



# 2014 Industrial Products

High Performance Balances & Scales



## Ingeniously Practical

ISO 9001:2008 Registered Quality Management System

[ohaus.com](http://ohaus.com)  
[youtube.com/ohauschannel](http://youtube.com/ohauschannel)  
[facebook.com/ohauscorp](http://facebook.com/ohauscorp)



# *The OHAUS Advantage*

## Over a Century of Ingeniously Practical Operation

For more than a century, the OHAUS name has been synonymous with high-quality, durable & reliable mechanical and electronic balances, scales and moisture analyzers that meet the weighing needs of virtually every industry. Our global and long-standing success can be attributed to our unwavering commitment to offering a wide range of products that are efficient and simple to use. Our ingeniously practical methodology, seen in all of our products and services, provides real-world benefits that improve the accuracy and quality of our customers' work.

Four principles lead us to fulfill our commitment to meeting our customers' expectations and achieve excellence in every aspect of our business. Our rich heritage and history, industry leadership, product portfolio, as well as service and support are the qualities that drive us to meet our goals and achieve the highest level of performance.

These principles, *The OHAUS Advantage*, guide our operation and propel us to offer our customers a level of quality that is second-to-none.

## A Trusted Supplier of Weighing Instruments Since 1907

We first opened our doors in Newark, New Jersey, in 1907 as a small scale repair business and have established ourselves as a trusted supplier of precise and reliable balances and scales. We continue to build upon our century-old knowledge of the industry by incorporating the newest technology and advancements necessary to continually improve our products to ensure they constantly meet market needs.

Our 107 years of operation devoted exclusively to the weighing industry have been marked by advancements and achievements that have propelled us to the next level of success. From the introduction of the Harvard Trip Balance, which quickly became the standard by which other mechanical balances are judged, to the introduction of the Explorer line of analytical and precision balances, the most advanced and intuitive product to ever come from OHAUS, we have the long-standing experience necessary to deliver high-quality and durable weighing instrument

### Heritage and History

*A trusted supplier of weighing instruments with American roots, OHAUS was founded by Gustav Ohaus and his father Karl in 1907 in Newark, New Jersey.*



### Ingenious Portfolio

*OHAUS manufactures high-quality, easy-to-use weighing equipment that provides practical benefits, meets or exceeds industry expectations and offers the best value in the industry.*



### Industry Leadership

*A worldwide manufacturer of high-quality and economical weighing equipment with strategic global operations capable of meeting the international marketplace's needs.*



### Service & Support

*OHAUS offers complete and thorough customer service, technical support, and product repair and is a trusted source of industry and product information.*



# What's New at OHAUS for 2014?

## Laboratory

## EXPLORER®

**Explorer®** The most intuitive balances to ever come from the mind of OHAUS, are now of even higher intuition. The newest additions to the Explorer series contain all of the intuitive and modern features of the existing models, as well as additional features that increase their functionality and ability to provide results in the laboratory.

**New Auto-Door Models**  
Touchless Sensors



**A More Classic Approach**  
External Calibration Models



**Higher Capacity**  
3 New Precision Models



## Industrial

**Ranger® 3000** Ranger 3000 and Ranger Count 3000 are tough, dependable, fast, and most importantly, precise. Whether you need to count inventory or items for packaging, or mix paint, weigh electrical components, or weigh an unstable load, the Ranger Series is the right tool for your toughest industrial weighing jobs.

**Ranger Count 3000**  
Dedicated Counting Scale



**Ranger 3000**  
Multifunctional Scale



## Food

**Valor®** The Valor Series provides all of the weighing applications, and protection, needed for varied culinary applications and the food industries' toughest jobs. The Valor 7000 is equipped with four application modes, including baker's percentage, ideal for all baking needs. Valor 4000 and 2000 are highly durable and can withstand the tough conditions in many food processing environments.

**Valor 7000**  
Precision Baking Scale



**Valor 4000**  
Legal for Trade!



**Valor 2000**  
Durable Processing Scale



## RANGER 3000

THE RIGHT TOOL FOR THE TOUGHEST JOBS

## VALOR

THE RIGHT TOOL FOR THE TOUGHEST JOBS



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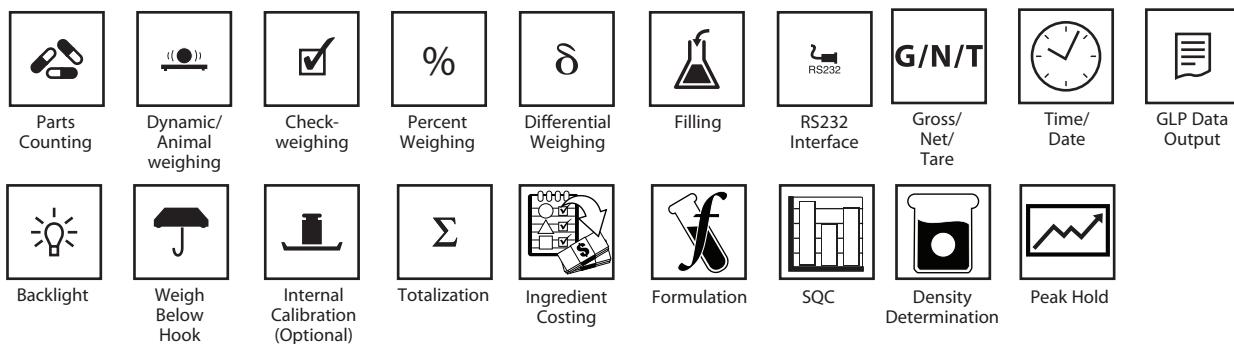
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# High Capacity Industrial Balances

