



# 2015 Industrial Products

High Performance Balances & Scales



Ranger® 7000



Valor® 4000



Defender® 7000

*Ingeniously Practical*

## Roadshow

The 2014-2015 Roadshow hit the road in September 2014, but we're only getting started! Our traveling tradeshow was designed to bring our newest products right to our dealers' doors. In 2015 we plan to continue traversing the entire country, and showcasing our products and engaging in conversation with our dealers.



If you would like the Roadshow to stop at your location, let us know. We're still mapping out our schedule, so contact your OHAUS sales representative to request that we stop by in 2015!

## Ingeniously Practical Products

### Ranger 7000

When Ranger 3000 was introduced in 2013, it took the Ranger Series to a whole new level of operation. Now the Ranger 7000 is here – and it once again elevates the Ranger Series to a whole new dimension of advanced weighing capabilities for industrial applications. The Ranger 7000 is the most advanced industrial scale to ever join the Ranger Series and boasts the best of every feature found on OHAUS scales.



**Ranger® 7000**  
*Higher Capacity*

### Aviator 7000

The new Aviator 7000 has taken off, and we are sure it will help your customers reach new heights of retail success! This advanced price computing scale combines high speed operation, reliability, and cost efficiency to produce weighing results for retail businesses that price and sell products based on weight.



**Aviator® 7000**  
*Price Computing*

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# High Capacity Industrial Balances

## Ranger® 7000 High Resolution Compact Bench Scales

- Stainless steel pan with painted metal base and detachable indicator, protected to IP54
- 4.3" graphical display with full alphanumeric keypad for data entry
- Optional Ethernet, 2<sup>nd</sup> RS232, Remote Base input, 2 In/4 Out Digital I/O for controlling external equipment

							<b>GMP/ GLP</b>
NTEP 30,000d	30,000d Measurement Canada	Weighing	Dynamic Weighing	Density Determination	Formulation	Filling	GMP/GLP
Display Hold	Check-weighing	Differential Weighing	Percent Weighing	Parts Counting	Time/Date	Weigh Below Hook	Battery (Optional)
<b>USB</b>							
Host/Device	RS232/USB Interface	RS232/USB Interface (Optional)					



Column Kit available

Model		R71MHD3	R71MHD6	R71MHD15	R71MHD35
Capacity x Readability	Default	3 kg x 0.00001 kg 3,000 g x 0.01 g 6 lb x 0.00002 lb 96 oz x 0.0005 oz	6 kg x 0.00002 kg 6,000 g x 0.02 g 15 lb x 0.00005 lb 240 oz x 0.001 oz	15 kg x 0.0001 kg 15,000 g x 0.1 g 30 lb x 0.0002 lb 480 oz x 0.005 oz	35 kg x 0.0001 kg 35,000 g x 0.1 g 70 lb x 0.0002 lb 1,120 oz x 0.005 oz
	NTEP Certified	3 kg x 0.0001 kg 3,000 g x 0.1 g 6 lb x 0.0002 lb 96 oz x 0.005 oz	6 kg x 0.0002 kg 6,000 g x 0.2 g 15 lb x 0.0005 lb 240 oz x 0.01 oz	15 kg x 0.001 kg 15,000 g x 1 g 30 lb x 0.002 lb 480 oz x 0.05 oz	15 kg x 0.001 kg 15,000 g x 1 g 30 lb x 0.002 lb 480 oz x 0.05 oz
Maximum Displayed Resolution		1:300,000	1:300,000	1:150,000	1:350,000
Certified/Approved Resolution		1:30,000	1:30,000	1:15,000	1:35,000
Linearity/Repeatability		±2d			
Platform Dimensions (W x D x H)		9.4 x 9.4 x 0.6 in/240 x 240 x 15 mm		14.8 x 12.2 x 1.9 in/377 x 311 x 48 mm	

NTEP Certificated of Conformance No. 14-033, Measurement Canada Weights and Measures Regulation AM-5490

## Explorer® High Capacity Balances

- Stainless steel pan with die-cast metal base with 2-D protecon
- 5.7" Full-color VGA graphic display touch screen and 2 programmable touchless sensors
- Icon-driven application software for increased efficiency with weigh below hook included

							<b>G/N/T</b>
Parts Counting	Dynamic/Animal weighing	Check-weighing	Percent Weighing	Differential Weighing	Filling	RS232 Interface	Gross/Net/Tare
Time/Date	GLP Data Output	Weigh Below Hook	Internal Calibration	Totalization	Ingredient Costing	Density Determination	SQC
Formulation	Peak Hold						



Column Kit available

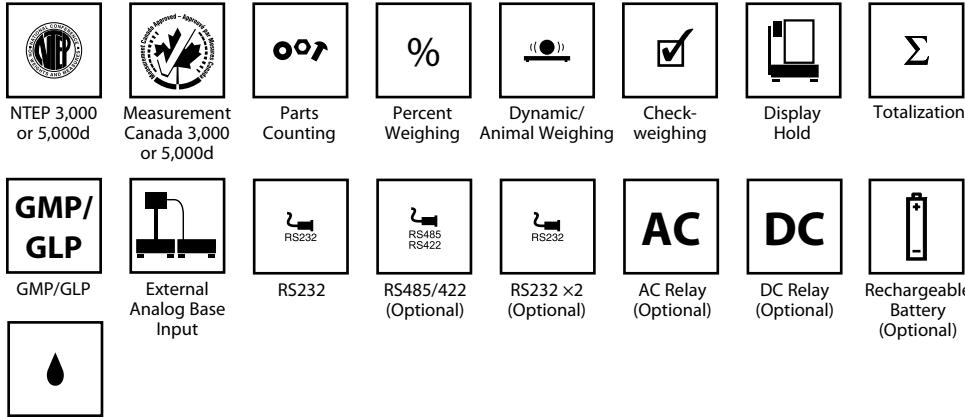
Model w/ AutoCal	EX12001	EX24001	EX35001
Capacity x Readability	12,000 g x 0.1 g	24,000 g x 0.1 g	35,000 g x 0.1 g
Linearity	±0.2 g		
Pan Size	14.8 x 12.2 in/ 37.7 x 31.1 cm		
Dimensions (W x H x D)	14.84 x 4.7 x 17.4 in/37.7 x 12 x 44.3 cm		

# Bench

## Defender® 7000X Xtreme Bench Scales

Available in Square or Rectangular Platforms

- Large dual line backlit LCD display with alphanumeric keypad for data entry
- 255 item library function included



## Defender® 7000XW Xtreme Square Washdown Bench Scales

Model		D71XW10WR3	D71XW25WR3	D71XW50WL4	D71XW100WL4	D71XW250WX4
Capacity × Readability	Default	25 × 0.002 lb 400 × 0.05 oz 25 lb × 0.05 oz 10 × 0.001 kg	50 × 0.005 lb 800 × 0.1 oz 50 lb × 0.1 oz 25 × 0.002 kg	100 × 0.01 lb 1,600 × 0.2 oz 100 lb × 0.2 oz 50 × 0.005 kg	250 × 0.02 lb 4,000 × 0.5 oz 250 lb × 0.5 oz 100 × 0.01 kg	500 × 0.05 lb 8,000 × 1 oz 500 lb × 1 oz 250 × 0.02 kg
	Certified / Approved	25 × 0.005 lb 10 × 0.002 kg 400 × 0.1 oz	50 × 0.01 lb 25 × 0.005 kg 800 × 0.2 oz	100 × 0.02 lb 50 × 0.01 kg 1,600 × 0.5 oz	250 × 0.05 lb 100 × 0.02 kg 4,000 × 1 oz	500 × 0.1 lb 250 × 0.05 kg 8,000 × 2 oz
Scale Base Size		12 × 12 × 3.8 in / 30 × 30 × 9.5 cm		18 × 18 × 4.5 in / 45 × 45 × 11.5 cm		24 × 24 × 5.4 in / 61 × 61 × 13.7 cm
Column		13.8 in / 35 cm stainless steel			26.8 in / 68 cm stainless steel	
Construction		Stainless steel indicator, weighing pan, loadcell, column and base construction				

Made from Certified/Approved weighing components • NTEP Certificate of Conformance No. 09-102 and 01-048AL, Measurement Canada Notices of Approval AM-5762 and AM-5719

## Defender® 7000X Xtreme Rectangular Bench Scales

Model		D71XW15HR1	D71XW30HR1	D71XW60HR1	D71XW60HL2	D71XW100HL2	D71XW150HX2	D71XW300HX2
Capacity × Readability	Default	30 × 0.002 lb 480 × 0.05 oz 30 lb × 0.05 oz 15 × 0.001 kg	60 × 0.005 lb 960 × 0.1 oz 60 lb × 0.1 oz 30 × 0.002 kg	150 × 0.01 lb 2,400 × 0.2 oz 150 lb × 0.2 oz 60 × 0.005 kg	250 × 0.02 lb 4,000 × 0.5 oz 250 lb × 0.5 oz 100 × 0.01 kg	300 × 0.02 lb 4,800 × 0.5 oz 300 lb × 0.5 oz 150 × 0.01 kg	600 × 0.05 lb 9,600 × 1 oz 600 lb × 1 oz 300 × 0.02 kg	
	Certified / Approved	30 × 0.01 lb 480 × 0.2 oz 15 × 0.005 kg	60 × 0.02 lb 960 × 0.5 oz 30 × 0.01 kg	150 × 0.05 lb 2,400 × 1 oz 60 × 0.02 kg	250 × 0.1 lb 4,000 × 2 oz 100 × 0.05 kg	300 × 0.1 lb 4,800 × 2 oz 150 × 0.05 kg	600 × 0.2 lb 9,600 × 5 oz 300 × 0.1 kg	
Scale Base Size		12 × 14 × 3.7 in / 30.5 × 35.5 × 9.5 cm			15.7 × 19.7 × 4.1 in / 40 × 50 × 10.5 cm	16.5 × 21.7 × 4.9 in / 42 × 55 × 10.5 cm		
Column		13.8 in / 35 cm painted steel			26.8 in / 68 cm painted steel			
Construction		Stainless steel indicator and weighing pan, aluminum loadcell, painted steel column and base construction						

Made from Certified/Approved weighing components • NTEP Certificate of Conformance No. 09-102 and 99-203A3, Measurement Canada Notices of Approval AM-5762 and AM-5675

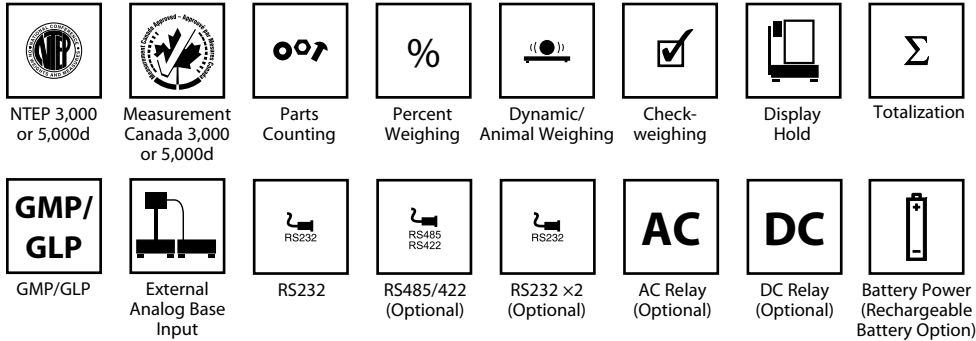


# Bench

## Defender® 7000 Bench Scales

Available in Square or Rectangular Platforms

- ABS plastic indicator, stainless steel pan, painted steel base and column, aluminum load cell
- Large dual line backlit LCD display with alphanumeric keypad for data entry
- 255 item library function included
- Includes external analog scale base input for two scale counting and weighing



## Defender® 7000 Square Bench Scales

Model		D71P10QR1	D71P25QR1	D71P50QL2	D71P100QL2	D71P250QX2
Capacity × Readability	Default	25 × 0.002 lb 400 × 0.05 oz 25 lb × 0.05 oz 10 × 0.001 kg	50 × 0.005 lb 800 × 0.1 oz 50 lb × 0.1 oz 25 × 0.002 kg	100 × 0.01 lb 1,600 × 0.2 oz 100 lb × 0.2 oz 50 × 0.005 kg	250 × 0.02 lb 4,000 × 0.5 oz 250 lb × 0.5 oz 100 × 0.01 kg	500 × 0.05 lb 8,000 × 1 oz 500 lb × 1 oz 250 × 0.02 kg
	Certified / Approved	25 × 0.005 lb 400 × 0.1 oz 10 × 0.002 kg	50 × 0.01 lb 800 × 0.2 oz 25 × 0.005 kg	100 × 0.02 lb 1,600 × 0.5 oz 50 × 0.01 kg	250 × 0.05 lb 4,000 × 1 oz 100 × 0.02 kg	500 × 0.10 lb 8,000 × 2 oz 250 × 0.05 kg
Scale Base Size		12 × 12 × 3.8 in / 30 × 30 × 9.5 cm		18 × 18 × 4.5 in / 45 × 45 × 11.5 cm		24 × 24 × 5.4 in / 61 × 61 × 13.7 cm
Column		13.8 in / 35 cm painted steel			26.8 in / 68 cm painted steel	

Made from Certified/Approved weighing components • NTEP Certificate of Conformance No. 09-102 and 01-048AL, Measurement Canada Notices of Approval AM-5762 and AM-5719

## Defender® 7000 Rectangular Bench Scales

Model		D71P15HR1	D71P30HR1	D71P60HR1	D71P60HL2	D71P100HL2	D71P150HX2	D71P300HX2
Capacity × Readability	Default	30 × 0.002 lb 480 × 0.05 oz 30 lb × 0.05 oz 15 × 0.001 kg	60 × 0.005 lb 960 × 0.1 oz 60 lb × 0.1 oz 30 × 0.002 kg	150 × 0.01 lb 2,400 × 0.2 oz 150 lb × 0.2 oz 60 × 0.005 kg	250 × 0.02 lb 4,000 × 0.5 oz 250 lb × 0.5 oz 100 × 0.01 kg	300 × 0.02 lb 4,800 × 0.5 oz 300 lb × 0.5 oz 150 × 0.01 kg	600 × 0.05 lb 9,600 × 1 oz 600 lb × 1 oz 300 × 0.02 kg	
	Certified / Approved	30 × 0.01 lb 480 × 0.2 oz 15 × 0.005 kg	60 × 0.02 lb 960 × 0.5 oz 30 × 0.01 kg	150 × 0.05 lb 2,400 × 1 oz 60 × 0.02 kg	250 × 0.1 lb 4,000 × 2 oz 100 × 0.05 kg	300 × 0.1 lb 4,800 × 2 oz 150 × 0.05 kg	600 × 0.2 lb 9,600 × 5 oz 300 × 0.1 kg	
Scale Base Size		12 × 14 × 3.7 in / 30.5 × 35.5 × 9.5 cm			15.7 × 19.7 × 4.1 in / 40 × 50 × 10.5 cm		16.5 × 21.7 × 4.9 in / 42 × 55 × 10.5 cm	
Column		13.8 in / 35 cm painted steel			26.8 in / 68 cm painted steel			



