



DEFENDER™ 6000

Extreme Washdown Bench Scales



EasyConnect



Advanced IP68/IP69K Washdown Bench Scale

The Defender 6000 Series Extreme Washdown Bench Scale is specifically designed for food, chemical and pharmaceutical applications, including production and packaging. Defender 6000 handles the most demanding applications with 316 stainless steel platform and frame, and hermetically-sealed stainless steel IP69K load cell. Defender 6000 meets metrological approvals, NSF listing, and supporting HACCP systems.

Unique Features:

- Defender 6000 stands up to harsh cleaning in processing and packaging environments with IP68 immersion/ IP69K washdown protection, 316 stainless steel construction and hermetically-sealed load cell.
- Durable Defender 6000 is NSF certified, supporting HACCP systems with a 316 stainless steel base and sturdy indicator providing corrosion protection in food, chemical processing, and packaging.
- Versatile scales include fast weight display and multiple software modes to meet food, chemical processing, and packaging needs.
- Defender 6000 is designed for simple connectivity in a variety of application settings.

DEFENDER™ 6000 *Extreme Washdown Bench Scales*

Defender 6000 series bench scales offer two types of indicators: a polycarbonate indicator housing for superior protection against moisture and a 316 stainless steel indicator for enhanced protection against corrosion from cleaners and additives. Equipped with a 316 stainless steel frame, platform and hermetically-sealed stainless steel load cell, the Defender 6000 series bench scales are specifically designed for wash-down, enhancing food safety and reducing downtime.

Food Safe Design: NSF listed/certified, and supports HACCP compliance. Defender 6000 series bench scales are wash-down IP68/IP69K rated with a knife proof front panel to operate reliably in harsh environments.

Featuring advanced applications including configurable Checkweighing, Percent Weighing, Filling and Dynamic Weighing or Display Hold, the Defender 6000 meets the weighing needs of practically any food or chemical processing application. Easy-to-use application modes eliminate the need for long and complicated manual calculations. GMP/GLP with time/date output allows for the traceability of results.

i-D61PW models offer an optional Infrared (IR) communication kit for connectivity without opening the housing. The indicator can store up to 1 000 weighing results which can be transferred to a PC or system for traceability.

i-D61XWE models offer multiple connectivity options, including built-in RS232 and USB host, 2nd RS232/RS485/USB Device, Analog Output, Wi-Fi/Bluetooth, Ethernet and Discrete I/O with relays. Hands-free, touchless sensor reduces contamination risk.

Application Modes



Weighing:

Determine the weight of items in the selected unit of measure.



Parts Counting: Count items of uniform weight. Advanced auto-optimization software recalculates the average piece weight as the overall weight increases.



Checkweighing/ Checkcounting: Compare the weight of an item against target limits. Compare the count of a package against target limits. Bar matrix or 3-color check light display give clear and bright indication of weight.



Percent Weighing: Display the weight of an item as a percentage of a pre-established reference weight.



Dynamic Weighing and Display Hold: Take an average of weights for an item over a period of time to account for vibration or other interference. The Display Hold feature manually or automatically holds the last stable weight of an item on the display.

Available only in the i-D61XWE models:



Filling: Fill a container to a target weight. 3-color bar matrix displays filling status. Connect with Discrete I/O option kit for an auto-filling system.

- **Library and User Management:** Up to 300 library items (stores part number, tare weights, APWs, under/over limits, set points or reference weight) can be shared within different weighing modes. Up to 100 user IDs can be stored for secure user access and traceability.

Additional Features

Dedicated target key for quick set-up of package over/under weights, speeding up line changeovers. Fully customizable templates allow for easy data printing. 150% overload capacity protection, menu password protection, key lock, selectable environmental and auto-print settings, stability indicator, overload/underload indicators, low battery indicator (i-D61PW models), auto shut-off, auto tare, non-slip adjustable rubber feet.



Optional IR RS232 kit for i-D61PW model

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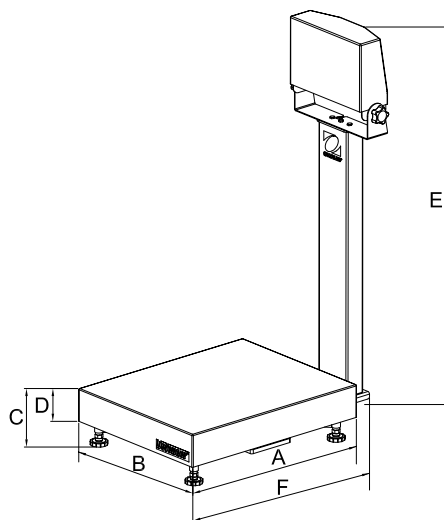
Specifications