## Explorer® The Industry's Most Easy-to-Use Balance

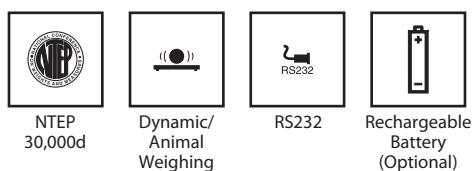
- Die-cast metal base with 2-D protection that prevents shock and damage associated with movement and forces applied to the balance. IP54 base enclosure protects the weighing base from damage by debris, humidity and accidental spills and splashes. Includes a large 14.8" x 12.2" (37.7 x 31.1cm) stainless steel pan built to withstand rugged every day use
- Full-color VGA graphic display (5.7 in / 14.cm diagonal) with 4-wire resistive touch screen and modular design that can be separated from weighing base for increased flexibility
- SmarText™ 2.0 software with virtual QWERTY keyboard and numeric keypad to quickly input GLP and GMP data and other application data. Enhanced vibration filtering for better balance stability, as well as AutoCal™ automatic internal calibration to improve accuracy
- 2 programmable touchless sensors, icon-driven application software for increased efficiency with Weigh-below hook included



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

## Ranger® High Resolution Compact Bench Scales

- Dynamic Weighing software included
- Backlit LCD display
- Stainless steel platform with cast aluminum housing



RD3RM Model



RD15LM or RD35LM Model

Model	RD3RM	RD6RM	RD15LM	RD35LM	
Capacity x Readability	Default	6.61388 x 0.00002 lb 105.8228 x 0.0002 oz 3 x 0.00001 kg 3,000 x 0.01g	13.22770 x 0.00005 lb 211.6440 x 0.0005 oz 6 x 0.00002 kg 6,000 x 0.02g	33.0694 x 0.0001 lb 529.110 x 0.002 oz 15 x 0.00005 kg 15,000 x 0.05g	77.1620 x 0.0002 lb 1234.592 x 0.002 oz 35 x 0.0001 kg 35,000 x 0.1g
	NTEP Certified	3 x 0.0001 kg 6 x 0.0002 lb	6 x 0.0002 kg 12 x 0.0005 lb	15 x 0.0005 kg 30 x 0.001 lb	30 x 0.001 kg 60 x 0.002 lb
Pan Size	6.4 x 6.4 in / 16.2 x 16.2 cm		9.5 x 8 in / 24 x 20 cm	14 x 9.5 in / 35 x 24 cm	

NTEP Certificate of Conformance No. 07-026

# Bench

## Defender® 7000X Xtreme Bench Scales

Available in Square or Rectangular Platforms

- Large dual line backlit LCD display with alphanumeric keypad for data entry
- Counting, Percent Weighing, Dynamic/Animal Weighing, Checkweighing, Totalization, Display Hold and 255 item library function included



NTEP 3,000 or 5,000d



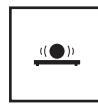
Measurement Canada 3,000 or 5,000d



Parts Counting



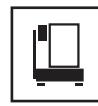
Percent Weighing



Dynamic/Animal Weighing



Checkweighing



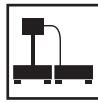
Display Hold



Totalization



GMP/GLP



External Analog Base Input



RS232



RS485/422 (Optional)



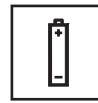
RS232 x2 (Optional)



AC Relay (Optional)



DC Relay (Optional)



Rechargeable Battery (Optional)



NEMA 4X/IP66  
w/W base



## 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
	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
Scale Base Size		12 × 12 × 3.8 in / 30 × 30 × 9.5 cm		18 × 18 × 4.5 in / 45 × 45 × 11.5 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
	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
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
- Counting, Percent Weighing, Dynamic/Animal Weighing, Checkweighing, Totalization, Display Hold and 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



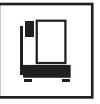
Percent Weighing



Dynamic/Animal Weighing



Checkweighing



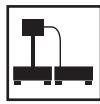
Display Hold



Totalization



GMP/GLP



External Analog Base Input



RS232



RS485/422 (Optional)



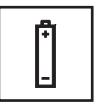
RS232 x2 (Optional)



AC Relay (Optional)



DC Relay (Optional)



Battery Power (Rechargeable Battery Option)



## Defender® 7000 Square Bench Scales

Model	D71P10QR1	D71P25QR1	D71P50QL2	D71P100QL2	D71P250QX2	
Capacity x 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			24 × 24 × 5.4 in / 61 × 61 × 13.7 cm	
Column		13.8 in / 35 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 x 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
- Counting, Percent Weighing, Dynamic/Animal Weighing, Checkweighing, Totalization, Display Hold and 255 item library function included
- Includes external analog scale base input for two scale counting and weighing



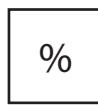
NTEP 3,000 or 5,000d



Measurement Canada 3,000 or 5,000d



Parts Counting



Percent Weighing



Dynamic/Animal Weighing



Checkweighing



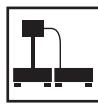
Display Hold



Totalization



GMP/GLP



External Analog Base Input



RS232



RS485/422 (Optional)



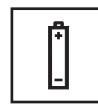
RS232 x2 (Optional)



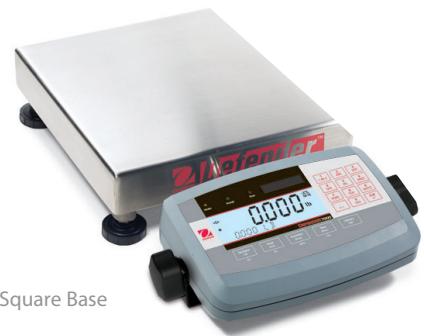
AC



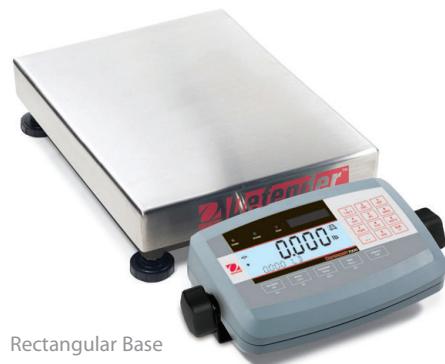
DC



Battery Power (Rechargeable Battery Option)



Square Base



Rectangular Base

## Defender® 7000 Low Profile Square Bench Scales

Model	D71P10QR5	D71P25QR5	D71P50QL5	D71P100QL5	D71P250QX5
Capacity x 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
	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
Scale Base Size		12 × 12 × 3.8 in / 30 × 30 × 9.5 cm		18 × 18 × 4.5 in / 45 × 45 × 11.5 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 x 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
- Counting, Percent Weighing, Dynamic/Animal Weighing, Checkweighing, and Display Hold software included