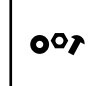




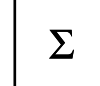







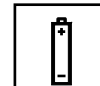
Made from Certified/Approved weighing components • NTEP Certificate of Conformance No. 09-102 and 99-203A3, Measurement Canada Notices of Approval AM-5762 and AM-5675

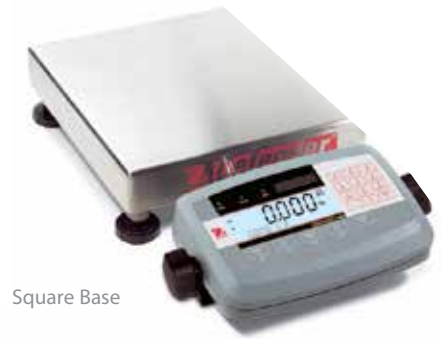
# Bench

## Defender® 7000 Low Profile Scales

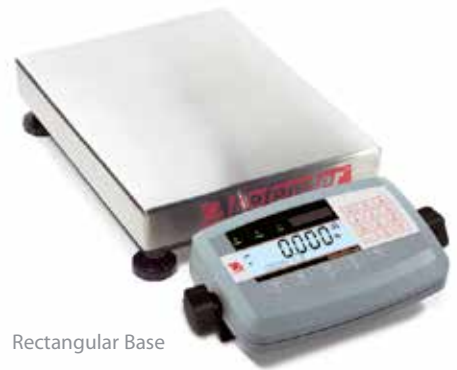
Available in Square or Rectangular Platforms

- ABS plastic indicator, stainless steel pan, painted steel base and mounting bracket, aluminum load cell
- Large dual line backlit LCD display with alphanumeric keypad for data entry
- 255 item library function included
- Includes external analog scale base input for two scale counting and weighing

							
NTEP 3,000 or 5,000d	Measurement Canada 3,000 or 5,000d	Parts Counting	Percent Weighing	Dynamic/Animal Weighing	Check-weighing	Display Hold	Totalization
							
GMP/GLP	External Analog Base Input	RS232	RS485/422 (Optional)	RS232 x2 (Optional)	AC Relay (Optional)	DC Relay (Optional)	Battery Power (Rechargeable Battery Option)



Square Base



Rectangular Base

## Defender® 7000 Low Profile Square Bench Scales

Model		D71P10QR5	D71P25QR5	D71P50QL5	D71P100QL5	D71P250QX5
Capacity × Readability	Default	25 × 0.002 lb 400 × 0.05 oz 25 lb × 0.05 oz 10 × 0.001 kg	50 × 0.005 lb 800 × 0.1 oz 50 lb × 0.1 oz 25 × 0.002 kg	100 × 0.01 lb 1,600 × 0.2 oz 100 lb × 0.2 oz 50 × 0.005 kg	250 × 0.02 lb 4,000 × 0.5 oz 250 lb × 0.5 oz 100 × 0.01 kg	500 × 0.05 lb 8,000 × 1 oz 500 lb × 1 oz 250 × 0.02 kg
	Certified / Approved	25 × 0.005 lb 10 × 0.002 kg 400 × 0.1 oz	50 × 0.01 lb 25 × 0.005 kg 800 × 0.2 oz	100 × 0.02 lb 50 × 0.01 kg 1,600 × 0.5 oz	250 × 0.05 lb 100 × 0.02 kg 4,000 × 1 oz	500 × 0.10 lb 250 × 0.05 kg 8,000 × 2 oz
Scale Base Size		12 × 12 × 3.8 in / 30 × 30 × 9.5 cm		18 × 18 × 4.5 in / 45 × 45 × 11.5 cm		24 × 24 × 5.4 in / 61 × 61 × 13.7 cm

Made from Certified/Approved weighing components • NTEP Certificate of Conformance No. 09-102 and 01-048AL, Measurement Canada Notices of Approval AM-5762 and AM-5719

## Defender® 7000 Low Profile Rectangular Bench Scales

Model		D71P15HR5	D71P30HR5	D71P60HR5	D71P60HL5	D71P100HL5	D71P150HX5	D71P300HX5
Capacity × Readability	Default	30 × 0.002 lb 480 × 0.05 oz 30 lb × 0.05 oz 15 × 0.001 kg	60 × 0.005 lb 960 × 0.1 oz 60 lb × 0.1 oz 30 × 0.002 kg	150 × 0.01 lb 2,400 × 0.2 oz 150 lb × 0.2 oz 60 × 0.005 kg	250 × 0.02 lb 4,000 × 0.5 oz 250 lb × 0.5 oz 100 × 0.01 kg	300 × 0.02 lb 4,800 × 0.5 oz 300 lb × 0.5 oz 150 × 0.01 kg	600 × 0.05 lb 9,600 × 1 oz 600 lb × 1 oz 300 × 0.02 kg	
	Certified / Approved	30 × 0.01 lb 480 × 0.2 oz 15 × 0.005 kg	60 × 0.02 lb 960 × 0.5 oz 30 × 0.01 kg	150 × 0.05 lb 2,400 × 1 oz 60 × 0.02 kg	250 × 0.1 lb 4,000 × 2 oz 100 × 0.05 kg	300 × 0.1 lb 4,800 × 2 oz 150 × 0.05 kg	600 × 0.2 lb 9,600 × 5 oz 300 × 0.1 kg	
Scale Base Size		12 × 14 × 3.7 in / 30.5 × 35.5 × 9.5 cm			15.7 × 19.7 × 4.1 in / 40 × 50 × 10.5 cm		16.5 × 21.7 × 4.9 in / 42 × 55 × 10.5 cm	

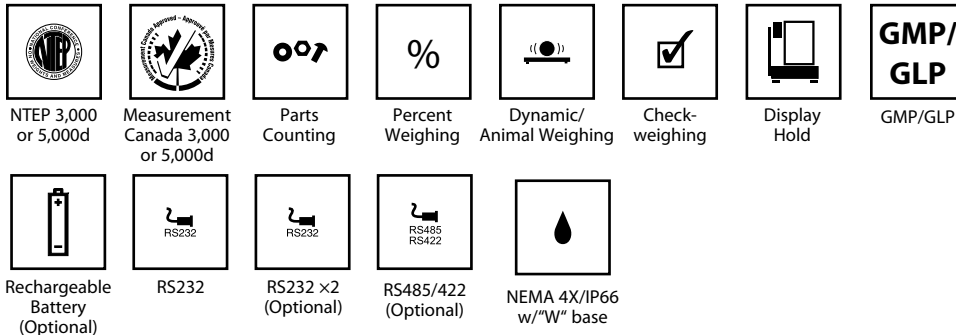
Made from Certified/Approved weighing components • NTEP Certificate of Conformance No. 09-102 and 99-203A3, Measurement Canada Notices of Approval AM-5762 and AM-5675

# Bench

## Defender® 5000X Xtreme Bench Scales

Available in Square or Rectangular Platforms

- Large backlit LCD display



## Defender® 5000XW Xtreme Square Washdown Bench Scales

Model		D51XW10WR3	D51XW25WR3	D51XW50WL4	D51XW100WL4	D51XW250WX4
Capacity × Readability	Default	25 × 0.002 lb 400 × 0.05 oz 25 lb × 0.05 oz 10 × 0.001 kg	50 × 0.005 lb 800 × 0.1 oz 50 lb × 0.1 oz 25 × 0.002 kg	100 × 0.01 lb 1,600 × 0.2 oz 100 lb × 0.2 oz 50 × 0.005 kg	250 × 0.02 lb 4,000 × 0.5 oz 250 lb × 0.5 oz 100 × 0.01 kg	500 × 0.05 lb 8,000 × 1 oz 500 lb × 1 oz 250 × 0.02 kg
	Certified / Approved	25 × 0.005 lb 10 × 0.002 kg 400 × 0.1 oz	50 × 0.01 lb 25 × 0.005 kg 800 × 0.2 oz	100 × 0.02 lb 50 × 0.01 kg 1,600 × 0.5 oz	250 × 0.05 lb 100 × 0.02 kg 4,000 × 1 oz	500 × 0.1 lb 250 × 0.05 kg 8,000 × 2 oz
Scale Base Size		12 × 12 × 3.8 in / 30 × 30 × 9.5 cm		18 × 18 × 4.5 in / 45 × 45 × 11.5 cm		24 × 24 × 5.4 in / 61 × 61 × 13.7 cm
Column		13.8 in / 35 cm stainless steel			26.8 in / 68 cm stainless steel	
Construction		Stainless steel indicator, weighing pan, loadcell, column and base construction				

Made from Certified/Approved weighing components • NTEP Certificate of Conformance No. 08-039 and 01-048A1, Measurement Canada Notices of Approval AM-5687 and AM-5719

## Defender® 5000X Xtreme Rectangular Bench Scales

Model		D51XW15HR1	D51XW30HR1	D51XW60HR1	D51XW60HL2	D51XW100HL2	D51XW150HX2	D51XW300HX2
Capacity × Readability	Default	30 × 0.002 lb 480 × 0.05 oz 30 lb × 0.05 oz 15 × 0.001 kg	60 × 0.005 lb 960 × 0.1 oz 60 lb × 0.1 oz 30 × 0.002 kg	150 × 0.01 lb 2,400 × 0.2 oz 150 lb × 0.2 oz 60 × 0.005 kg	250 × 0.02 lb 4,000 × 0.5 oz 250 lb × 0.5 oz 100 × 0.01 kg	300 × 0.02 lb 4,800 × 0.5 oz 300 lb × 0.5 oz 150 × 0.01 kg	600 × 0.05 lb 9,600 × 1 oz 600 lb × 1 oz 300 × 0.02 kg	
	Certified / Approved	30 × 0.01 lb 480 × 0.2 oz 15 × 0.005 kg	60 × 0.02 lb 960 × 0.5 oz 30 × 0.01 kg	150 × 0.05 lb 2,400 × 1 oz 60 × 0.02 kg	250 × 0.1 lb 4,000 × 2 oz 100 × 0.05 kg	300 × 0.1 lb 4,800 × 2 oz 150 × 0.05 kg	600 × 0.2 lb 9,600 × 5 oz 300 × 0.1 kg	
Scale Base Size		12 × 14 × 3.7 in / 30.5 × 35.5 × 9.5 cm			15.7 × 19.7 × 4.1 in / 40 × 50 × 10.5 cm		16.5 × 21.7 × 4.9 in / 42 × 55 × 10.5 cm	
Column		13.8 in / 35 cm painted steel			26.8 in / 68 cm painted steel			
Construction		Stainless steel indicator and weighing pan, aluminum loadcell, painted steel column and base construction						

Made from Certified/Approved weighing components • NTEP Certificate of Conformance No. 08-039 and 99-203A3, Measurement Canada Notices of Approval AM 5687 and AM-5675

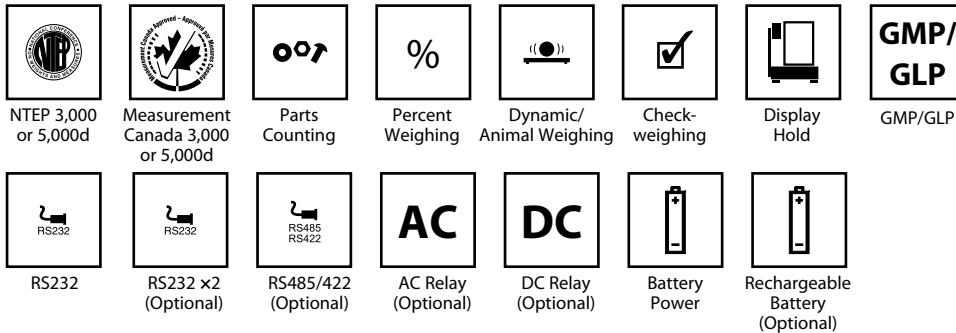


# Bench

## Defender® 5000 Bench Scales

Available in Square or Rectangular Platforms

- ABS plastic indicator, stainless steel pan, painted steel base and column, aluminum load cell
- Large backlit LCD display



## Defender® 5000 Square Bench Scales

Model		D51P10QR1	D51P25QR1	D51P50QL2	D51P100QL2	D51P250QX2
Capacity × Readability	Default	25 × 0.002 lb 400 × 0.05 oz 25 lb × 0.05 oz 10 × 0.001 kg	50b × 0.005 lb 800 × 0.1 oz 50 lb × 0.1 oz 25 × 0.002 kg	100 × 0.01 lb 1,600 × 0.2 oz 100 lb × 0.2 oz 50 × 0.005 kg	250 × 0.02 lb 4,000 × 0.5 oz 250 lb × 0.5 oz 100 × 0.01 kg	500 × 0.05 lb 8,000 × 1 oz 500 lb × 1 oz 250 × 0.02 kg
	Certified / Approved	25 × 0.005 lb 10 × 0.002 kg 400 × 0.1 oz	50 × 0.01 lb 25 × 0.005 kg 800 × 0.2 oz	100 × 0.02 lb 50 × 0.01 kg 1,600 × 0.5 oz	250 × 0.05 lb 100 × 0.02 kg 4,000 × 1 oz	500 × 0.10 lb 250 × 0.05 kg 8,000 × 2 oz
Scale Base Size		12 × 12 × 3.8 in / 30 × 30 × 9.5 cm		18 × 18 × 4.5 in / 45 × 45 × 11.5 cm		24 × 24 × 5.4 in / 61 × 61 × 13.7 cm
Column		13.8 in / 35 cm painted steel			26.8 in / 68 cm painted steel	

