,000		1:150,000	1:350,000	
Internal Counting Resolution	1:6,000,000		1:3,000,000	1:7,000,000	
Base Housing Dimensions $(W \times D \times min.H)$	280 × 280 × 114 mm		377 × 311 × 128 mm		
Platform Dimensions (W \times D \times H)	210 × 210 × 12 mm		377 × 311 × 48 mm		
Net Weight	7.2 kg		10.9 kg		
Shipping Weight	9.2 kg		14.4 kg		
Shipping Dimensions	605 × 405 × 244 mm		665 × 525 × 330 mm		
Calibration	InCal [™] internal calibration, Span or Linear				
Optional Battery Life	9 hours continuous use				

Accessories

Accessones	
Alibi Memory Kit	
2nd RS232 Kit	
498 mm High Painted Column Kit	
Discrete I/O Kit 2 in/4out	
Ethernet Kit	
Cable Extension Kit, 9 m	
2nd Platform / Remote Base Kit	
Li-ion Rechargeable Battery Kit	
SF40A Impact Printer	
In Use Cover	
RS232 Cable for Reference Balance	
Cable, RS232, IBM 9P	

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The management system governing the manufacture of this product is ISO 9001:2015 certified.