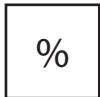
NTEP 3,000  
or 5,000d



Measurement  
Canada 3,000  
or 5,000d



Parts  
Counting



Percent  
Weighing



Dynamic/  
Animal Weighing



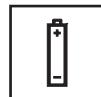
Check-  
weighing



Display  
Hold



GMP/GLP



Rechargeable  
Battery  
(Optional)



RS232



RS232  
x2  
(Optional)



RS485/  
422  
(Optional)



NEMA 4X/IP66  
w/"W" base

## Defender® 5000XW Xtreme Square Washdown Bench Scales

Model	D51XW10WR3	D51XW25WR3	D51XW50WL4	D51XW100WL4	D51XW250WX4
Capacity x 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
	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
Scale Base Size		12 × 12 × 3.8 in / 30 × 30 × 9.5 cm		18 × 18 × 4.5 in / 45 × 45 × 11.5 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 x 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							

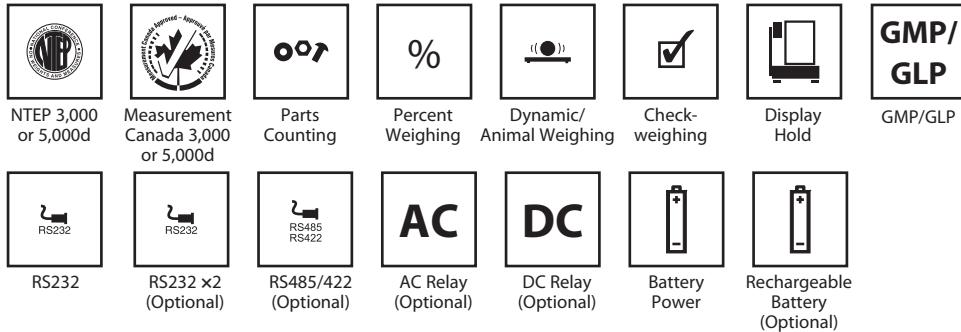
Made from Certified/Approved weighing components • NTEP Certificate of Conformance No. 08-039 and 99-203A3, Measurement Canada Notices of Approval AM 5687 and AM-5675

# 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
- Counting, Percent Weighing, Dynamic/Animal Weighing, Checkweighing, and Display Hold software included



## 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	50lb × 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	
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			

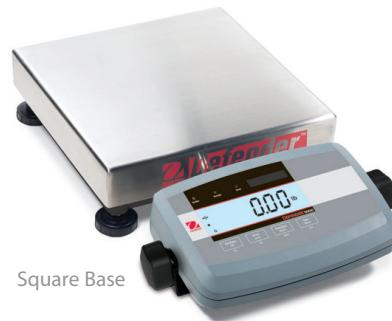
Made from Certified/Approved weighing components • NTEP Certificate of Conformance No. 08-039 and 99-203A3, Measurement Canada Notices of Approval AM 5687 and AM-5675

# Bench

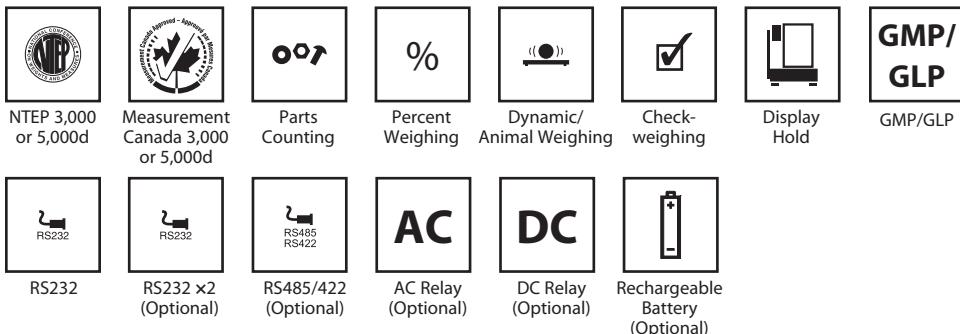
## Defender® 5000 Low Profile Scales

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
- Counting, Percent Weighing, Dynamic/Animal Weighing, Checkweighing, and Display Hold software included



Square Base



Rectangular Base

## Defender® 5000 Square Bench Scales

Model		D51P10QR5	D51P25QR5	D51P50QL5	D51P100QL5	D51P250QX5
Capacity x 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

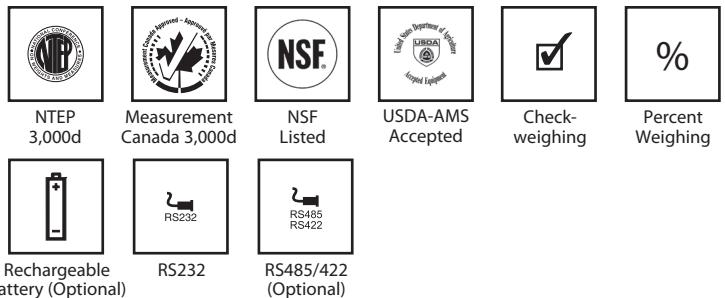
Model		D51P15HR5	D51P30HR5	D51P60HR5	D51P60HL5	D51P100HL5	D51P150HX5	D51P300HX5
Capacity x Readability	Default	30 × 0.002 lb 480 × 0.05 oz 30 lb × 0.05 oz 15 × 0.001 kg	60 × 0.005 lb 960 × 0.1 oz 60 lb × 0.1 oz 30 × 0.002 kg	150 × 0.01 lb 2,400 × 0.2 oz 150 lb × 0.2 oz 60 × 0.005 kg	250 × 0.02 lb 4,000 × 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

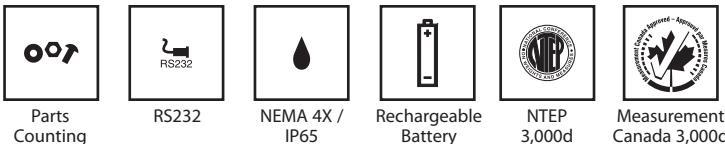


Model	CKW3R55	CKW6R55	CKW15L55	CKW30L55
Capacity × Readability	Default 6 × 0.001 lb 96 × 0.02 oz 6 lb × 0.02 oz 3 × 0.0005 kg	15 × 0.002 lb 240 × 0.05 oz 16 lb × 0.05 oz 6 × 0.001 kg	30 × 0.005 lb 480 × 0.1 oz 30 lb × 0.1 oz 15 × 0.002 kg	60 × 0.01 lb 960 × 0.2 oz 60 lb × 0.2 oz 30 × 0.005 kg
	Certified / 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