Made from Certified/Approved weighing components • NTEP Certificate of Conformance No. 08-039 and 01-048A1, Measurement Canada Notices of Approval AM 5687 and AM-5719

## Defender® 5000 Rectangular Bench Scales

Model		D51P15HR1	D51P30HR1	D51P60HR1	D51P60HL2	D51P100HL2	D51P150HX2	D51P300HX2
Capacity × Readability	Default	30 × 0.002 lb 480 × 0.05 oz 30 lb × 0.05 oz 15 × 0.001 kg	60 × 0.005 lb 960 × 0.1 oz 60 lb × 0.1 oz 30 × 0.002 kg	150 × 0.01 lb 2,400 × 0.2 oz 150 lb × 0.2 oz 60 × 0.005 kg	250 × 0.02 lb 4,000 × 0.5 oz 250 lb × 0.5 oz 100 × 0.01 kg	300 × 0.02 lb 4,800 × 0.5 oz 300 lb × 0.5 oz 150 × 0.01 kg	600 × 0.05 lb 9,600 × 1 oz 600 lb × 1 oz 300 × 0.02 kg	
	Certified / Approved	30 × 0.01 lb 480 × 0.2 oz 15 × 0.005 kg	60 × 0.02 lb 960 × 0.5 oz 30 × 0.01 kg	150 × 0.05 lb 2,400 × 1 oz 60 × 0.02 kg	250 × 0.1 lb 4,000 × 2 oz 100 × 0.05 kg	300 × 0.1 lb 4,800 × 2 oz 150 × 0.05 kg	600 × 0.2 lb 9,600 × 5 oz 300 × 0.1 kg	
Scale Base Size		12 × 14 × 3.7 in / 30.5 × 35.5 × 9.5 cm			15.7 × 19.7 × 4.1 in / 40 × 50 × 10.5 cm	16.5 × 21.7 × 4.9 in / 42 × 55 × 10.5 cm		
Column		13.8 in / 35 cm painted steel			26.8 in / 68 cm painted steel			












Made from Certified/Approved weighing components • NTEP Certificate of Conformance No. 08-039 and 99-203A3, Measurement Canada Notices of Approval AM 5687 and AM-5675

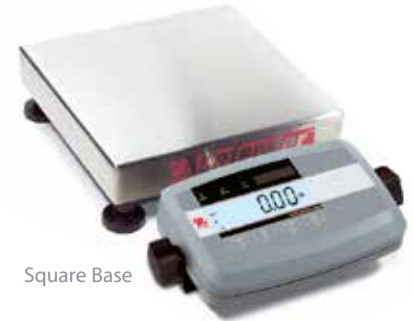
# Bench

## Defender® 5000 Low Profile Scales

Available in Square or Rectangular Platforms

- ABS plastic indicator, stainless steel pan, painted steel base and mounting bracket, aluminum load cell
- Large backlit LCD display

 NTEP 3,000 or 5,000d	 Measurement Canada 3,000 or 5,000d	 Parts Counting	 Percent Weighing	 Dynamic/Animal Weighing	 Check-weighing	 Display Hold	<b>GMP/ GLP</b> GMP/GLP
 RS232	 RS232 x2 (Optional)	 RS485/RS422 (Optional)	<b>AC</b> AC Relay (Optional)	<b>DC</b> DC Relay (Optional)	 Rechargeable Battery (Optional)		



## Defender® 5000 Square Bench Scales

Model		D51P10QR5	D51P25QR5	D51P50QL5	D51P100QL5	D51P250QX5
Capacity × Readability	Default	25 × 0.002 lb 400 × 0.05 oz 25 lb × 0.05 oz 10 × 0.001 kg	50 × 0.005 lb 800 × 0.1 oz 50 lb × 0.1 oz 25 × 0.002 kg	100 × 0.01 lb 1,600 × 0.2 oz 100 lb × 0.2 oz 50 × 0.005 kg	250 × 0.02 lb 4,000 × 0.5 oz 250 lb × 0.5 oz 100 × 0.01 kg	500 × 0.05 lb 8,000 × 1 oz 500 lb × 1 oz 250 × 0.02 kg
	Certified / Approved	25 × 0.005 lb 10 × 0.002 kg 400 × 0.1 oz	50 × 0.01 lb 25 × 0.005 kg 800 × 0.2 oz	100 × 0.02 lb 50 × 0.01 kg 1,600 × 0.5 oz	250 × 0.05 lb 100 × 0.02 kg 4,000 × 1 oz	500 × 0.10 lb 250 × 0.05 kg 8,000 × 2 oz
Scale Base Size		12 × 12 × 3.8 in / 30 × 30 × 9.5 cm		18 × 18 × 4.5 in / 45 × 45 × 11.5 cm		24 × 24 × 5.4 in / 61 × 61 × 13.7 cm

Made from Certified/Approved weighing components • NTEP Certificate of Conformance No. 08-039 and 01-048A1, Measurement Canada Notices of Approval AM 5687 and AM-5719

## Defender® 5000 Rectangular Bench Scales

Model		D51P15HR5	D51P30HR5	D51P60HR5	D51P60HL5	D51P100HL5	D51P150HX5	D51P300HX5
Capacity × Readability	Default	30 × 0.002 lb 480 × 0.05 oz 30 lb × 0.05 oz 15 × 0.001 kg	60 × 0.005 lb 960 × 0.1 oz 60 lb × 0.1 oz 30 × 0.002 kg	150 × 0.01 lb 2,400 × 0.2 oz 150 lb × 0.2 oz 60 × 0.005 kg	250 × 0.02 lb 4,000 × 0.5 oz 250 lb × 0.5 oz 100 × 0.01 kg	300 × 0.02 lb 4,800 × 0.5 oz 300 lb × 0.5 oz 150 × 0.01 kg	600 × 0.05 lb 9,600 × 1 oz 600 lb × 1 oz 300 × 0.02 kg	
	Certified / Approved	30 × 0.01 lb 480 × 0.2 oz 15 × 0.005 kg	60 × 0.02 lb 960 × 0.5 oz 30 × 0.01 kg	150 × 0.05 lb 2,400 × 1 oz 60 × 0.02 kg	250 × 0.1 lb 4,000 × 2 oz 100 × 0.05 kg	300 × 0.1 lb 4,800 × 2 oz 150 × 0.05 kg	600 × 0.2 lb 9,600 × 5 oz 300 × 0.1 kg	
Scale Base Size		12 × 14 × 3.7 in / 30.5 × 35.5 × 9.5 cm			15.7 × 19.7 × 4.1 in / 40 × 50 × 10.5 cm		16.5 × 21.7 × 4.9 in / 42 × 55 × 10.5 cm	

Made from Certified/Approved weighing components • NTEP Certificate of Conformance No. 08-039 and 99-203A3, Measurement Canada Notices of Approval AM 5687 and AM-5675

# Bench

## CHAMP™ CKW Checkweighing Scales

- All stainless steel construction with NEMA 4X/IP66 washdown protection, 11.8 inch high column
- Quick operation with fully configurable bright LED weight display
- Fully programmable red/yellow/green 24 LED checkweighing display
- 20-item library for Over, Under, Target, and Tare values



NTEP  
3,000d



Measurement  
Canada 3,000d



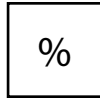
NSF  
Listed



USDA-AMS  
Accepted



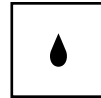
Check-  
weighing



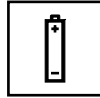
Percent  
Weighing



Totalization



NEMA 4X /  
IP66



Rechargeable  
Battery (Optional)



RS232



RS485/422  
(Optional)



Model		CKW3R55	CKW6R55	CKW15L55	CKW30L55
Capacity × Readability	Default	6 × 0.001 lb 96 × 0.02 oz 6 lb × 0.02 oz 3 × 0.0005 kg	15 × 0.002 lb 240 × 0.05 oz 16 lb × 0.05 oz 6 × 0.001 kg	30 × 0.005 lb 480 × 0.1 oz 30 lb × 0.1 oz 15 × 0.002 kg	60 × 0.01 lb 960 × 0.2 oz 60 lb × 0.2 oz 30 × 0.005 kg
	Certified / Approved	6 × 0.002 lb 96 × 0.05 oz 3 × 0.001 kg	15 × 0.005 lb 240 × 0.1 oz 6 × 0.002 kg	30 × 0.01 lb 480 × 0.2 oz 15 × 0.005 kg	60 × 0.02 lb 960 × 0.5 oz 30 × 0.01 kg
Scale Base Size		10 × 10 × 2.3 in / 254 × 254 × 57.5 mm		12 × 12 × 2.3 in / 305 × 305 × 57.5 mm	12 × 12 × 2.7 in / 305 × 305 × 69.5 mm

Made from Certified/Approved weighing components • NTEP Certificate of Conformance 06-030 for bases, 06-038 for indicator; Measurement Canada Notice of Approval AM-5422 on Base, AM-5340 Rev. 1 on indicator. NSF Listed/Certified to NSF/ANSI 169-2005 Special Purpose Food Equipment and Devices (formerly NSF C-2); USDA/AMS Accepted to NSF/3-A 14159-1 Hygiene Requirements for the Design of Meat and Poultry Processing Equipment; meets requirements for HACCP conformity.

## Defender® 3000XW Xtreme Washdown Scales

- NEMA 4X / IP65 washdown protection
- Stainless-steel indicator, column, pan, load cell and base
- Backlit LCD display
- Parts counting software included



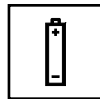
Parts  
Counting



RS232



NEMA 4X /  
IP65



Rechargeable  
Battery



NTEP  
3,000d



Measurement  
Canada 3,000d



Model		D32XW30VR	D32XW60VR	D32XW60VL	D32XW150VL	D32XW150VX	D32XW300VX
Capacity × Readability	Default	66 × 0.01 lb 1,056 × 0.2 oz 66 lb × 0.2 oz 30 × 0.005 kg	132 × 0.02 lb 2,112 × 0.5 oz 160 lb × 0.5 oz 60 × 0.01 kg	132 × 0.02 lb 2,112 × 0.5 oz 160 lb × 0.5 oz 60 × 0.01 kg	330 × 0.05 lb 5,280 × 1 oz 300 lb × 1 oz 150 × 0.02 kg	330 × 0.05 lb 5,280 × 1 oz 300 lb × 1 oz 150 × 0.02 kg	660 × 0.1 lb 10,576 × 2 oz 660 lb × 2 oz 300 × 0.05 kg
	Certified / Approved	60 × 0.02 lb 30 × 0.01 kg	150 × 0.05 lb 60 × 0.02 kg	150 × 0.05 lb 60 × 0.02 kg	300 × 0.01 lb 150 × 0.05 kg	300 × 0.01 lb 150 × 0.05 kg	600 × 0.2 lb 300 × 0.01 kg
Column		13.8 in / 350 mm stainless steel			27.6 in / 700 mm stainless steel		
Battery Life		100 - 240 VAC/50-60 Hz internal switching power supply with internal rechargeable sealed lead-acid battery (58-hour typical operation with full charge)					
Scale Base Size		12 × 14 × 4.8 in / 305 × 355 × 123 mm		16.5 × 21.6 × 5.4 in / 420 × 550 × 136 mm		19.7 × 25.6 × 5.8 in / 500 × 650 × 147 mm	

# Bench

## Defender® 3000 Bench Scales

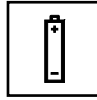
- Stainless steel pan with painted carbon steel frame and column, ABS indicator and aluminum load cell
- Backlit LCD display
- Parts Counting software included



Parts Counting



RS232



Rechargeable Battery



NTEP 3,000d



Measurement Canada 3,000d



Model		D31P30BR	D31P60BR	D31P60BL	D31P150BL	D31P150BX	D31P300BX
Capacity × Readability	Default	66 × 0.01 lb 1056 × 0.2 oz 66 lb × 0.2 oz 30 × 0.005 kg	132 × 0.02 lb 2,112 × 0.5 oz 160 lb × 0.5 oz 60 × 0.01 kg	132 × 0.02 lb 2,112 × 0.5 oz 160 lb × 0.5 oz 60 × 0.01 kg	330 × 0.05 lb 5,280 × 1 oz 300 lb × 1 oz 150 × 0.02 kg	330 × 0.05 lb 5,280 × 1 oz 300 lb × 1 oz 150 × 0.02 kg	660 × 0.1 lb 10,576 × 2 oz 660 lb × 2 oz 300 × 0.05 kg
	Certified / Approved	60 × 0.02 lb 30 × 0.01 kg	150 × 0.05 lb 60 × 0.02 kg	150 × 0.05 lb 60 × 0.02 kg	300 × 0.01 lb 150 × 0.05 kg	300 × 0.01 lb 150 × 0.05 kg	600 × 0.2 lb 300 × 0.01 kg
Column		13.8 in / 350 mm stainless steel			27.6 in / 700 mm stainless steel		
Battery Life		AC adapter with 100-hour internal rechargeable lead acid battery included					
Scale Base Size		12 × 14 × 4.8 in / 305 × 355 × 123 mm		16.5 × 21.6 × 5.4 in / 420 × 550 × 136 mm		19.7 × 25.6 × 5.8 in / 500 × 650 × 147 mm	

## Defender® 3000 Wheeled Floor Scales

- Stainless steel pan with painted carbon steel frame and column, ABS indicator, aluminum load cell and polyurethane wheels
- Backlit LCD display
- Polyurethane wheels with quick-lock mechanism
- Parts Counting software included



NTEP 3,000d



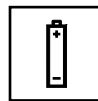
Measurement Canada 3,000d



Parts Counting



RS232



Rechargeable Battery



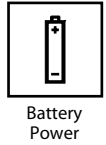
Model	D31P250TXUS	D31P500TXUS
Capacity × Readability (default: cal unit lb)	500 × 0.1 lb / 227 × 0.05 kg	1,000 × 0.2 lb / 454 × 0.1 kg
Capacity × Readability (cal unit kg)	250 × 0.05 kg / 551 × 0.2 lb	500 × 0.1 kg / 1,102 × 0.5 lb
Certified / Approved Resolution	500 × 0.2 lb 250 × 0.1 kg	1,000 × 0.5 lb 500 × 0.2 kg
Column	40.5 in / 1,030 mm stainless steel	
Battery Life	9-12 VDC, 0.5A, AC adapter with internal rechargeable lead acid battery (100-hour typical operation on full charge)	
Pan Dimensions (W × D)	20 × 28 in / 508 × 710 mm	

Made from Certified/Approved weighing components • NTEP Certificate of conformance No. 09-056 for base, 08-066A1 for indicator, Measurement Canada Notice of Approval AM-5723 for bases, AM-5713C Rev.1 for indicator

# Bench

## ES Economical Bench Scales

- Stainless steel platform/painted steel frame, ABS indicator
- Three-way mounting bracket included

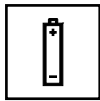


Model	ES6R	ES30R	ES50R	ES50L	ES100L	ES200L
Capacity × Readability	13.225 × 0.005 lb 6 × 0.002 kg 211.6 × 0.1 oz 13 lb 3 oz × 1 oz	66.1 × 0.05 lb 30 × 0.01 kg 1,058 × 0.5 oz 66 lb 2 oz × 1 oz	110.2 × 0.05 lb 50 × 0.02 kg 1,763 × 1.0 oz 110 lb 3 oz × 1 oz	110.2 × 0.05 lb 50 × 0.02 kg 1,763 × 1.0 oz 110 lb 3 oz × 1 oz	220.4 × 0.1 lb 100 × 0.05 kg 3,526 × 2.0 oz 220 lb 6 oz × 2 oz	440.8 × 0.2 lb 200 × 0.1 kg 7,050 × 5.0 oz n/a
Typical Battery Life	Up to 120 hours / 30 hours of continuous use					
Weighing Units	kg, lb, oz,					kg, lb, oz
Scale Base Size	12.2 × 10.8 × 1.5 in / 31 × 27 × 4 cm			20.5 × 15.7 × 3 in / 52 × 40 × 7.5 cm		
Indicator Stand	4 in / 10 cm					

\*lb:oz unit not available in ES200L model.