Column Mount Bench Scales

Model	i-D61XWE6K1DS6	i-D61XWE15K1DR6	i-D61XWE30K1DR6	i-D61XWE60K1DL7	i-D61XWE150K1L7
Capacity×Default Readability	3/6 kg×0.2/0.5 g	6/15 kg×0.5/1 g	15/30 kg×1/2 g	30/60 kg×2/5 g	150 kg×10 g
Maximum Displayed Resolution	2×15 000	2×15 000		2×15 000	1×15 000
Linearity/Repeatability	±2d				
Certified Model	i-D61XWE6K1DS6-M	i-D61XWE15K1DR6-M	i-D61XWE30K1DR6-M	i-D61XWE60K1DL7-M	i-D61XWE150K1L7-M
Capacity×Certified/Approved Readability	3/6 kg×1/2 g	6/15 kg×2/5 g	15/30 kg×5/10 g	30/60 kg×10/20 g	150 kg×50 g
Maximum Certified Resolution	2×3 000				1×3 000
Indicator	i-DT61XWE				
Column	260 mm 316 stainless steel			670 mm 316 stainless steel	
Base Construction	316 stainless steel top and bottom frame, hermetically sealed IP68/IP69K stainless steel loadcell			316 stainless steel removable weighing platform with 316 stainless steel frame, hermetically sealed IP68/IP69K stainless steel loadcell	
Safe Overload Capacity	150% of maximum capacity				
Stabilization Time	Within 1 second				
Operating Temperature Range	-10 °C to 40 °C				
Scale Dimensions (A×B×C×D×E×F)	250×250×106×-×518×376 mm	300×300×106×-×518×427 mm		500×400×137×80×929×660 mm	
Shipping Dimensions (L×W×H)	490×450×380 mm			1000×690×250 mm	
Approx. Net Weight	10.5 kg	11.7 kg		22 kg	23.2 kg
Approx. Shipping Weight	13 kg	15 kg		25 kg	26 kg

Model	i-D61PW3K1S6	i-D61PW6K1S6	i-D61PW15K1R6	i-D61PW30K1R6	i-D61PW60K1L7	i-D61PW150K1L7
Capacity×Default Readability	3 kg×0.5 g	6 kg×0.5 g	15 kg×1 g	30 kg×2g	60 kg×5 g	150 kg×10 g
Maximum Displayed Resolution	1: 6 000	1: 12 000	1: 15 000		1: 12 000	1: 15 000
Linearity/Repeatability	±2d					
Certified Model	i-D61PW3K1S6-M	i-D61PW6K1S6-M	i-D61PW15K1R6-M	i-D61PW30K1R6-M	i-D61PW60K1L7-M	i-D61PW150K1L7-M
Capacity×Certified/Approved Readability	3 kg×1 g	6 kg×2 g	15 kg×5 g	30 kg×10 g	60 kg×20 g	150 kg×50 g
Maximum Certified Resolution	1: 3 000					
Indicator	i-DT61PW					
Column	260 mm 316 stainless steel				670 mm 316 stainless steel	
Base Construction	316 stainless steel top and bottom frame, hermetically sealed IP68/IP69K stainless steel loadcell				316 stainless steel removable weighing platform with 316 stainless steel frame, hermetically sealed IP68/IP69K stainless steel loadcell	
Safe Overload Capacity	150% of maximum capacity					
Stabilization Time	Within 1 second					
Operating Temperature Range	-10 °C to 40 °C					
Scale Dimensions (A×B×C×D×E×F)	250×250×106×-×504×376 mm	300×300×106×-×504×427 mm		500×400×137×80×915×660 mm		
Shipping Dimensions (L×W×H)	490×450×380 mm				1000×690×250 mm	
Approx. Net Weight	10 kg	11.2 kg		21.5 kg	22.7 kg	
Approx. Shipping Weight	12 kg	14 kg		25 kg	26 kg	