Model	D32XW30VR	D32XW60VR	D32XW60VL	D32XW150VL	D32XW150VX	D32XW300VX
Capacity × Readability	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
	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		
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

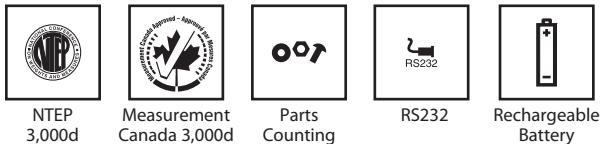
- Stainless steel pan with painted carbon steel frame and column, ABS indicator and aluminum load cell
- Backlit LCD display
- Parts Counting software included



Model	D31P30BR	D31P60BR	D31P60BL	D31P150BL	D31P150BX	D31P300BX
Capacity x Readability	Default	66 x 0.01 lb 1056 x 0.2 oz 66 lb x 0.2 oz 30 x 0.005 kg	132 x 0.02 lb 2,112 x 0.5 oz 160 lb x 0.5 oz 60 x 0.01 kg	132 x 0.02 lb 2,112 x 0.5 oz 160 lb x 0.5 oz 60 x 0.01 kg	330 x 0.05 lb 5,280 x 1 oz 300 lb x 1 oz 150 x 0.02 kg	330 x 0.05 lb 5,280 x 1 oz 300 lb x 1 oz 150 x 0.02 kg
	Certified / Approved	60 x 0.02 lb 30 x 0.01 kg	150 x 0.05 lb 60 x 0.02 kg	150 x 0.05 lb 60 x 0.02 kg	300 x 0.01 lb 150 x 0.05 kg	300 x 0.01 lb 150 x 0.05 kg
Column	13.8 in / 350 mm stainless steel					
Scale Base Size	12 x 14 x 4.8 in / 305 x 355 x 123 mm		16.5 x 21.6 x 5.4 in / 420 x 550 x 136 mm			19.7 x 25.6 x 5.8 in / 500 x 650 x 147 mm

## Defender® 3000 Wheeled Bench 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



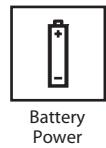
Model	D31P250TXUS	D31P500TXUS
Capacity x Readability (default: cal unit lb)	500 x 0.1 lb / 227 x 0.05 kg	1,000 x 0.2 lb / 454 x 0.1 kg
Capacity x Readability (cal unit kg)	250 x 0.05 kg / 551 x 0.2 lb	500 x 0.1 kg / 1,02 x 0.5 lb
Certified / Approved Resolution	500 x 0.2 lb 250 x 0.1 kg	
Column	40.5 in / 1,030 mm stainless steel	
Pan Dimensions (W x D)	20 x 28 in / 508 x 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

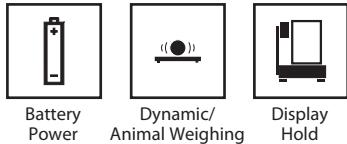


Model	ES6R	ES30R	ES50R	ES50L	ES100L	ES200L
Capacity x Readability	13.225 x 0.005 lb 6 x 0.002 kg 211.6 x 0.1 oz 13 lb 3 oz x 1 oz	66.1 x 0.05 lb 30 x 0.01 kg 1,058 x 0.5 oz 66 lb 2 oz x 1 oz	110.2 x 0.05 lb 50 x 0.02 kg 1,763 x 1.0 oz 110 lb 3 oz x 1 oz	110.2 x 0.05 lb 50 x 0.02 kg 1,763 x 1.0 oz 110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



## Catapult® 1000 Compact Shipping Scales

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



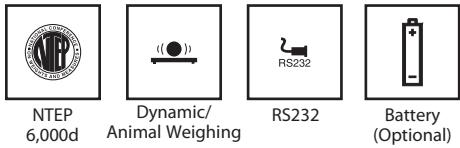
Optional  
Stainless steel pan,  
Model 80251248  
(scale not included)

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

# Compact Bench

## Ranger® Compact Bench Scales

- Includes Dynamic Weighing software
- Backlit LCD display
- Stainless steel platform with painted cast aluminum housing



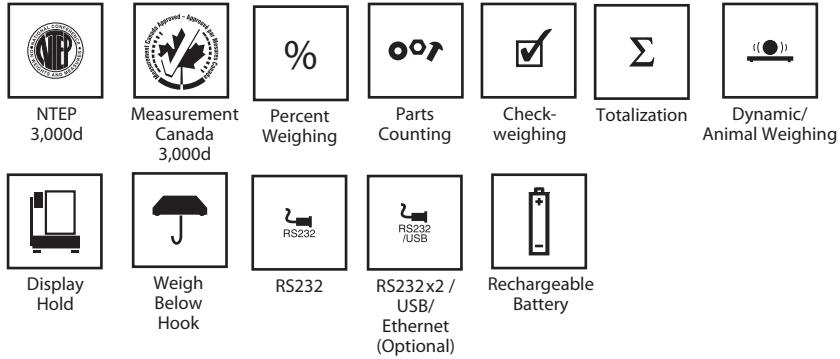
Model	RD3RS	RD6RS	RD12LS	RD30LS	RD60LS	
Capacity x Readability	Default	6.6138 x 0.0002 lb 105.822 x 0.002 oz 3 x 0.0001 kg 3,000 x 0.1 g	13.2275 x 0.0005 lb 211.640 x 0.005 oz 6 x 0.0002 kg 6,000 x 0.2 g	26.456 x 0.001 lb 423.30 x 0.02 oz 12 x 0.0005 kg 12,000 x 0.5 g	66.138 x 0.002 lb 1,058.20 x 0.02 oz 30 x 0.001 kg 30,000 x 1 g	132.275 x 0.005 lb 2116.50 x 0.05 oz 60 x 0.002 kg 60,000 x 2 g
	NTEP Certified	6 x 0.001 lb 3 x 0.0005 kg 3,000 x 0.5 g	12 x 0.002 lb 6 x 0.001 kg 6,000 x 1 g	24 x 0.005 lb 12 x 0.002 kg 12,000 x 2 g	60 x 0.01 lb 30 x 0.005 kg 30,000 x 5 g	120 x 0.02 lb 60 x 0.01 kg 60,000 x 10 g
Pan Size	9.5 x 8 in / 24 x 20 cm			14 x 9.5 in / 35 x 24 cm		