## SD Shipping Scales

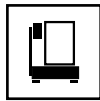
- Painted steel platform with painted steel platform and ABS plastic indicator
- Universal table/wall mounting brackets included



Battery Power



Dynamic/Animal Weighing



Display Hold

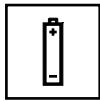
Model	SD35	SD75	SD200	SD75L	SD200L
Capacity × Readability	77 × 0.05 lb 35 × 0.02 kg	165 × 0.1 lb 75 × 0.05 kg	440 × 0.2 lb 200 × 0.1 kg	165 × 0.1 lb 75 × 0.05 kg	440 × 0.2 lb 200 × 0.1 kg
Battery Life	360 Hours				
Scale Base Size	12.4 × 11 × 1.7 in / 31.6 × 28 × 4.5 cm			20.5 × 15.7 × 3 in / 52 × 40 × 7.5 cm	



SD shipping scale "L" model

## Catapult® 1000 Compact Shipping Scales

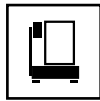
- ABS plastic construction—Stainless steel pan cover optional
- Integrated handles for easy transport



Battery Power



Dynamic/Animal Weighing



Display Hold

Model	C11P9	C11P20	C11P75
Capacity × Readability	20 × 0.01 lb 9 × 0.005 kg	44 × 0.02 lb 20 × 0.01 kg	165 × 0.1 lb 75 × 0.05 kg
Pan Size	12.4 × 11 in / 316 × 280 mm		



Optional Stainless steel pan, Model 80251248 (scale not included)

# Compact Bench

## Ranger® 7000 Compact Bench Scales



- Removable stainless steel platform, die cast base and detachable indicator, IP54
- 4.3" TFT Graphic full-color LCD display with full alphanumeric keypad for fast data entry
- 300 item library for storage of weighing, check, counting, and filling data—data can be loaded on a PC and downloaded using a USB drive
- Back-up, restore and clone user profile library data using individual USB port

NTEP 30,000d	30,000d Measurement Canada	Weighing	Dynamic Weighing	Density Determination	Formulation	Filling	GMP/ GLP
Display Hold	Check- weighing	Differential Weighing	Percent Weighing	Parts Counting	Time/ Date	Weigh Below Hook	Battery (Optional)
Host/ Device	RS232/USB Interface	RS232/USB Interface (Optional)					

Model		R71MD3	R71MD6	R71MD15	R71MD35
Capacity × Readability	Default	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 15,000g × 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
	NTEP Certified	3 kg × 0.0005 kg 3,000 g × 0.5 g 6 lb × 0.001 lb 96 oz × 0.02 oz	6 kg × 0.001 kg 6,000 g × 1 g 15 lb × 0.002 lb 240 oz × 0.05 oz	15 kg × 0.002 kg 15,000g × 2 g 30 lb × 0.005 lb 480 oz × 0.1 oz	35 kg × 0.005 kg 35,000 g × 5 g 70 lb × 0.01 lb 1,120 oz × 0.2 oz
Maximum Displayed Resolution		1:60,000	1:75,000	1:75,000	1:70,000
Certified/Approved Resolution		1:6,000	1:7,500	1:7,500	1:7,500
Linearity/Repeatability		±2d			
Platform Dimensions (W × D × H)		11 × 11 × 4.5 in/280 × 280 × 114 mm		14.9 × 12.2 × 5 in/377 × 311 × 128 mm	

### HIGH RESOLUTION MODELS!

Model		R71MHD3	R71MHD6	R71MHD15	R71MHD35
Capacity × Readability	Default	3 kg × 0.00001 kg 3,000 g × 0.01 g 6 lb × 0.00002 lb 96 oz × 0.0005 oz	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
	NTEP Certified	3 kg × 0.0001 kg 3,000 g × 0.1 g 6 lb × 0.0002 lb 96 oz × 0.005 oz	6 kg × 0.0002 kg 6,000 g × 0.2 g 15 lb × 0.0005 lb 240 oz × 0.01 oz	15 kg × 0.001 kg 15,000 g × 1 g 30 lb × 0.002 lb 480 oz × 0.05 oz	15 kg × 0.001 kg 15,000 g × 1 g 30 lb × 0.002 lb 480 oz × 0.05 oz
Maximum Displayed Resolution		1:300,000	1:300,000	1:150,000	1:350,000
Certified/Approved Resolution		1:30,000	1:30,000	1:15,000	1:35,000
Linearity/Repeatability		±2d			
Platform Dimensions (W × D × H)		9.4 × 9.4 × 0.6 in/240 × 240 × 15 mm		14.8 × 12.2 × 1.9 in/377 × 311 × 48 mm	

NTEP Certified of Conformance No. 14-033, Measurement Canada Weights and Measures Regulations AM-5490



# Compact Bench

## Ranger® 3000 Compact Bench Scales

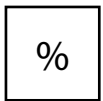
- ABS housing with stainless steel pan
- Large 1.5 inch bright backlit LCD display with rapid stabilization under 1 second
- Parts counting, percent weighing, check weighing, accumulation, dynamic weighing and display hold



NTEP  
3,000d



Measurement  
Canada  
3,000d



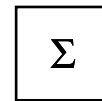
Percent  
Weighing



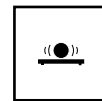
Parts  
Counting



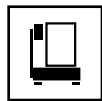
Check-  
weighing



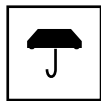
Totalization



Dynamic  
Weighing



Display  
Hold



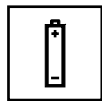
Weigh  
Below  
Hook



RS232



RS232x2 /  
USB/  
Ethernet  
(Optional)



Rechargeable  
Battery

Model		R31P1502	R31P3	R31P6	R31P15	R31P30
Capacity × Readability	Default	1.5 × 0.00005 kg 3 × 0.0001 lb 1,500 × 0.05 g 48 × 0.002 oz	3 × 0.0001 kg 6 × 0.0002 lb 3,000 × 0.1 g 96 × 0.005 oz	6 × 0.0002 kg 15 × 0.0005 lb 6,000 × 0.2 g 240 × 0.01 oz	15 × 0.0005 kg 30 × 0.001 lb 15,000 × 0.5 g 480 × 0.02 oz	30 × 0.001 kg 60 × 0.002 lb 30,000 × 1 g 960 × 0.05 oz
	Certified / Approved	1.5 × 0.0005 kg 3 × 0.001 lb 1,500 × 0.5 g 48 × 0.02 oz	3 × 0.001 kg 6 × 0.002 lb 3,000 × 1 g 96 × 0.05 oz	6 × 0.002 kg 15 × 0.005 lb 6,000 × 2 g 240 × 0.1 oz	15 × 0.005 kg 30 × 0.01 lb 15,000 × 5 g 480 × 0.2 oz	30 × 0.01 kg 60 × 0.02 lb 30,000 × 10 g 960 × 0.5 oz
Typical Battery Life		210 hours continuous use between recharges with 12 hour recharge time				
Platform Size (W × L)		11.8 × 8.9 in / 300 × 225 mm				

# Compact Bench

## FD Series Compact Bench Scales

- NSF Listed/Certified, USDA/AMS Accepted, supports HACCP-Certified Systems
- All stainless steel construction, dishwasher safe removable pan
- Backlit LCD display with checkweighing LEDs
- Percentage Weighing and Checkweighing software



NTEP 3,000d  
(non-H models)



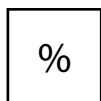
Measurement  
Canada  
3,000d  
(non-H models)



NSF  
Listed



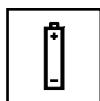
USDA-AMS  
Accepted



Percent  
Weighing



Check-  
weighing



Rechargeable  
Battery

Model	FD3H	FD6H	FD15H
Capacity × Readability	6 × 0.0002 lb 96 × 0.005 oz 96 × ¼ oz 6 lb × 0.1 oz or ¼ oz 3 × 0.0001 kg 3,000 × 0.1 g	15 × 0.001 lb 240 × 0.01 oz 240 × ¼ oz 15 lb × 0.1 oz or ¼ oz 6 × 0.0002 kg 6,000 × 0.2 g	30 × 0.001 lb 480 × 0.02 oz 480 × ¼ oz 30 lb × 0.1 oz or ¼ oz 15 × 0.001 kg 15,000 × 1 g
Battery Life	Internal rechargeable sealed lead-acid battery with 120 hours continuous use		
Pan Size	8.2 × 8.2 in / 209 × 209 mm		



Optional  
Foot Tare Switch for hands-free scale use,  
(Model 71169633)

## LEGAL FOR TRADE MODELS

Model		FD3	FD6	FD15
Capacity × Readability	Default	6 × 0.001 lb 96 × 0.02 or ¼ oz 6 lb × 0.1 or ¼ oz 3 × 0.0005 kg 3,000 × 0.5 g	15 × 0.002 lb 240 × 0.05 or ¼ oz 15 lb × 0.1 or ¼ oz 6 × 0.001 kg 6,000 × 1 g	30 × 0.005 lb 480 × 0.1 or ¼ oz 30 lb × 0.1 or ¼ oz 15 × 0.002 kg 15,000 × 2 g
	Certified / Approved	6 × 0.002 lb 96 × 0.05 or ¼ oz 3,000 × 1 g	15 × 0.005 lb 240 × 0.1 or ¼ oz 6,000 × 2 g	30 × 0.01 lb 480 × 0.2 or ¼ oz 15,000 × 5 g
Battery Life	Internal rechargeable sealed lead-acid battery with 120 hours continuous use			
Pan Size	8.2 × 8.2 in / 209 × 209 mm			



Optional Carrying Case,  
(Model 80251394)

NTEP Certificate of Conformance No. 05-072, Measurement Canada Approval No. AM-5582  
NSF Listed/Certified to NSF/ANSI 169-2005 Special Purpose Food Equipment and Devices (formerly NSF C-2); USDA/AMS Accepted to NSF/3-A 14159-1 Hygiene Requirements for the Design of Meat and Poultry Processing Equipment; meets requirements for HACCP conformity.

# Compact Bench

## Valor® 7000 Compact Bench Scales

- NSF Listed/certified, USDA-AMS Accepted, supports HACCP systems
- ABS housing, dishwasher safe removable stainless steel pan
- Backlit LCD display and check weighing LEDs on front and back
- Rapid stabilization under 1 second
- Hands-free operation with touch less sensor



NTEP 3,000d



Measurement  
Canada  
3,000d



NSF  
Listed



USDA-AMS  
Accepted



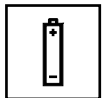
Percent  
Weighing



Check-  
weighing



Totalization



Rechargeable  
Battery



RS232



RS232x2 /  
USB/  
Ethernet  
(Optional)

Model		V71P1502T	V71P3T	V71P6T	V71P15T	V71P30T
Capacity × Readability	Default	1.5 × 0.00005 kg 3 × 0.0001 lb 1,500 × 0.05 g 48 × 0.002 oz	3 × 0.0001 kg 6 × 0.0002 lb 3,000 × 0.1 g 96 × 0.005 oz	6 × 0.0002 kg 15 × 0.0005 lb 6,000 × 0.2 g 240 × 0.01 oz	15 × 0.0005 kg 30 × 0.001 lb 15,000 × 0.5 g 480 × 0.02 oz	30 × 0.001 kg 60 × 0.002 lb 30,000 × 1 g 960 × 0.05 oz
	Certified / Approved	1.5 × 0.0005 kg 3 × 0.001 lb 1,500 × 0.5 g 48 × 0.02 oz	3 × 0.001 kg 6 × 0.002 lb 3,000 × 1 g 96 × 0.05 oz	6 × 0.002 kg 15 × 0.005 lb 6,000 × 2 g 240 × 0.1 oz	15 × 0.005 kg 30 × 0.01 lb 15,000 × 5 g 480 × 0.2 oz	30 × 0.01 kg 60 × 0.02 lb 30,000 × 10 g 960 × 0.5 oz
Weighing Units		kg, g, lb, oz, lb:oz kg, g, lb, oz (certified)				
Battery Life		210 hours continuous use with 12 hour recharge time				
Platform Size (W × L)		11.8 × 8.9 in. / 300 × 225 mm				

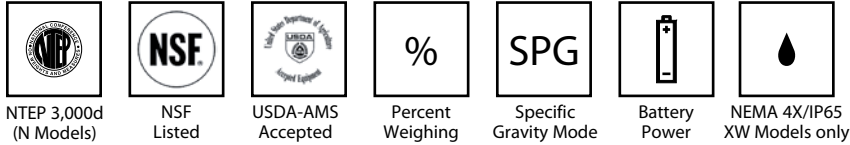
NSF Listed/Certified to NSF/ANSI 169-2005 Special Purpose Food Equipment and Devices (formerly NSF C-2); USDA/AMS Accepted to NSF/3-A 14159-1 Hygiene Requirements for the Design of Meat and Poultry Processing Equipment; meets requirements for HACCP conformity.