Outline Dimensions

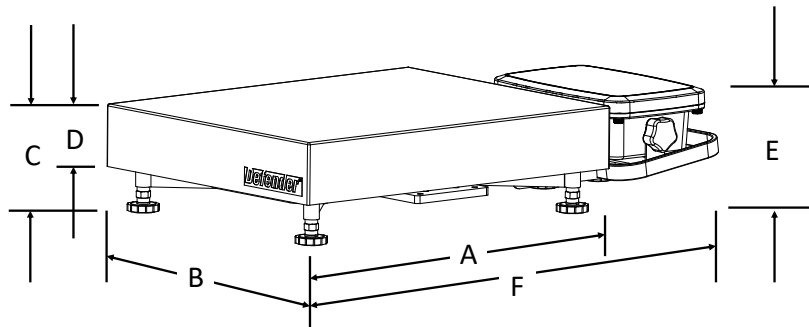


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Front Mount Bench Scales

MODEL	i-D61PW3K1S5	i-D61PW6K1S5	i-D61PW15K1R5	i-D61PW30K1R5	i-D61PW60K1L5	i-D61PW150K1L5
Capacity x Default Readability	3 kg x 0.5 g	6 kg x 0.5 g	15 kg x 1 g	30 kg x 2 g	60 kg x 5 g	150 kg x 10 g
Maximum Displayed Resolution	1: 6 000	1: 12 000	1: 15 000		1: 12 000	1: 15 000
Linearity/Repeatability	±2d					
Certified Model	i-D61PW3K1S5-M	i-D61PW6K1S5-M	i-D61PW15K1R5-M	i-D61PW30K1R5-M	i-D61PW60K1L5-M	i-D61PW150K1L5-M
Capacity x Certified/Approved Readability	3 kg x 1 g	6 kg x 2 g	15 kg x 5 g	30 kg x 10 g	60 kg x 20 g	150 kg x 50 g
Maximum Certified Resolution	1:3 000					
Indicator	i-DT61PW					
Column	316 stainless steel front-mount bracket with handle					
Base Construction	316 stainless steel top and bottom frame, hermetically sealed IP68/IP69K stainless steel loadcell				316 stainless steel removable weighing platform with 316 stainless steel frame, hermetically sealed IP68/IP69K stainless steel loadcell	
Safe Overload Capacity	150% of maximum capacity					
Stabilization Time	Within 1 second					
Operating Temperature Range	-10 °C to 40 °C					
Scale Dimensions (A x B x C x D x E x F)	250 x 250 x 106 x - x 129 x 545 mm		300 x 300 x 106 x - x 129 x 596 mm		500 x 400 x 137 x 80 x 129 x 767 mm	
Shipping Dimensions (L x W x H)	490 x 450 x 380 mm				1000 x 690 x 250 mm	
Approx. Net Weight	10 kg		11.2 kg		20 kg	21.2 kg
Approx. Shipping Weight	12 kg		14 kg		23 kg	24 kg

Outline Dimensions



Compliance

- **Metrology:** EN45501 (Scale: T11889; Indicator: TC11888; Load Cell: OIML R60/2000-DE1-06.02 / D09-06.20; OIML R60/2000-NL1-12.50 / TC7648)
- **Product Safety:** CAN/CSA C22.2 61010-1; UL61010-1; IEC/EN 61010-1
- **Electromagnetic Compatibility:** IEC/EN 61326-1 Class B, basic environments; FCC Part 15 Class A; Canada ICES-003 Class A
- **Food Safety:** ANSI/NSF 169, NSF/ANSI/3-A 14159-1
- **Ingress Protection:** IEC 60529 – IP68, ISO 20653 – IP69K
- **Compliance Marks:** CE
- **Other:** WEEE, RoHS

Accessories

Wi-Fi/Bluetooth Dongle i-DT61XW.....	30412537
Analog Output kit i-DT61XW.....	30424403
2 nd RS232/RS485/USB	
Device kit i-DT61XW.....	30424404
LC Extension Cable, 9 meters.....	30424409
LC Extension Cable, 3.5 meters.....	30803566
M16 Gland with Ferrite.....	30379716
Light Tower, 3 Colors, 243mm, IP65 (Requires 30097591).....	30424021
Discrete I/O with Relay (2 In/4 Out) i-DT61XW.....	30097591
Ethernet kit i-DT61XW.....	30429666
External power bank holder i-DT61XW (Requires external USB power bank).....	30572907
Cable RS232 i-DT61XW.....	80500552
Column Kit 260 mm 316 SS.....	30572908
Column Kit 670 mm 316 SS.....	30572909
Front Mounting kit 316 SS i-DT61PW.....	30626654
Pan 305 x 305 mm 304 SS.....	30427798
Pan 254 x 254 mm 304 SS.....	30427799
IR communication kit i-DT61PW.....	30572910
Wheel kit SS Defender Series.....	30616409
Alibi Memory i-DT61XW.....	80500503

OHAUS Europe GmbH

e-mail: ssc@ohaus.com
Tel: 0041 22 567 53 19
e-mail: tsc@ohaus.com
Tel: 0041 22 567 53 20

www.ohaus.com

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

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