NTEP Certificate of Conformance No. 07-026

# 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

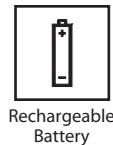
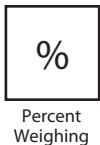
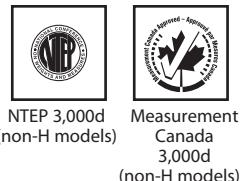


Model	R31P1502	R31P3	R31P6	R31P15	R31P30	
Capacity × Readability	Default	1.5 × 0.00005 kg 3 × 0.0001 lb 1,500 × 0.05 g 48 × 0.002 oz	3 × 0.0001 kg 6 × 0.0002 lb 3,000 × 0.1 g 96 × 0.005 oz	6 × 0.0002 kg 15 × 0.0005 lb 6,000 × 0.2 g 240 × 0.01 oz	15 × 0.0005 kg 30 × 0.001 lb 15,000 × 0.5 g 480 × 0.02 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 x 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



Model	FD3H	FD6H	FD15H
Capacity x Readability	6 x 0.0002 lb 96 x 0.005 oz 96 x 1/4 oz 6 lb x 0.1 oz or 1/4 oz 3 x 0.0001 kg 3,000 x 0.1 g	15 x 0.001 lb 240 x 0.01 oz 240 x 1/4 oz 15 lb x 0.1 oz or 1/4 oz 6 x 0.0002 kg 6,000 x 0.2 g	30 x 0.001 lb 480 x 0.02 oz 480 x 1/4 oz 30 lb x 0.1 oz or 1/4 oz 15 x 0.001 kg 15,000 x 1 g
Pan Size	8.2 x 8.2 in / 209 x 209 mm		



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

## LEGAL FOR TRADE MODELS

Model		FD3	FD6	FD15
Capacity x Readability	Default	6 x 0.001 lb 96 x 0.02 or 1/4 oz 6 lb x 0.1 or 1/4 oz 3 x 0.0005 kg 3,000 x 0.5 g	15 x 0.002 lb 240 x 0.05 or 1/4 oz 15 lb x 0.1 or 1/4 oz 6 x 0.001 kg 6,000 x 1 g	30 x 0.005 lb 480 x 0.1 or 1/4 oz 30 lb x 0.1 or 1/4 oz 15 x 0.002 kg 15,000 x 2 g
	Certified / Approved	6 x 0.002 lb 96 x 0.05 or 1/4 oz 3,000 x 1 g	15 x 0.005 lb 240 x 0.1 or 1/4 oz 6,000 x 2 g	30 x 0.01 lb 480 x 0.2 or 1/4 oz 15,000 x 5 g
Pan Size	8.2 x 8.2 in / 209 x 209 mm			

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.



Optional Carrying Case,  
(Model 80251394)

# 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
- Percentage weighing, check weighing, check percentage, accumulation
- Hands-free operation with touch less sensor



NTEP 3,000d



Measurement  
Canada  
3,000d



NSF  
Listed



USDA-AMS  
Accepted



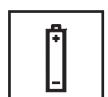
Percent  
Weighing



Check-  
weighing



Totalization



Rechargeable  
Battery



RS232



RS232x2 /  
USB/  
Ethernet  
(Optional)

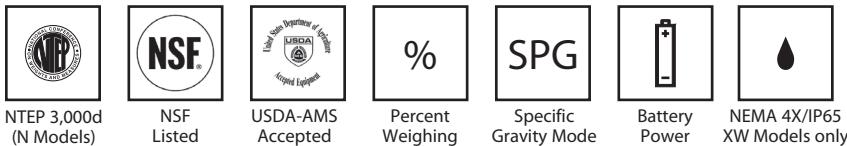
Model	V71P1502T	V71P3T	V71P6T	V71P15T	V71P30T	
Capacity x Readability	Default	1.5 × 0.00005 kg 3 × 0.0001 lb 1,500 × 0.05 g 48 × 0.002 oz	3 × 0.0001 kg 6 × 0.0002 lb 3,000 × 0.1 g 96 × 0.005 oz	6 × 0.0002 kg 15 × 0.0005 lb 6,000 × 0.2 g 240 × 0.01 oz	15 × 0.0005 kg 30 × 0.001 lb 15,000 × 0.5 g 480 × 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)					
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.

# 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 × ¼ oz — 0.3 × 0.0001 kg 300 × 0.1 g 10.140 × 0.005 fl oz	6.615 × 0.002 lb 105.8 × 0.02 oz 105 ½ × ¼ oz 6 lb : 9.80 oz × 0.05 oz 6 lb : 9 ½ oz × ¼ oz 3 × 0.001 kg 3,000 × 1 g 101.45 × 0.05 fl oz	6.615 × 0.002 lb 105.8 × 0.02 oz 105 ½ × ¼ oz 6 lb : 9.80 oz × 0.02 oz 6 lb : 9 ½ oz × ¼ 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 × ¼ oz 6 lb : 9.80 oz × 0.02 oz 6 lb : 9 ½ oz × ¼ oz 3 × 0.0005 kg 3,000 × 0.5 g 101.44 × 0.02 fl oz	13.225 × 0.005 lb 211.60 × 0.05 oz 211 ½ × ¼ oz 13 lb : 3.65 oz × 0.05 oz 13 lb : 3 ½ oz × ¼ 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 × ¼ oz 13 lb : 3.65 oz × 0.05 oz 13 lb : 3 ½ oz × ¼ 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 × ¼ oz 13 lb : 3.65 oz × 0.05 oz 13 lb : 3 ½ oz × ¼ 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 105.80 × 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 × ¼ 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 ¼ × ¼ 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 × ¼ oz 1 lb : 1.64 oz × 0.01 oz 1 lb : 1 ¼ oz × ¼ 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 × ¼ oz 4 lb : 6.55 oz × 0.01 oz 4 lb : 6 ½ oz × ¼ 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 × ¼ oz 8 lb : 13.10 oz × 0.01 oz 8 lb : 13 ½ oz × ¼ 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 Wash-down 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
- Percent weighing, check weighing, accumulation