Accessories	Item No.
In-Use-Cover, V71	30037445
Ethernet Kit, R31 RC31 R71 V71	30037447
RS232 Kit, R31 RC31 R71 V71	30037448
USB Kit, R31 RC31 V71	30037449
Hook, R21 RC21 R31 RC31 V71	30037450
In-Use-Cover, Set(10), V71	30037469
Printer, Impact, SF40A, AM	30064203
Cable, RS232, IBM 9P, AV DV MB Ranger	80500525
Carrying Case, TR TC R31 TC31 V71	80850084

# Compact Bench

## Valor® 3000 Xtreme Portable Scales

- NSF Listed/Certified, USDA-AMS Accepted, supports HACCP-Certified systems
- 1:3,000-1:6,000 displayed resolution (by model)
- Stainless steel construction, dishwasher-safe removable pan
- Backlit LCD display
- Specific Gravity Determination and % Weighing software included

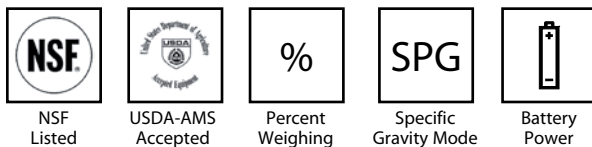


Model	V31XW301	V31X3	V31XW3	V31X3N	V31X6	V31XW6	V31X6N
Capacity × Readability	0.6615 × 0.0005 lb 10.585 × 0.005 oz 10 ½ × ½ oz — 0.3 × 0.0001 kg 300 × 0.1 g 10.140 × 0.005 fl oz	6.615 × 0.005 lb 105.8 × 0.05 oz 105 ½ × ½ oz 6 lb : 9.80 oz × 0.05 oz 6 lb : 9 ½ oz × ½ oz 3 × 0.001 kg 3,000 × 1 g 101.45 × 0.05 fl oz	6.615 × 0.002 lb 105.80 × 0.02 oz 105 ½ × ½ oz 6 lb : 9.80 oz × 0.02 oz 6 lb : 9 ½ oz × ½ oz 3 × 0.0005 kg 3,000 × 0.5 g 101.44 × 0.02 fl oz	6.615 × 0.002 lb 105.8 × 0.02 oz 105 ½ × ½ oz 6 lb : 9.80 oz × 0.02 oz 6 lb : 9 ½ oz × ½ oz 3 × 0.0005 kg 3,000 × 0.5 g 101.44 × 0.02 fl oz	13.225 × 0.005 lb 211.65 × 0.05 oz 211 ½ × ½ oz 13 lb : 3.65 oz × 0.05 oz 13 lb : 3 ½ oz × ½ oz 6 × 0.001 kg 6,000 × 1 g 202.90 × 0.05 fl oz	13.225 × 0.005 lb 211.60 × 0.05 oz 211 ½ × ½ oz 13 lb : 3.60 oz × 0.05 oz 13 lb : 3 ½ oz × ½ oz 6 × 0.001 kg 6,000 × 1 g 202.90 × 0.05 fl oz	13.225 × 0.05 lb 211.65 × 0.05 oz 211 ½ × ½ oz 13 lb : 3.65 oz × 0.05 oz 13 lb : 3 ½ oz × ½ oz 6 × 0.001 kg 6,000 × 1 g 202.90 × 0.05 fl oz
NTEP Certified Capacity × Readability	Not NTEP Certified	Not NTEP Certified	6.6 × 0.005 lb 105.80 × 0.05 oz 3 × 0.001 kg 3,000 × 1 g	6.6 × 0.005 lb 105.8 × 0.05 oz 3 × 0.001 kg 3,000 × 1 g	Not NTEP Certified	13.2 × 0.005 lb 211.6 × 0.1 oz 6 × 0.002 kg 6,000 × 2 g	13.2 × 0.005 lb 211.6 × 0.1 oz 6 × 0.002 kg 6,000 × 2 g
Battery Life	50 hours minimum	120 hours minimum	50 hours minimum	120 hours minimum	120 hours minimum	50 hours minimum	120 hours minimum
Pan Size	5.8 × 6.2 in / 14.6 × 15.8 cm						
Protection	Washdown	Dry Use	Washdown	Dry Use	Dry Use	Washdown	Dry Use

NTEP Certificate of Conformance No. 08-008, NSF Listed/Certified to NSF/ANSI 169-2005 Special Purpose Food Equipment and Devices (formerly NSF C-2); USDA/AMS Accepted to NSF/3-A 14159-1 Hygiene Requirements for the Design of Meat and Poultry Processing Equipment; meets requirements for HACCP conformity.

## Valor® 3000 Xtreme Portable Scales

- NSF Listed/Certified, USDA-AMS Accepted, supports HACCP-Certified systems
- Stainless steel construction, dishwasher-safe removable pan
- Backlit LCD display
- Specific Gravity Determination and % Weighing software included



### HIGH RESOLUTION MODELS!

Model	V31XH202	V31XH402	V31X501	V31XH2	V31XH4
Capacity × Readability	0.4409 × 0.00005 lb 7.055 × 0.0005 oz 7 × ½ oz — 0.2 × 0.00001 kg 200 × 0.01 g 6.7630 × 0.0005 fl oz	0.88185 × 0.00005 lb 14.1095 × 0.0005 oz 14 ½ × ½ oz — 0.40000 × 0.00001 kg 400 × 0.01 g 13.5255 × 0.0005 fl oz	1.1025 × 0.0005 lb 17.635 × 0.005 oz 17 ¾ × ½ oz 1 lb : 1.64 oz × 0.01 oz 1 lb : 1 5/8 oz × ½ oz 0.5000 × 0.0001 kg 500 × 0.1 g 16.905 × 0.005 fl oz	4.409 × 0.0005 lb 70.55 × 0.005 oz 70 ½ × ½ oz 4 lb : 6.55 oz × 0.01 oz 4 lb : 6 ½ oz × ½ oz 2 × 0.0001 kg 2,000 × 0.1 g 67.630 × 0.005 fl oz	8.81850 × 0.0005 lb 141.095 × 0.005 oz 141 ½ × ½ oz 8 lb : 13.10 oz × 0.01 oz 8 lb : 13 ½ oz × ½ oz 4.0000 × 0.0001 kg 4,000 × 0.1 g 135.255 × 0.005 fl oz
Typical Battery Life	50 hours minimum	120 hours minimum	50 hours minimum		
Pan Size	5.8 × 6.2 in / 14.6 × 15.8 cm	4.72 in / 12 cm dia	4.72 in / 12 cm dia	5.8 × 6.2 in / 14.6 × 15.8 cm	

NSF Listed/Certified to NSF/ANSI 169-2005 Special Purpose Food Equipment and Devices (formerly NSF C-2); USDA/AMS Accepted to NSF/3-A 14159-1 Hygiene Requirements for the Design of Meat and Poultry Processing Equipment; meets requirements for HACCP conformity.

# Compact Bench

## Valor® 4000 Washdown Scales

- NTEP Legal for trade and Measurement Canada, NSF listed/certified, USDA – AMS Accepted, supports HACCP systems
- IP X8 Washdown Protection
- ABS (P version) or stainless steel (XW version) housing, dishwasher-safe removable stainless steel pan
- Large bright LED displays on front and back of scale, touchless sensor for hands-free use



NTEP 3,000d  
(non-H models)



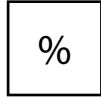
Measurement  
Canada 3,000d  
(non-H models)



NSF  
Listed



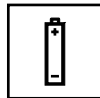
USDA-AMS  
Accepted



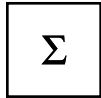
Percent  
Weighing



Check-  
weighing



Rechargeable  
Battery



Totalization



IP X8



V41XW



V41PW

Model		V41PWE1501T V41XWE1501T	V41PWE3T V41XWE3T	V41PWE6T V41XWE6T	V41PWE15T V41XWE15T
Capacity × Readability	Default	1.5 × 0.0005 kg 3 × 0.0001 lb 1,500 × 0.05 g 48 × 0.002 oz	3 × 0.0001 kg 6 × 0.0002 lb 3,000 × 0.1 g 96 × 0.005 oz	6 × 0.0002 kg 15 × 0.0005 lb 6,000 × 0.2 g 240 × 0.01 oz	15 × 0.0005 kg 30 × 0.001 lb 15,000 × 0.5 g 480 × 0.02 oz
	Certified / Approved	1.5 × 0.0005 kg 3 × 0.001 lb 1,500 × 0.5 g 48 × 0.02 oz	3 × 0.001 kg 6 × 0.002 lb 3,000 × 1 g 96 × 0.05 oz	6 × 0.002 kg 15 × 0.005 lb 6,000 × 2 g 240 × 0.1 oz	15 × 0.005 kg 30 × 0.01 lb 15,000 × 5 g 480 × 0.2 oz
Battery Life		Typically 50 hours of continuous use with 12-hour full charge			
Platform Size (W × L)		7.5 x 9.5 in/190 x 242 mm			

## Valor® 2000 Washdown Scales

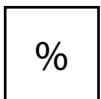
- NSF listed/certified, USDA – AMS accepted, supports HACCP systems
- IP X8 Wash-down Protection
- ABS (P version) or stainless steel (XW version) housing, dishwasher-safe removable stainless steel pan



NSF  
Listed



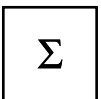
USDA-AMS  
Accepted



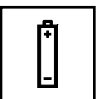
Percent  
Weighing



Check-  
weighing  
(XW models)



Totalization



Rechargeable  
Battery



IP X8



V22XW



V22PW

Model		V22PWE1501T V22XWE1501T	V22PWE3T V22XWE3T	V22PWE6T V22XWE6T	V22PWE15T V22XWE15T
Capacity × Readability	Default	1.5 kg × 0.0002 kg 1500 g × 0.2 g 3 lb × 0.0005 lb 48 oz × 0.01 oz 3 lb × 0.01 oz (lb:oz)	3 kg × 0.0005 kg 3000 g × 0.5 g 6 lb × 0.001 lb 96 oz × 0.02 oz 6 lb × 0.02 oz (lb:oz)	6 kg × 0.001 kg 6000 g × 1 g 15 lb × 0.002 lb 240 oz × 0.05 oz 15 lb × 0.05 oz (lb:oz)	15 kg × 0.002 kg 15000 g × 2 g 30 lb × 0.005 lb 480 oz × 0.1 oz 30 lb × 0.1 oz (lb:oz)
	Certified / Approved	1.5 kg × 0.0002 kg 1500 g × 0.2 g 3 lb × 0.0005 lb 48 oz × 0.01 oz 3 lb × 0.01 oz (lb:oz)	3 kg × 0.0005 kg 3000 g × 0.5 g 6 lb × 0.001 lb 96 oz × 0.02 oz 6 lb × 0.02 oz (lb:oz)	6 kg × 0.001 kg 6000 g × 1 g 15 lb × 0.002 lb 240 oz × 0.05 oz 15 lb × 0.05 oz (lb:oz)	15 kg × 0.002 kg 15000 g × 2 g 30 lb × 0.005 lb 480 oz × 0.1 oz 30 lb × 0.1 oz (lb:oz)
Battery Life		Typically 50 hours of continuous use with 12-hour full charge			
Pan Size		7.5 x 9.5 in/190 x 242 mm			

# Compact Bench

## Valor® 1000 Scales

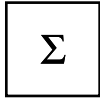
- ABS housing, removable stainless steel pan
- NSF Listed/Certified, supports HACCP systems
- Single or dual backlit LCD display



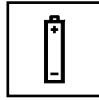
NSF  
Listed



Check-  
weighing



Totalization



Rechargeable  
Battery

Single Display Model	V11P3	V11P6	V11P15	V11P30
Dual Display Model	V11P3T	V11P6T	V11P15T	V11P30T
Capacity × Readability	6.6 × 0.001 lb 105 × 0.02 oz 3 × 0.0005 kg 3,000 × 0.5 g	13 × 0.002 lb 210 × 0.05 oz 6 × 0.001 kg 6,000 × 1 g	33 × 0.005 lb 520 × 0.1 oz 15 × 0.002 kg 15,000 × 2 g	66 × 0.01 lb 1,058 × 0.5 oz 30 × 0.005 kg 30,000 × 5 g
Battery Life	80/100 hours (with / without backlight on) with 12-hour recharge time			
Pan Size	9.9 × 7.1 in/250 × 180 mm			

NSF Listed/Certified to NSF/ANSI 169-2005 Special Purpose Food Equipment and Devices (formerly NSF C-2).



# Portable

## Navigator® Portable Scales

- NTEP / Measurement Canada models available
- ABS housing with removable stainless steel pan
- Backlit LCD display with LED checkweighing indicators
- Hands-free operation with touch-less sensor.



Parts Counting



Backlight



Check-Weighing



Percent Weighing



Totalization



Rechargeable Battery



RS232/USB/  
Ethernet  
Optional



Display Hold



NTEP  
"N" Models  
Only



Measurement  
Canada  
"N" Models  
Only

Navigator XT	NVT1601/1	NVT3201/1	NVT6401/1	NVT10001/1	NVT16000/1
Capacity × Readability (Default)	1,600 × 0.1 g 3.2 × 0.0002 lb 51 × 0.005 or 1/8 oz 1.6 × 0.0001 kg	3,200 × 0.2 g 6.4 × 0.0005 lb 102 × 0.01 or 1/8 oz 3.2 × 0.0002 kg	6,400 × 0.5 g 16 × 0.001 lb 256 × 0.02 or 1/8 oz 6.4 × 0.0005 kg	10,000 × 0.5 g 22 × 0.002 lb 352 × 0.05 or 1/8 oz 10 × 0.0005 kg	16,000 × 1 g 32 × .002 lb 515 × 0.05 or 1/8 oz 16 × 0.001 kg
Repeatability / Linearity	0.1g / ±0.2g	0.2g / ±0.4g	0.5g / ±1g	0.5g / ±1g	1g / ±2g
Pan Size (W × D) (in/cm)	9 × 6.9 in / 230 × 174 mm				
Scale Dimensions (W × D × H)	9.5 × 9.8 × 2.9 in / 240 × 250 × 70 mm				

## LEGAL FOR TRADE MODELS

Navigator XT LFT	NVT1601N/1	NVT3200N/1	NVT6400N/1		NVT16000N/1
Capacity × Readability NTEP / Measurement Canada (e)	1,600 × 0.5 g 3.2 × 0.001 lb 51 × 0.02 oz 46 × 0.02 ozt 8,000 × 5 ct 1.6 × 0.0005 kg	3,200 × 1 g 6.4 × 0.002 lb 102 × 0.05 oz 93 × 0.05 ozt 16,000 × 5 ct 3.2 × 0.001 kg	6,400 × 2 g 16 × 0.005 lb 256 × 0.1 oz 233 × 0.1 ozt 32,000 × 10 ct 6.4 × 0.002 kg		16,000 × 5 g 32 × 0.01 lb 512 × 0.2 oz 466 × 0.2 ozt 80,000 × 50 ct 16 × 0.005 kg
Certified / Approved Resolution	1:3,200	1:3,200	1:3,200		1:3,200
Repeatability / Linearity	0.1g / ±0.2g	0.2g / ±0.4g	0.5g / ±1g		1g / ±2g
Span Mass	2 lb / 1 kg	5 lb / 2 kg	10 lb / 5 kg		20 lb / 10 kg
Pan Size (W × D) (in/cm)	9 × 6.9 in / 230 × 174 mm				
Scale Dimensions (W × D × H)	9.5 × 9.8 × 2.9 in / 240 × 250 × 70 mm				

# Counting

## Ranger® 7000 Counting Scales



- Removable stainless steel platform, die cast housing
- 4.3" TFT Graphic full-color LCD display
- Advanced auto optimization software recalculates the average piece weight as the overall weight increases
- Back-up, restore and clone user profile library data using individual USB port
- Optional 2<sup>nd</sup> scale input accessory for remote bases

							<b>GMP/ GLP</b>
NTEP 30,000d	30,000d Measurement Canada	Weighing	Dynamic Weighing	Density Determination	Formulation	Filling	GMP/GLP
Display Hold	Check- weighing	Differential Weighing	Percent Weighing	Parts Counting	Time/ Date	Weigh Below Hook	Battery (Optional)
<b>USB</b>							
Host/ Device	RS232/USB Interface	RS232/USB Interface (Optional)					

Model		R71MD3	R71MD6	R71MD15	R71MD35
Capacity × Readability	Default	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 15,000g × 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
	NTEP Certified	3 kg × 0.0005 kg 3,000 g × 0.5 g 6 lb × 0.001 lb 96 oz × 0.02 oz	6 kg × 0.001 kg 6,000 g × 1 g 15 lb × 0.002 lb 240 oz × 0.05 oz	15 kg × 0.002 kg 15,000g × 2 g 30 lb × 0.005 lb 480 oz × 0.1 oz	35 kg × 0.005 kg 35,000 g × 5 g 70 lb × 0.01 lb 1,120 oz × 0.2 oz
Maximum Displayed Resolution		1:60,000	1:75,000	1:75,000	1:70,000
Certified/Approved Resolution		1:6,000	1:7,500	1:7,500	1:7,500
Linearity/Repeatability		±2d			
Platform Dimensions (W × D × H)		280 × 280 × 114 mm/11 × 11 × 4.5 in		377 × 311 × 128 mm/14.9 × 12.2 × 5 in	

### HIGH RESOLUTION MODELS!

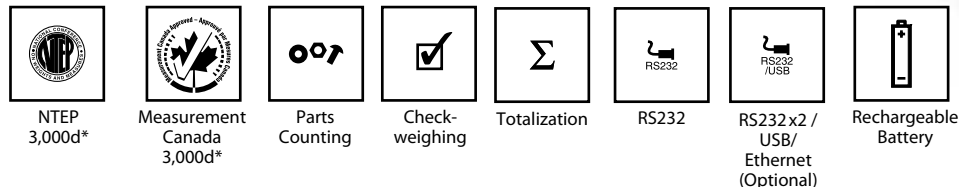
Model		R71MHD3	R71MHD6	R71MHD15	R71MHD35
Capacity × Readability	Default	3 kg × 0.00001 kg 3,000 g × 0.01 g 6 lb × 0.00002 lb 96 oz × 0.0005 oz	6 kg × 0.00002 kg 6,000 g × 0.02 g 15 lb × 0.00005 lb 240 oz × 0.001 oz	15 kg × 0.0001 kg 15,000 g × 0.1 g 30 lb × 0.0002 lb 480 oz × 0.005 oz	35 kg × 0.0001 kg 35,000 g × 0.1 g 70 lb × 0.0002 lb 1,120 oz × 0.005 oz
	NTEP Certified	3 kg × 0.0001 kg 3,000 g × 0.1 g 6 lb × 0.0002 lb 96 oz × 0.005 oz	6 kg × 0.0002 kg 6,000 g × 0.2 g 15 lb × 0.0005 lb 240 oz × 0.01 oz	15 kg × 0.001 kg 15,000 g × 1 g 30 lb × 0.002 lb 480 oz × 0.05 oz	15 kg × 0.001 kg 15,000 g × 1 g 30 lb × 0.002 lb 480 oz × 0.05 oz
Maximum Displayed Resolution		1:300,000	1:300,000	1:150,000	1:350,000
Certified/Approved Resolution		1:30,000	1:30,000	1:15,000	1:35,000
Linearity/Repeatability		±2d			
Platform Dimensions (W × D × H)		240 × 240 × 15 mm/ 9.4 × 9.4 × 0.6 in		377 × 311 × 48mm/14.8 × 12.2 × 1.9 in	

NTEP Certificate of Conformance No. 14-033, Measurement Canada Weights and Measures Regulation AM-5490

# Counting

## Ranger® Count 3000 Dedicated Counting Scales Up To 1:300,000 Maximum External Counting Resolution

- ABS plastic housing and stainless steel pan
- Rapid stabilization under 1 second
- 3 backlit LCD displays
- 30 item library, advanced parts counting, check counting
- 2nd scale input accessory for remote bases

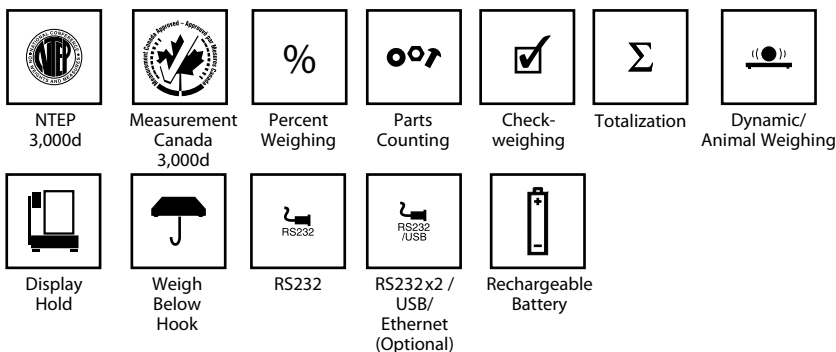


\*Counting function not legal for trade.

Model		RC31P1502	RC31P3	RC31P6	RC31P15	RC31P30
Capacity × Readability	Default	1.5 × 0.00005 kg 3 × 0.0001 lb 1,500 × 0.05 g 48 oz × 0.002 oz	3 × 0.0001 kg 6 × 0.0002 lb 3,000 × 0.1 g 96 × 0.005 oz	6 × 0.0002 kg 15 × 0.0005 lb 6,000 × 0.2 g 240 × 0.01 oz	15 × 0.0005 kg 30 × 0.001 lb 15,000 × 0.5 g 480 × 0.02 oz	30 × 0.001 kg 60 × 0.002 lb 30,000 × 1 g 960 × 0.05 oz
	Certified / Approved	1.5 × 0.0005 kg 3 × 0.001 lb 1,500 × 0.5 g 48 × 0.02 oz	3 × 0.001 kg 6 × 0.002 lb 3,000 × 1 g 96 × 0.05 oz	6 × 0.002 kg 15 × 0.005 lb 6,000 × 2 g 240 × 0.1 oz	15 × 0.005 kg 30 × 0.01 lb 15,000 × 5 g 480 × 0.2 oz	30 × 0.01 kg 60 × 0.02 lb 30,000 × 10 g 960 × 0.5 oz
Minimum APW		0.005 g	0.01 g	0.02 g	0.05 g	0.1 g
Typical Battery Life		210 hours continuous use between recharges with 12 hour recharge time				
Platform Size (W × L)		11.8 × 8.9 in. / 300 × 225 mm				

## Ranger® 3000 Compact Bench Scales Up To 1:30,000 Maximum External Displayed Resolution

- ABS housing with stainless steel pan
- Large 1.5 inch bright backlit LCD display with rapid stabilization under 1 second
- Parts counting, percent weighing, check weighing, accumulation, dynamic weighing and display hold








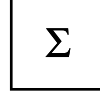


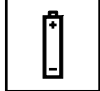




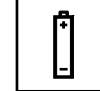




Model		R31P1502	R31P3	R31P6	R31P15	R31P30
Capacity × Readability	Default	1.5 × 0.00005 kg 3 × 0.0001 lb 1,500 × 0.05 g 48 × 0.002 oz	3 × 0.0001 kg 6 × 0.0002 lb 3,000 × 0.1 g 96 × 0.005 oz	6 × 0.0002 kg 15 × 0.0005 lb 6,000 × 0.2 g 240 × 0.01 oz	15 × 0.0005 kg 30 × 0.001 lb 15,000 × 0.5 g 480 × 0.02 oz	30 × 0.001 kg 60 × 0.002 lb 30,000 × 1 g 960 × 0.05 oz
	Certified / Approved	1.5 × 0.0005 kg 3 × 0.001 lb 1,500 × 0.5 g 48 × 0.02 oz	3 × 0.001 kg 6 × 0.002 lb 3,000 × 1 g 96 × 0.05 oz	6 × 0.002 kg 15 × 0.005 lb 6,000 × 2 g 240 × 0.1 oz	15 × 0.005 kg 30 × 0.01 lb 15,000 × 5 g 480 × 0.2 oz	30 × 0.01 kg 60 × 0.02 lb 30,000 × 10 g 960 × 0.5 oz
Typical Battery Life		210 hours continuous use between recharges with 12 hour recharge time				
Platform Size (W × L)		11.8 × 8.9 in. / 300 × 225 mm				

# Indicators

## 7000 Series Indicators

- 1:50,000 maximum displayed weighing resolution, maximum counting resolution to 1:500,000
- T71P features a high-impact, durable ABS plastic housing  
T71XW features an NEMA 4X/IP66 water resistant stainless steel housing
- Large backlit LCD and checkweighing LEDs (green, yellow, red)
- 255-item library for storing application data
- Includes analog scale base input for two scale counting and weighing

 NTEP 10,000d	 Measurement Canada 10,000d	 Parts Counting	 Percent Weighing	 Dynamic/ Animal Weighing	 Check- weighing	 Display Hold	 Totalization
 External Analog Base Input	 RS232	 Battery Power T71P	 GMP/ GLP	 NEMA 4X IP66 (T71XW models)	 AC Relay (Optional)	 RS422/ RS485 (Optional)	 Rechargeable Battery (optional) T71P/T71XW
 DC Relay (Optional)	 RS232 x2 (Optional)						



Model	T71P	T71XW
Capacity Range	1 to 999,950 kg/lb	
Certified / Approved Resolution	1:10,000	
Max. Displayed Resolution	1:50,000	
Maximum Counting Resolution	1:500,000	
Min. Average Piece Weight	0.1d	
Operating Temperature Range	14°F to 104°F / -10°C to 40°C	
Stabilization Time	Within 2 seconds	
Auto-Zero Tracking Capture Range	Off, 0.5, 1 or 3 divisions	
Zeroing Range	2% or 100% of capacity	
Span Calibration	1 kg or 1 lb to 100% of capacity	
Load Cell Sensitivity	Up to 3 mV/V	
Load Cell Drive	Up to eight x 350 Ohm load cells	
Display	1.5 in / 3.8 cm high x 4.9 in / 12.5 cm dual-line backlit LCD display with 1 in / 2.5 cm high 6-digit primary weight/text display and ¾ in / 0.95 cm high 12-character secondary alphanumeric text display	
Power	9 VDC, 0.5A, AC adapter (included) or 6 "C" cell batteries (not included) optional internal rechargeable, NiMH battery	100-240 VAC/50-60 Hz, internal power supply or optional internal rechargeable, NiMH battery
Environmental Protection	Dry use	NEMA 4X / IP66
Housing	ABS Plastic	Stainless Steel
Interface	Built-in RS232, external tare input and analog scale base input included, Optional 2nd RS232, RS244/485, AC Relay or DC Relay available	
Keypad	4 function membrane switches, raised tactile keys with alphanumeric keypad	
Enclosure Dimensions (W x D x H)	10.2 x 2.7 x 6.6 in / 260 x 71 x 168 mm	10.3 x 3 x 5.8 in / 262 x 76 x 149 mm

NTEP Certificate of Conformance No. 09-102, Measurement Canada Notice of Approval AM-5762

Model	Column CS Floor Scale	Column SST Floor Scale
Material	Black Painted Carbon Steel	304 Stainless Steel

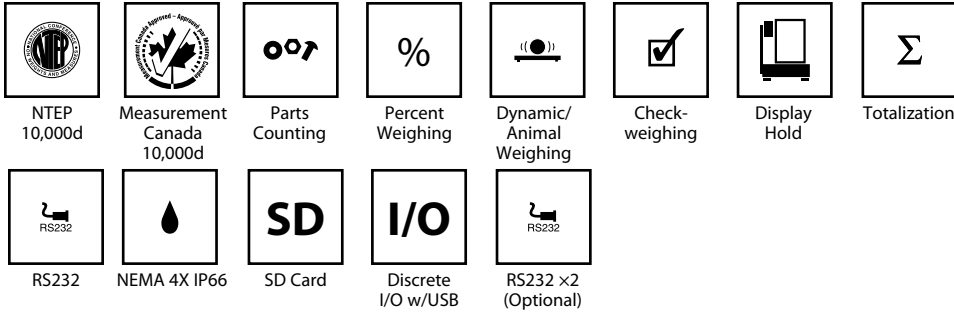
These two Floor Stands can work with T31, T32, T51, T71 and T72 indicators with U-brackets. The column height is 700mm and it's a removable column.