V41XW



NTEP 3,000d  
(non-H models)



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



NSF  
Listed



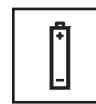
USDA-AMS  
Accepted



Percent  
Weighing



Check-  
weighing



Rechargeable  
Battery



Totalization



IP X8



V41PW

Model	V41PWE1501T V41XWE1501T	V41PWE3T V41XWE3T	V41PWE6T V41XWE6T	V41PWE15T V41XWE15T	
Capacity x Readability	Default	1.5 x 0.00005 kg 3 x 0.0001 lb 1,500 x 0.05 g 48 x 0.002 oz	3 x 0.0001 kg 6 x 0.0002 lb 3,000 x 0.1 g 96 x 0.005 oz	6 x 0.0002 kg 15 x 0.0005 lb 6,000 x 0.2 g 240 x 0.01 oz	15 x 0.0005 kg 30 x 0.001 lb 15,000 x 0.5 g 480 x 0.02 oz
	Certified / Approved	1.5 x 0.0005 kg 3 x 0.001 lb 1,500 x 0.5 g 48 x 0.02 oz	3 x 0.001 kg 6 x 0.002 lb 3,000 x 1 g 96 x 0.05 oz	6 x 0.002 kg 15 x 0.005 lb 6,000 x 2 g 240 x 0.1 oz	15 x 0.005 kg 30 x 0.01 lb 15,000 x 5 g 480 x 0.2 oz
Platform Size (W x L)	190 x 242 mm / 7.5 x 9.5 in				

## Valor® 2000 Washdown Scales

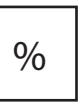
- NSF listed/certified, USDA – AMS accepted, supports HACCP systems
- IP X8 Wash-down Protection
- ABS (P version) or stainless steel (XW version) housing, dishwasher-safe removable stainless steel pan



NSF  
Listed



USDA-AMS  
Accepted



Percent  
Weighing  
(XW models)



Check-  
weighing



Totalization



Rechargeable  
Battery



IP X8



V22XW

Model	V22PWE1501T V22XWE1501T	V22PWE3T V22XWE3T	V22PWE6T V22XWE6T	V22PWE15T V22XWE15T
Capacity x Readability	1.5 kg x 0.0002 kg 1500 g x 0.2 g 3 lb x 0.0005 lb 48 oz x 0.01 oz 3 lb x 0.01 oz (lb:oz)	3 kg x 0.0005 kg 3000 g x 0.5 g 6 lb x 0.001 lb 96 oz x 0.02 oz 6 lb x 0.02 oz (lb:oz)	6 kg x 0.001 kg 6000 g x 1 g 15 lb x 0.002 lb 240 oz x 0.05 oz 15 lb x 0.05 oz (lb:oz)	15 kg x 0.002 kg 15000 g x 2 g 30 lb x 0.005 lb 480 oz x 0.1 oz 30 lb x 0.1 oz (lb:oz)
Pan Size	190 x 242 mm / 7.5 x 9.5 in			



V22PW

# Compact Bench

## Valor® 1000 Scales

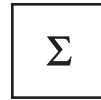
- ABS housing, removable stainless steel pan
- NSF Listed/Certified, supports HACCP systems
- Single or dual backlit LCD display
- Checkweighing and Accumulation software included



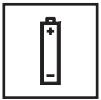
NSF  
Listed



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
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
- Percent weighing, counting, display hold and totalization modes
- 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

<b>Navigator XT</b>	<b>NVT1601/1</b>	<b>NVT3201/1</b>	<b>NVT6401/1</b>	<b>NVT10001/1</b>	<b>NVT16000/1</b>
Capacity × Readability (Default)	1,600 × 0.1 g 3.2 × 0.0002 lb 51 × 0.005 or ¼ oz 1.6 × 0.0001 kg	3,200 × 0.2 g 6.4 × 0.0005 lb 102 × 0.01 or ½ oz 3.2 × 0.0002 kg	6,400 × 0.5 g 16 × 0.001 lb 256 × 0.02 or ¼ oz 6.4 × 0.0005 kg	10,000 × 0.5 g 22 × 0.002 lb 352 × 0.05 or ½ oz 10 × 0.0005 kg	16,000 × 1 g 32 × .002 lb 515 × 0.05 or ½ 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

<b>Navigator XT LFT</b>	<b>NVT1601N/1</b>	<b>NVT3200N/1</b>	<b>NVT6400N/1</b>		<b>NVT16000N/1</b>
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® Count Plus Dedicated Counting Scales

1:300,000 Maximum External Counting Resolution

- Stainless steel platform and painted cast aluminum housing
- APW Enhancement and Auto Add sample weight software
- 100 memories for APW and parts information



NTEP  
30,000d



Check-  
weighing



Parts  
Counting



Dynamic/  
Animal  
Weighing



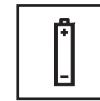
Totalization



GMP/GLP



RS232



Rechargeable  
Battery  
(Optional)

Model		RP3RM	RP6RM	RP15LM	RP35LM
Capacity x Readability	Default	6.61388 × 0.00002 lb 105.8228 × 0.0002 oz 3 × 0.0001 kg 3,000 × 0.01g	13.22770 × 0.00005 lb 211.6440 × 0.0005 oz 6 × 0.00002 kg 6,000 × 0.02g	33.0694 × 0.0001 lb 529.110 × 0.002 oz 15 × 0.00005 kg 15,000 × 0.05g	77.1620 × 0.0002 lb 1,234.592 × 0.002 oz 35 × 0.0001 kg 35,000 × 0.1g
	NTEP Certified (NTEP Certification not for Counting Function)	3 × 0.0001 kg 6 × 0.0002 lb	6 × 0.0002 kg 12 × 0.0005 lb	15 × 0.0005 kg 30 × 0.001 lb	30 × 0.001 kg 60 × 0.002 lb
Minimum APW		0.000005 lb 0.0001 oz 0.002 g	0.00001 lb 0.00005 oz 0.005 g	0.00005 lb 0.0002 oz 0.01 g	0.00002 lb 0.0002 oz 0.05 g
Pan Size		6.4 × 6.4 in / 16.2 × 16.2 cm	9.5 × 8 in / 24 × 20 cm	14 × 9.5 in / 35 × 24 cm	