# Indicators

## 7000 Series T72XW Indicator

- Rugged stainless steel enclosure with IP66 environmental protection
- Large transfective graphic LCD display with backlight for vivid readability in all light conditions
- Whether communicating weight data to a PC or providing a serial output of data to a printer, the T72XW terminal supports for a wide range of applications
- SD memory card can be used for additional storage in the Checkweighing and Counting applications



**NEW**



Model	T72XW
Capacity	Up to 998000 (t, kg, g or lb)
Maximum Displayed Resolution	1:50,000
Maximum Approved Resolution	1:10,000 (NTEP, Measurement Canada); 1:6,000 (OIML)
Weighing Units	kg, lb, oz, lb-oz, g, ton, t
Weighing Modes	Animal/Dynamic Weighing, Parts Counting, Checkweighing
Display	Transfective graphic LCD with white backlight, 240 x 96 pixels
Under/Accept/Over indicators	3 Zones, up to 25 targets
Ingress Protection	IP66
Load Cell Excitation Voltage	10 VDC
Load Cell Drive	Up to 10 x 350 ohm load cells
Load Cell Input Sensitivity	Up to 3 mV/V
Stabilization Time	Within 2 seconds
Auto-Zero Tracking	Off, 0.5d, 1d, 3d or 10d
Zeroing Range	+/-2% or +/-20% of capacity
Interfaces	RS232 (included), SD card (included), Ethernet (optional), USB with Discrete I/O (optional), Second RS232/RS485 (optional)
Operating Temperature Range	14 °F to 104 °F / -10 °C to 40 °C
Main Power	100-240 V ~ 0.15 A 50/60 Hz internal power supply
Housing dimensions (W x D x H)	11.1 x 3.4 x 9.1 in / 283 x 86 x 232 mm

NTEP Certificate of Conformance No. 14-049, Measurement Canada Noce of Approval AM-5943).

Model	Column CS Floor Scale	Column SST Floor Scale
Material	Black Painted Carbon Steel	304 Stainless Steel




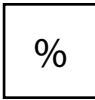
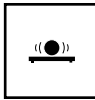

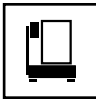

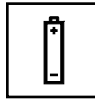




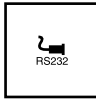

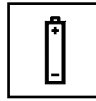
These two Floor Stands can work with T31, T32, T51, T71 and T72 indicators with U-brackets. The column height is 700mm and it's a removable column.



# Indicators

## 5000 Series Indicators

- 1:30,000 maximum displayed weighing resolution, maximum counting resolution to 1:300,000
- T51P features a high-impact, durable ABS plastic housing  
T51XW features an NEMA 4X/IP66 water resistant stainless steel housing
- Large backlit LCD and checkweighing LEDs (green, yellow, red)

 NTEP 10,000d	 Measurement Canada 10,000d	 Parts Counting	 Percent Weighing	 Dynamic/ Animal Weighing	 Check- weighing	 Display Hold	 RS232
 Battery Power T51P	 GMP/ GLP	 NEMA 4X IP66 (T51XW models)	 AC Relay (Optional)	 DC Relay (Optional)	 RS232 x2 (Optional)	 RS422/ RS485 (Optional)	 Rechargeable Battery (optional) T51P/T51XW



Model	T51P	T51XW
Capacity Range	1 to 999,950 kg/lb	
Certified / Approved Resolution	1:10,000	
Maximum Displayed Resolution	1:30,000	
Maximum Counting Resolution	1:300,000	
Minimum Average Piece Weight	0.1d	
Operating Temperature Range	14°F to 104°F / -10°C to 40°C	
Stabilization Time	Within 2 Seconds	
Auto-Zero Tracking Capture Range	Off, 0.5, 1 or 3 Divisions	
Zeroing Range	2% or 100% of Capacity	
Span Calibration	1 kg or 1 lb to 100% Capacity	
Load Cell Sensitivity	Up to 3 mV/V	
Load Cell Drive	Up to eight x 350 Ohm Load Cells	
Display	1 in / 2.5 cm digit height, 6-digit, 7-segment 1.5 in / 3.8 cm high x 4.9 in / 12.5 cm wide backlit LCD	
Power	9 VDC, 0.5A, AC adapter (included) or 6 "C" cell batteries (not included) optional internal rechargeable, NiMH battery	100-240 VAC/50-60 Hz, internal power supply or optional internal rechargeable, NiMH battery
Environmental Protection	Dry use	NEMA 4X / IP66
Housing	ABS Plastic	Stainless Steel
Interface	Built-in RS232 and External Tare Input included, Optional 2nd RS232, RS244/485, AC Relay or DC Relay available	
Keypad	4 function membrane switches, raised tactile keys	
Enclosure Dimensions (W x D x H)	10.2 x 2.7 x 6.6 in / 260 x 71 x 168 mm	10.3 x 3 x 5.8 in / 262 x 76 x 149 mm

NTEP Certificate of Conformance No. 08-039, Measurement Canada Notice of Approval AM-5687

Model	Column CS Floor Scale	Column SST Floor Scale
Material	Black Painted Carbon Steel	304 Stainless Steel

These two Floor Stands can work with T31, T32, T51, T71 and T72 indicators with U-brackets. The column height is 700mm and it's a removable column.

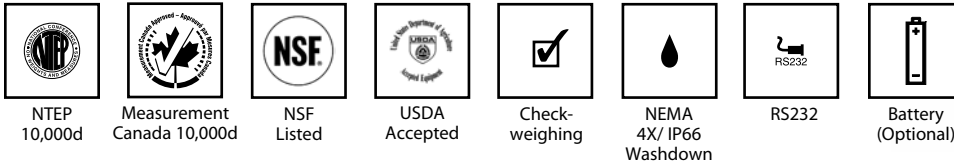




# Indicators

## CKW55 Indicator

- 1:20,000 max. displayed resolution
- GLP/GMP, Time, Date output
- NEMA 4X/IP66 all-stainless steel construction
- LED display
- Fully programmable checkweighing function
- User programmable library



Model	CKW55
Capacity Range	1 to 100,000 lb, kg, oz or g
Graduation	0.0001 to 5 lb, kg, oz or g
Certified / Approved Resolution	1:10,000
Operating Temperature	-10°C to 40°C / 14° F to 104° F
Stabilization Time	Within 2 Seconds
Auto-Zero Tracking Capture Range	Off, .5, 1 or 3 Divisions
Zeroing Range	2%, 18%, or 100% of Capacity
Span Calibration	1 kg/lb to 100% of Capacity
Load Cell Performance	5V DC Excitation Voltage / 2 or 3mV/V Input Sensitivity
Load Cell Drive	Up to 4 x 350 Ohm Load Cells
Weight Display	20 mm / 0.8" High 6-digit, 7-segment LED with Adjustable Brightness Control
Checkweigh Indication	3-color, 34-segment LED Bar Graph with Audible Beeper Alert and LED Weight Display Alert
Power	100-240 VAC / 50/60Hz Universal Power Supply Hardwire Cord Optional Internal Rechargeable NiMH Battery
Interface	Built-in RS232 and External Input / Optional RS422/485, Relay Output
Keyboard	8 Function Keys, 11 Numeric Keypad, Dedicated Tare and Target Entry Buttons
Dimensions (W x D x H)	9 x 3 x 8.5 in. / 230 x 75 x 217 mm (Includes Bracket)

NTEP Certificate of Conformance No. 06-038, Measurement Canada Notice of Approval AM 5339  
 NSF Listed/Certified to NSF/ANSI 169-2005 Special Purpose Food Equipment and Devices (formerly NSF C-2); USDA/AMS Accepted to NSF/3-A 14159-1 Hygiene Requirements for the Design of Meat and Poultry Processing Equipment; meets requirements for HACCP conformity.

# Indicators

## 3000 Series Indicators

- 1:20,000d maximum displayed weighing resolution
- High-impact ABS housing (Model T31P) or NEMA 4X/IP65 stainless steel housing ( Model T32XW)—both models include mounting bracket
- Backlit LCD display



T31P Indicator



T32XW Indicator



NTEP  
6,000d



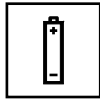
Measurement  
Canada  
6,000d



Parts  
Counting



RS232



Rechargeable  
Battery



NEMA 4X IP65  
(T32XW  
models)

Model	T31P	T32XW
Capacity Range	5 to 20,000 lb or kg	
Maximum Displayed Resolution	1:20,000	
Certified /Approved Resolution	1:6,000	
Operating Temperature Range	14°F to 104°F / -10°C to 40°C Maximum relative humidity 80 % for temperatures up to 31°C / 88°F, decreasing linearly to 50 % relative humidity at 40°C / 104°F, non condensing	
Minimum Average Piece Weight	1d	
Stabilization Time	Within 2 Seconds	
Auto-Zero Tracking Capture Range	Off, 0.5, 1 or 3 Divisions	
Zeroing Range	2% or 100% of Capacity	
Span Calibration	5 kg or 5 lb to 100% Capacity	
Load Cell Sensitivity	Up to 3 mV/V	
Load Cell Drive	Up to four × 350 Ohm Load Cells	
Display	1 in. / 2.5 cm digit height, 6-digit, 7-segment 1.5 in. / 3.8 cm high x 4.9 in. / 12.5 cm wide backlit LCD	
Power	9 VDC, 0.5A, AC adapter or internal rechargeable, sealed lead-acid battery (100-hour typical operation with full charge)	100-240 VAC/50-60 Hz, internal power supply or internal rechargeable battery (58-hour typical operation with full charge)
Environmental Protection	Dry use	NEMA 4X / IP65
Housing	ABS Plastic	Stainless Steel
Interface	Bidirectional RS232C	
Keypad	4-button mechanical switches, raised tactile keys	4-button membrane switch, raised tactile keys
Dimensions (W × D × H)	8.2 × 2.8 × 6.5 in / 210 × 71 × 168 mm	8.3 × 2.8 × 5.8 in / 212 × 71 × 149 mm

NTEP Certificate of Conformance No. 08-066A1, Measurement Canada Notice of Approval AM-5713C Rev. 1

Model	Column CS Floor Scale	Column SST Floor Scale
Material	Black Painted Carbon Steel	304 Stainless Steel

These two Floor Stands can work with T31, T32, T51, T71 and T72 indicators with U-brackets. The column height is 700mm and it's a removable column



# Indicators

## 3000 Series Indicators

- 1:20,000 maximum displayed weighing resolution
- High-impact ABS front panel with painted carbon steel rear housing
- T32MC features 1 in. high backlit LCD display, T32ME features 0.8 in. high LED display
- Both indicators feature checkweighing LEDs (green, yellow, red)



T32ME Indicator  
(LED version)

T32MC Indicator  
(LCD version)



Model	T32MC	T32ME
Capacity Range	5 to 20,000 lb or kg	
Maximum Displayed Resolution	1:20,000	
Certified / Approved Resolution	1:6,000	
Maximum Counting Resolution	1:20,000	
Minimum Average Piece Weight	1d	
Operating Temperature Range	14°F to 104°F / -10°C to 40°C	
Stabilization Time	Within 2 Seconds	
Auto-Zero Tracking Capture Range	Off, 0.5, 1 or 3 Divisions	
Zeroing Range	2% or 100% of Capacity	
Span Calibration	5 kg or 5 lb to 100% Capacity	
Load Cell Sensitivity	5V DC / up to 3 mV/V (min 1 µV/d)	
Load Cell Drive	Up to four 350Ω load cells	
Display	6-digit, 7-segment LCD 1 in / 25 mm digit height, with high-contrast white LED backlight	6-digit, 7-segment red LED 0.8 in / 20 mm digit height
Power	9-12 VDC, 0.5A, external AC adapter	
Construction	ABS Plastic front panel with painted carbon steel rear housing; includes painted carbon steel table-wall mount bracket with adjustment knobs	
Interface	Bidirectional RS232C	
Keypad	4 function mechanical switches, raised tactile keys	
Dimensions (W × D × H)	7.8 × 1.08 × 5.2 in / 198 × 46 × 132 mm	

NTEP Certificate of Conformance No. 09-090, Measurement Canada Notice of Approval AM-5747C

Model	Column CS Floor Scale	Column SST Floor Scale
Material	Black Painted Carbon Steel	304 Stainless Steel

These two Floor Stands can work with T31, T32, T51, T71 and T72 indicators with U-brackets. The column height is 700mm and it's a removable column



# Bases

## Defender® Standard Square Washdown Bases

- 1:10,000-1:12,500 maximum resolution
- Stainless steel pan, frame, and load cell
- Adjustable no-slip rubber leveling feet
- Externally visible level indicator
- IP67 washdown protected loadcell



NTEP  
5,000d



Measurement  
Canada  
5,000d

Model		D10WR	D25WR	D50WL	D100WL	D250WX
Capacity x Readability	Maximum	25 x 0.002 lb 10 x 0.001 kg	50 x 0.005 lb 25 x 0.002 kg	100 x 0.01 lb 50 x 0.005 kg	250 x 0.02 lb 100 x 0.01 kg	500 x 0.05 lb 250 x 0.02 kg
	Certified / Approved	25 x 0.005 lb 10 x 0.002 kg	50 x 0.01 lb 25 x 0.005 kg	100 x 0.02 lb 50 x 0.01 kg	250 x 0.05 lb 100 x 0.02 kg	500 x 0.1 lb 250 x 0.05 kg
Scale Base Size		12 x 12 x 3.8 in / 30 x 30 x 9.5 cm		18 x 18 x 4.5 in / 45 x 45 x 11.5 cm		24 x 24 x 5.4 in / 61 x 61 x 13.7 cm

NTEP Certificate of Conformance No. 01-048A1, Measurement Canada Notice of Approval AM-5719

## Defender® Standard Square Bases

- 1:10,000-1:12,500 maximum resolution
- Stainless steel platform, painted steel frame, aluminum loadcell
- Adjustable no-slip rubber leveling feet
- Externally visible level indicator
- IP67 washdown protected loadcell