NTEP Certificate of Conformance No. 07-026

## Ranger® Count Dedicated Counting Scales

1:30,000 Maximum External Counting Resolution

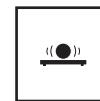
- Stainless steel platform/painted cast aluminum housing
- APW Enhancement and Auto Add Sample Weight Dynamic Weighing software



NTEP  
6,000d



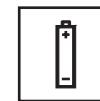
Parts  
Counting



Dynamic/  
Animal  
Weighing



RS232



Rechargeable  
Battery  
(Optional)

Model		RC3RS	RC6RS	RC12LS	RC30LS	RC60LS
Capacity x Readability	Default	6.6138 × 0.0002 lb 105.822 × 0.002 oz 3 × 0.0001 kg 3,000 × 0.1 g 0.003 × 0.00001 t	13.2275 × 0.0005 lb 211.640 × 0.005 oz 6 × 0.0002 kg 6,000 × 0.2 g 0.006 × 0.00001 t	26.456 × 0.001 lb 423.30 × 0.02 oz 12 × 0.0005 kg 12,000 × 0.5 g 0.012 × 0.00001 t	66.138 × 0.002 lb 1,058.20 × 0.02 oz 30 × 0.001 kg 30,000 × 1 g 0.03 × 0.00001 t	132.275 × 0.005 lb 2116.50 × 0.05 oz 60 × 0.002 kg 60,000 × 2 g 0.06 × 0.00002 t
	NTEP Certified (NTEP Certification not for Counting Function)	6 × 0.001 lb 3 × 0.0005 kg 3,000 × 0.5 g	12 × 0.002 lb 6 × 0.001 kg 6,000 × 1 g	24 × 0.005 lb 12 × 0.002 kg 12,000 × 2 g	60 × 0.01 lb 30 × 0.005 kg 30,000 × 5 g	120 × 0.02 lb 60 × 0.01 kg 60,000 × 10 g
Minimum APW		0.00002 lb 0.0005 oz 0.01 g	0.00005 lb 0.001 oz 0.02 g	0.0001 lb 0.002 oz 0.05 g	0.0002 lb 0.005 oz 0.1 g	0.0005 lb 0.01 oz 0.2 g
Pan Size		9.5 × 8 in / 24 × 20 cm		14 × 9.5 in / 35 × 24 cm		

NTEP Certificate of Conformance No. 07-026

# 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



NTEP  
3,000d\*



Measurement  
Canada  
3,000d\*



Parts  
Counting



Check-  
weighing



Totalization



RS232



RS232x2 /  
USB/  
Ethernet  
(Optional)



Rechargeable  
Battery



\*Counting function not legal for trade.

Model	RC31P1502	RC31P3	RC31P6	RC31P15	RC31P30	
Capacity x 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 × 0.00005 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 x L)	11.8 × 8.9 in. / 300 × 225 mm					

## Ranger® 3000 Compact Bench Scales

Up To 1:30,000 Maximum External Displayed Resolution

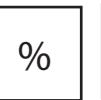
- ABS housing with stainless steel pan
- Large 1.5 inch bright backlit LCD display with rapid stabilization under 1 second
- Parts counting, percent weighing, check weighing, accumulation, dynamic weighing and display hold



NTEP  
3,000d



Measurement  
Canada  
3,000d



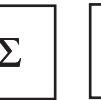
Percent  
Weighing



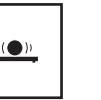
Parts  
Counting



Check-  
weighing



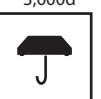
Totalization



Dynamic/  
Animal Weighing



Display  
Hold



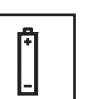
Weigh  
Below  
Hook



RS232



RS232x2 /  
USB/  
Ethernet  
(Optional)



Rechargeable  
Battery

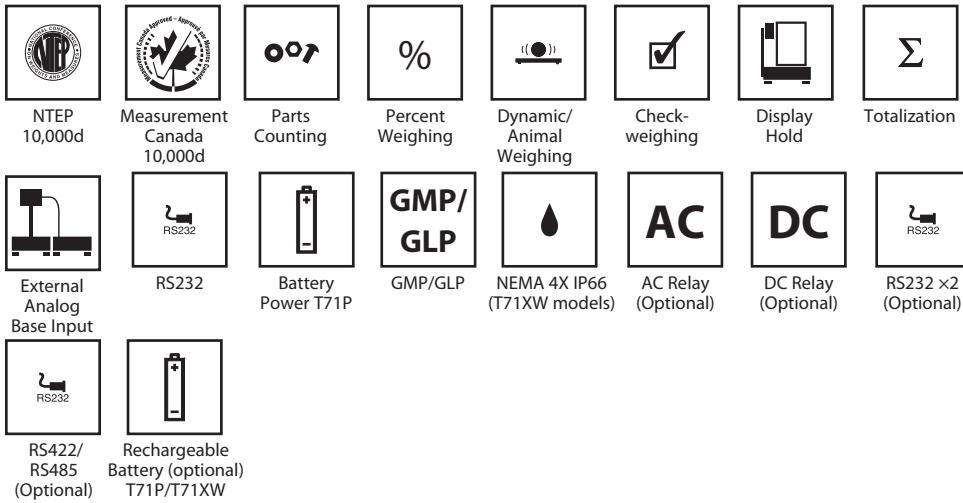


Model	R31P1502	R31P3	R31P6	R31P15	R31P30	
Capacity x Readability	Default	1.5 × 0.00005 kg 3 × 0.0001 lb 1,500 × 0.05 g 48 × 0.002 oz	3 × 0.0001 kg 6 × 0.0002 lb 3,000 × 0.1 g 96 × 0.005 oz	6 × 0.0002 kg 15 × 0.0005 lb 6,000 × 0.2 g 240 × 0.01 oz	15 × 0.0005 kg 30 × 0.001 lb 15,000 × 0.5 g 480 × 0.02 oz	30 × 0.001 kg 60 × 0.002 lb 30,000 × 1 g 960 × 0.05 oz
	Certified / Approved	1.5 × 0.00005 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 x 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)
- Software for Counting, Percent Weighing, Dynamic/Animal Weighing, Checkweighing, Totalization, Display Hold and 255-item library for storing application data
- Includes analog scale base input for two scale counting and weighing