NTEP  
5,000d



Measurement  
Canada  
5,000d

Model		D10QR	D25QR	D50QL	D100QL	D250QX
Capacity x Readability	Maximum	25 x 0.002 lb 10 x 0.001 kg	50 x 0.005 lb 25 x 0.002 kg	100 x 0.01 lb 50 x 0.005 kg	250 x 0.02 lb 100 x 0.01 kg	500 x 0.05 lb 250 x 0.02 kg
	Certified / Approved	25 x 0.005 lb 10 x 0.002 kg	50 x 0.01 lb 25 x 0.005 kg	100 x 0.02 lb 50 x 0.01 kg	250 x 0.05 lb 100 x 0.02 kg	500 x 0.1 lb 250 x 0.05 kg
Scale Base Size		12 x 12 x 3.8 in / 30 x 30 x 9.5 cm		18 x 18 x 4.5 in / 45 x 45 x 11.5 cm		24 x 24 x 5.4 in / 61 x 61 x 13.7 cm

NTEP Certificate of Conformance No. 01-048A1, Measurement Canada Notice of Approval AM-5719

## Defender® Standard Rectangular Bases

- 1:6,000-1:7,500 maximum resolution
- Stainless steel platform, painted steel frame, aluminum loadcell
- Adjustable leveling feet
- Externally visible leveling bubble
- IP67 washdown protected loadcell



NTEP  
3,000d



Measurement  
Canada  
3,000d

Model		D15HR	D30HR	D60HR	D60HL	D100HL	D150HX	D300HX
Capacity x Readability	Maximum	30 x 0.005 lb 15 x 0.002 kg	60 x 0.01 lb 30 x 0.005 kg	120 x 0.02 lb 60 x 0.01 kg	120 x 0.02 lb 60 x 0.01 kg	250 x 0.05 lb 100 x 0.02 kg	300 x 0.05 lb 150 x 0.02 kg	600 x 0.1 lb 300 x 0.05 kg
	Certified / Approved	30 x 0.01 lb 15 x 0.005 kg	60 x 0.02 lb 30 x 0.01 kg	120 x 0.05 lb 60 x 0.02 kg	120 x 0.05 lb 60 x 0.02 kg	250 x 0.1 lb 100 x 0.05 kg	300 x 0.1 lb 150 x 0.05 kg	600 x 0.2 lb 300 x 0.1 kg
Scale Base Size (W x D x H)		12 x 14 x 3.54 in / 30.5 x 35.5 x 9.5 cm			16 x 20 x 4.1 in / 40 x 50 x 10.5 cm		17 x 22 x 4.1 in / 42 x 55 x 10.5 cm	

NTEP Certificate of Conformance No. 99-203A3, Measurement Canada Notice of Approval AM-5675

# Bases

## Defender® Basic Rectangular Washdown Bases

- 1:6,000-1:7,500 max. resolution
- Adjustable no-slip rubber leveling feet
- Externally visible leveling bubble
- Stainless steel platform, tubular frame and load cell



NTEP  
3,000d



Measurement  
Canada  
3,000d

Model		D30VR	D60VR	D60VL	D150VL	D150VX	D300VX
Capacity × Readability	Maximum	60 × 0.01 lb 30 × 0.005 kg	150 × 0.02 lb 60 × 0.01 kg	150 × 0.02 lb 60 × 0.01 kg	300 × 0.05 lb 150 × 0.02 kg	300 × 0.05 lb 150 × 0.02 kg	600 × 0.1 lb 300 × 0.05 kg
	Certified / Approved	60 × 0.02 lb 30 × 0.01 kg	150 × 0.05 lb 60 × 0.02 kg	150 × 0.05 lb 60 × 0.02 kg	300 × 0.1 lb 150 × 0.05 kg	300 × 0.1 lb 150 × 0.05 kg	600 × 0.2 lb 300 × 0.1 kg
Base Dimensions (W × D × min. H)		12 × 14 × 4.8 in / 305 × 355 × 123 mm		16.5 × 21.6 × 5.4 in / 420 × 550 × 136 mm		19.7 × 25.6 × 5.8 in / 500 × 650 × 147 mm	

NTEP Certificate of Conformance No. 08-021, Measurement Canada Notice of Approval No. AM 5667

## Defender® Basic Rectangular Bases

- 1:6,000-1:7,500 max. resolution
- Adjustable no-slip leveling feet
- Externally visible leveling bubble
- Stainless steel platform, painted tubular steel frame and aluminum loadcell



NTEP  
3,000d



Measurement  
Canada  
3,000d

Model		D30BR	D60BR	D60BL	D150BL	DB150BX	DB300BX
Capacity × Readability	Maximum	60 × 0.01 lb 30 × 0.005 kg	150 × 0.02 lb 60 × 0.01 kg	150 × 0.02 lb 60 × 0.01 kg	300 × 0.05 lb 150 × 0.02 kg	300 × 0.05 lb 150 × 0.02 kg	600 × 0.1 lb 300 × 0.05 kg
	Certified / Approved	60 × 0.02 lb 30 × 0.01 kg	150 × 0.05 lb 60 × 0.02 kg	150 × 0.05 lb 60 × 0.02 kg	300 × 0.1 lb 150 × 0.05 kg	300 × 0.1 lb 150 × 0.05 kg	600 × 0.2 lb 300 × 0.1 kg
Base Dimensions (W × D × min. H)		12 × 14 × 4.8 in / 305 × 355 × 123 mm		16.5 × 21.6 × 5.4 in / 420 × 550 × 136 mm		19.7 × 25.6 × 5.8 in / 500 × 650 × 147 mm	

NTEP Certificate of Conformance No. 08-021, Measurement Canada Notice of Approval No. AM 5667

## Champ™ CKW Square Bases

- NSF Listed/Certified, USDA-AMS accepted, supports HACCP-certified systems
- 1:6,000-7,500 maximum resolution
- Stainless steel construction and extended skirt minimizes water or contamination entry into the frame
- Stainless steel pan and frame, IP67 washdown protected load cell
- Adjustable no-slip rubber leveling feet
- Externally visible level indicator



NTEP  
3,000d



Measurement  
Canada  
3,000d



NSF  
Listed



USDA/  
AMS  
Accepted

Model		CKW3R	CKW6R	CKW15L	CKW30L
Capacity × Readability	Maximum	6 × 0.001 lb 3 × 0.0005 kg	15 × 0.002 lb 6 × 0.001 kg	30 × 0.005 lb 15 × 0.002 kg	60 × 0.01 lb 30 × 0.005 kg
	Certified / Approved	6 × 0.002 lb 3 × 0.001 kg	15 × 0.005 lb 6 × 0.002 kg	30 × 0.01 lb 15 × 0.005 kg	60 × 0.02 lb 30 × 0.01 kg
Base Dimensions (W × D × minimum H)		10 × 10 × 2.26 in / 25.4 × 25.4 × 5.75 cm		12 × 12 × 2.26 in / 30.5 × 30.5 × 5.75 cm	12 × 12 × 2.74 in / 30.5 × 30.5 × 6.95 cm

NTEP Certificate of Conformance No. 06-030, Measurement Canada Notice of Approval AM-5340/Rev1

NSF Listed/Certified to NSF/ANSI 169-2005 Special Purpose Food Equipment and Devices (formerly NSF C-2); USDA/AMS Accepted to NSF/3-A 14159-1 Hygiene Requirements for the Design of Meat and Poultry Processing Equipment; meets requirements for HACCP conformity.

# Mechanical

## D500M Mobile Floor Beam Scale

- Epoxy-painted steel construction
- Beam lock mechanism protects scale during storage
- Phenolic wheels for portability
- Beam calibrated to 100 lbs in 0.5 lb increments
- Included counterpoise weights increase capacity to 1,000 lbs.  
Total 1,000 lb: 2 × 100 lb, 1 × 200 lb, 1 × 500 lb



NTEP 2,000d

Model	D500M
Capacity × Readability	1,000 × 0.5 lb
Front Beam Calibrations	100 × 0.5 lb
Platform Size	19.25 × 28.125 in

NTEP Certificate of Conformance No. 08-070.



## Heavy Duty Solution

High Capacity Weighing Scales

- Stainless steel platform
- Positive load stops
- Oversized plate for larger containers
- Magnetic damping speeds the weighing process
- Covered self-aligning bearings for maintenance-free life

Model	1119-D0
Capacity × Readability	20 kg × 1 g
Calibrations	Front Beam Rear Beam
	100 × 1 g 1000 × 100 g
Platform Size (Diameter)	11 in / 27.9 cm



## Field Test Compact Industrial Scales

- Compact, precision mechanical design
- Slotted weight set included
- Weighed base keeps scale stable
- Large, stabilized pan holds oversized samples without tipping

Model	2400-11	2400-12
Capacity × Readability	16 kg × 5 g	36 × 0.01 lb
Beam Calibration	500 × 5 g	1 × 0.01 lb
Platform Size (Diameter)	11 in / 27.9 cm	





# Retail Price Computing

## Aviator® 7000 Standard Retail Price Computing Scales

- ABS and stainless steel pan
- Backlit display with large LCD on front and back of scale – tower models available
- Light touch technology and user friendly keyboard
- Totalization and 100 PLU memory storage
- Accessories for external connectivity and POS



NTEP  
3,000d



Price  
Computing



Totalization



Shown with tower

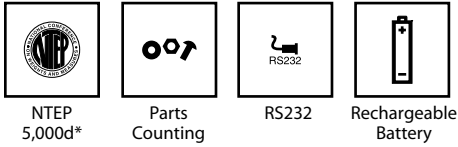
Model	A71P15DNUS	A71P15DTNUS	A71P30DNUS	A71P30DTNUS
Capacity	15 x 0.005 lb/30 x 0.01 lb 6 kg x 2 g/15 kg x 5 g		30 x 0.01 lb/60 x 0.02 lb 15 kg x 5 g/30 kg x 10 g	
Typical Battery Life	Up to 150 Hours (Backlight off)			
Pan Size	9.5 x 13.3 in			

# Floor

## VX Standard Floor Scales

MODEL VX32XW2500L and VX32XW5000L ONLY\*

- Durable epoxy painted weighing deck and frame
- Junction box with easy side access and integrated DB-9 connector
- Pre-wired NEMA 4X/IP65 water resistant stainless steel indicator
- Parts counting software included

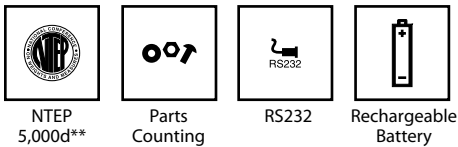


Model	VX32XW2500L*	VX32XW5000L*	VX32XW5000X	VX32XW10000L	VX32XW10000X
Capacity × Readability	2,500 × 0.5 lb	5,000 × 1 lb	5,000 × 1 lb	10,000 × 2 lb	10,000 × 2 lb
Scale Base Size	48 × 48 in		60 × 60 in	48 × 48 in	60 × 60 in

\*Made from Certified/Approved weighing components • NTEP Certification for model VX32XW2500L and V32XW5000L only, Certificate of Conformance No. 08-069 and 08-066.

## VN Economical Floor Scales

- Durable epoxy painted weighing deck and frame
- Stainless steel junction box with easy side access and integrated DB-9 connector
- Pre-wired indicator with 12' ready-to-plug cable
- Adjustable ball-in-cup leveling feet
- Parts counting software included



Model	VN31P5000L	VN31P5000X
Capacity × Readability	5,000 × 1 lb	
Scale Base Size	48 × 48 × 3.5 in	60 × 60 × 3.5 in

\*\* Made from Certified/Approved weighing components • NTEP Certificate of Conformance No. 08-048A1 and 08-066.

# OHAUS Industrial Product Features Chart

Product	Weight Range	Parts Counting	Dual Base Counting	Checkweighing	Percent Weighing	Dynamic Weighing	Display Hold	Totalization	Library Memories	NTEP	Measurement Canada	Washdown (IP/NEMA)	NSF Listed/Certified	RS232	Other Data Output	Supports GMP Output
<b>Bench Scales</b>																
Defender® 7000 XW	25 to 600 lb	√	√	√	√	√	√	√	255	√	√	√		√	Opt	√
Defender 7000 with T71P		√	√	√	√	√	√	√		√	√			√	Opt	√
Defender 5000 XW		√		√	√	√	√			√	√	√		√	Opt	√
Defender 5000 with T51P		√		√	√	√	√			√	√			√	Opt	√
Wheeled Defender 3000	500 or 1,000 lb	√								√	√			√		
Defender 3000 XW	66 to 660 lb	√								√	√	√		√		
Defender 3000		√								√	√			√		
CKW Checkweigher	6 to 60 lb			√	√			√	20	√	√	√	√	√	Opt	√
ES	13 to 440 lb															
SD	77 to 440 lb					√	√									
<b>Compact Bench Scales</b>																
Ranger® 7000 High Resolution	6 to 70 lb	√	√	√	√	√	√		30	√	√			√	Opt	√
Ranger 7000 Standard	6 to 70 lb	√	√	√	√	√	√		30	√	√			√	Opt	√
Ranger 3000	3 to 60 lb				√	√	√	√		√	√			√	Opt	
Catapult 1000	20 to 165 lb					√										
FD®	6 to 30 lb			√	√					√*	√*		√			
Valor® 7000	3 to 60 lb			√	√			√		√	√		√	√	Opt	
Valor 4000	3 to 30 lb			√	√			√		√	√	√	√			
Valor 3000	<1 to 13 lb				√					√*		√*	√			
Valor 2000	3 to 30 lb			XW								√	√			
Valor 1000	6 to 66 lb			√				√					√			
<b>Counting Scales</b>																
Ranger 7000 High Resolution	6 to 70 lb	√	√	√	√	√	√		30	√	√			√	Opt	√
Ranger 7000 Standard	6 to 70 lb	√	√	√	√	√	√		30	√	√			√	Opt	√
Ranger Count 3000	3 to 60 lb	√	Opt	√	√				30					√	Opt	
<b>Floor Scales</b>																
VX	2,500 to 10,000 lb								√*		√		√			
VN	5000 lb								√*				√			
<b>Retail Price Computing Scales</b>																
Aviator 7000	30 or 60 lb							√	24 / 100	√				√		

√\* Certain models only - see specifications for more information.



## OHAUS Corporation

Headquartered in Parsippany, NJ, OHAUS Corporation manufactures an extensive line of high-precision electronic and mechanical balances and scales that meet the weighing needs of virtually every industry. We are a global leader in the laboratory, industrial, and education channels as well as a host of specialty markets, including the food preparation, pharmacy and jewelry industries. An ISO 9001:2008 manufacturer, OHAUS products are precise, reliable and affordable, and are backed by industry-leading customer support. For additional information, contact OHAUS Corporation at 1.973.377.9000, or visit [www.ohaus.com](http://www.ohaus.com).



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