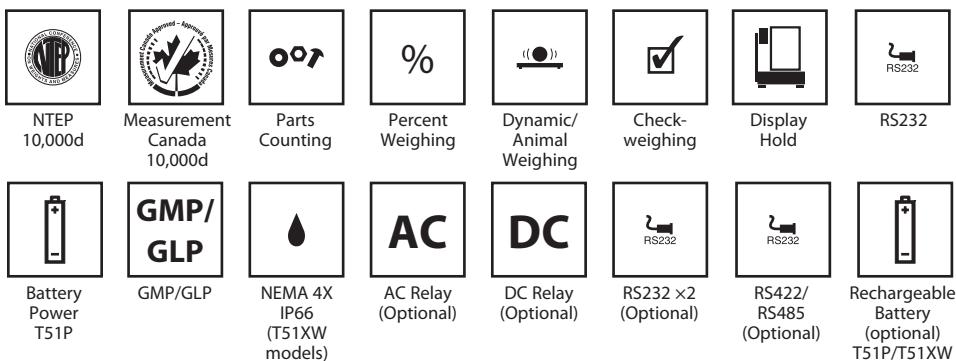
Model	T71P	T71XW
Capacity Range	1 to 999,950 kg/lb	
Certified / Approved Resolution	1:10,000	
Max. Displayed Resolution	1:50,000	
Maximum Counting Resolution	1:500,000	
Min. Average Piece Weight	0.1d	
Operating Temperature Range	14°F to 104°F / -10°C to 40°C	
Stabilization Time	Within 2 seconds	
Auto-Zero 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 × 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 3/8 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 × D × H)	10.2 × 2.7 × 6.6 in / 260 × 71 × 168 mm	10.3 × 3 × 5.8 in / 262 × 76 × 149 mm

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

# 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)
- Software for Counting, Percent Weighing, Dynamic/Animal Weighing, Checkweighing, and Display Hold



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

# 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
- Counting software included
- 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

# 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)
- Basic modes for counting, checkweighing, display hold and totalization



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

# Bases

## Defender® 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 × 0.002 lb 10 × 0.001 kg	50 × 0.005 lb 25 × 0.002 kg	100 × 0.01 lb 50 × 0.005 kg	250 × 0.02 lb 100 × 0.01 kg
	Certified / Approved	25 × 0.005 lb 10 × 0.002 kg	50 × 0.01 lb 25 × 0.005 kg	100 × 0.02 lb 50 × 0.01 kg	250 × 0.05 lb 100 × 0.02 kg
Scale Base Size		12 × 12 × 3.8 in / 30 × 30 × 9.5 cm		18 × 18 × 4.5 in / 45 × 45 × 11.5 cm	
NTEP Certificate of Conformance No. 01-048A1, Measurement Canada Notice of Approval AM-5719					

## Defender® 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 × 0.002 lb 10 × 0.001 kg	50 × 0.005 lb 25 × 0.002 kg	100 × 0.01 lb 50 × 0.005 kg	250 × 0.02 lb 100 × 0.01 kg
	Certified / Approved	25 × 0.005 lb 10 × 0.002 kg	50 × 0.01 lb 25 × 0.005 kg	100 × 0.02 lb 50 × 0.01 kg	250 × 0.05 lb 100 × 0.02 kg
Scale Base Size		12 × 12 × 3.8 in / 30 × 30 × 9.5 cm		18 × 18 × 4.5 in / 45 × 45 × 11.5 cm	
NTEP Certificate of Conformance No. 01-048A1, Measurement Canada Notice of Approval AM-5719					

## Defender® 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 × 0.005 lb 15 × 0.002 kg	60 × 0.01 lb 30 × 0.005 kg	120 × 0.02 lb 60 × 0.01 kg	120 × 0.02 lb 60 × 0.01 kg	250 × 0.05 lb 100 × 0.02 kg	300 × 0.05 lb 150 × 0.02 kg
	Certified / Approved	30 × 0.01 lb 15 × 0.005 kg	60 × 0.02 lb 30 × 0.01 kg	120 × 0.05 lb 60 × 0.02 kg	120 × 0.05 lb 60 × 0.02 kg	250 × 0.1 lb 100 × 0.05 kg	300 × 0.1 lb 150 × 0.05 kg
Scale Base Size (W × D × H)		12 × 14 × 3.54 in / 30.5 × 35.5 × 9.5 cm		16 × 20 × 4.1 in / 40 × 50 × 10.5 cm		17 × 22 × 4.1 in / 42 × 55 × 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						

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						

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			

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

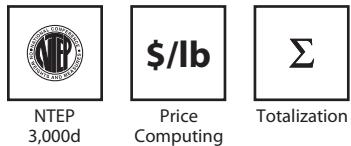


Model	2400-11	2400-12
Capacity × Readability	16 kg × 5 g	36 × 0.01 lb
Beam Calibration	500 × 5 g	1 × 0.01 lb
Platform Size (Diameter)	11 in / 27.9 cm	

# 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



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



NTEP  
5,000d\*



Parts  
Counting



RS232



Rechargeable  
Battery



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



NTEP  
5,000d\*\*



Parts  
Counting



RS232



Rechargeable  
Battery

Model	VN31P5000L	VN31P5000X
Capacity x Readability	5,000 x 1 lb	
Scale Base Size	48 x 48 x 3.5 in	60 x 60 x 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® High Resolution	6 to 77 lb						√			√				√		
Ranger	6 to 132 lb						√			√				√		
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 Count Plus	6 to 77 lb	√		√		√		√	100	√				√		√
Ranger Count	6 to 132 lb	√				√				√				√		
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 creates products which 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).



# Ingeniously Practical

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*With offices throughout  
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**\*ISO 9001**  
Registered Quality  
Management System