



# Navigator® Series

Portable Scales



Navigator NVL



Navigator NVT



Navigator NV

## ***The Only Scale in its Class with Touchless Sensors That Free Up Your Hands!***

OHAUS raises the bar in value-oriented scales...again! The Navigator® series offers a unique combination of features, including touchless sensors, ultra-fast response time and superior overload protection for use in a wide variety of weighing applications. NTEP and Measurement Canada approved models meet or exceed Class III accuracy requirements

### ***Standard Features Include:***

- **Now Available In Three Durable Housing Sizes With Models To Fit Any Application**
- **Touchless Sensors**—The Navigator Series is designed with two touchless sensors that will free up your hands so you can focus on handling samples. The touch-free control of the zero, print, function or tare operations helps to avoid transferring sample residue to the keypad. In addition, the two sensors can be set up independently to control up to 36 combinations of operations
- **One Second Stabilization Time**—The Navigator Series is designed to accurately stabilize in less than one second to provide fast and accurate weighing results, improving operator efficiency, productivity and throughput.
- **Superior Overload Protection**—The Navigator Series is designed with a superior mechanical overload protection system that allows the scale to withstand loads up to 400% of its rated capacity. This prevents damage to the scale and helps it withstand undue shock or overloading. In addition, an integrated shipping lock further protects the weighing cell from damage during transportation or storage.
- **Multiple Application Modes**—The Navigator Series is designed for versatility. Multiple application modes such as counting, percent weighing, checkweighing, display hold and accumulation/totalization address a wide range of use in quality control, inventory management, shipping and receiving, recipes and formulation, portioning and other popular applications.

# Navigator® Series *Portable Scales*

**With Its Best-In-Class Combination of Features, Versatility and Performance, The OHAUS Navigator Offers a Wide Range of Use in Industrial, Food and Laboratory Weighing Applications.**

## **Unsurpassed Cleanliness**

- Designed with two touchless sensors that free up your hands, allowing you to focus on handling samples and keeping the scale free from contaminants. The touch-free control of tare, zero, print, function and display backlight helps to minimize touching the keypad, thereby avoiding cross-contamination or unwanted residue on or from the scale.
- A polished stainless steel platform, corrosion-free plastic housing and spill-resistant sub-assembly embodies a hygienic design that is easy to clean.
- The optional full-body in-use cover wraps over and around the housing and keypad to guard against spills, dust and contamination.

## **Unmatched Productivity**

- Amazing stabilization in less than one second to provide fast, accurate and repeatable weighing results; improving operator efficiency and increasing productivity.
- Includes an internal rechargeable lead acid battery that operates up to 100 hours (or over twelve 8-hour days) of normal use on a full charge. With maximized portability, the scale can be transported and used where power outlets are not readily available.
- A wave of the hand over the touchless sensors eliminates the extra effort or time to press the keys.
- A bright backlit LCD display provides optimum visibility in any lighting condition – indoors or out – with large digits and indicators that make it fast and easy to read the weighing results.

## **Unmatched Durability**

- Built to handle serious loads, the superior mechanical overload protection system enables the scale to safely bear loads up to 4 times its rated capacity.
- Constructed of a high-strength 304 type stainless steel platform and impact-resistant ABS plastic housing that helps the scale stand up to years of use.
- The touchless sensors minimize keypad use, reducing operational wear and tear.



Navigator NVT



Navigator NVL



Navigator NV



Navigator NV212

## Applications

(Applications available with any model)

### Laboratory and Research

Designed to be easy to clean, precise and simple to use in laboratory environments. Simple set up, a spill-resistant housing, percent weighing mode and security features make this the ideal solution for laboratory applications such as formulation, quality inspections, testing and experimentation.



### Industry and Manufacturing

Designed to be robust, fast and accurate for ideal use in light-medium duty industrial applications, including paint and ink mixing, packaging, sampling and parts counting. Up to 400% safe overload enhances protection of internal components, with an ultra-fast, one-second stabilization time to improve operator efficiency and productivity.



### Home Office, Commercial Business and Manufacturing

Designed to be tough, portable and reliable for ideal use in shipping and receiving, home office and warehouse environments. A display hold mode holds the weight for viewing that would otherwise be blocked by oversized packages. Battery operation, counting and checkweighing modes also expand range of use for hobbies, inventory management, inspection and quality control.



### Food and Portioning

Designed to be hygienic, low-maintenance and durable for ideal use in food service, portioning and pre-packaging. Weighing units such as lb, oz, lb:oz (including 1/8 fractional ounce), kg and g, and percent and checkweighing modes enhance its usefulness in behind-the-counter, prep station and kitchen environments.



General Specifications – Navigator Series

Stabilization Time	≤1 second
Tare Range	Full capacity by subtraction
AC Power	12VDC 0.42A AC adapter (included), 100-240V 0.25A 50-60Hz
Calibration	User-selectable external span or linearity calibration / Digital with external weight
Application Modes	Weighing, Percent Weighing, Parts Counting, Check Weighing, Display Hold, Accumulate/Totalize
Weighing Units*	Gram, Kilogram, Pound, Ounce (decimal or fractional), Pound:Ounce (decimal or fractional), Ounce Troy, Grain, Newton, Carat, Pennyweight, Hong Kong Tael, Taiwan Tael, Singapore Tael, Tical, Tola
Display Type	Backlit LCD: 6-digit 7-segment with white LED backlight
Display Size	0.78 in / 20 mm digits
Checkweigh Indicators	Over-Accept-Under LCD annunciators
Keypad	4 mechanical keys, raised and with tactile feedback plus 2 touchless sensors
Leveling Adjustment	Front-mounted level bubble with illumination / adjustable leveling feet with skid-resistant rubber pads
Overload Capacity	400% of rated capacity
Power Conservation	User-enabled auto power-off after 5 minutes of inactivity
Operating Conditions	50°F to 104°F / 10°C to 40°C at 20% to 85% relative humidity, non-condensing

\*NV212 no kg or lb units; NV511 / NVL511 no kg units

Standard Models – Navigator

Model	NV212	NV211	NV511	NV1101	NV2101	NV4101	NV5101	NV4000
Capacity x Maximum Displayed Readability	210 g x 0.01 g	210 g x 0.1 g	510 g x 0.1 g	1,100 g x 0.1 g	2,100 g x 0.1 g	4,100 g x 0.2 g	5,100 g x 0.5 g	4000g x 1g
	—	—	1.1 lb x 0.0005 lb	2.4 lb x 0.0005 lb	4.6 lb x 0.0005 lb	9 lb x 0.0005 lb	11.2 lb x 0.002 lb	9lb x 0.005lb
	7.4 oz x 0.0005 or 1/8 oz	7.4 oz x 0.0005 or 1/8 oz	38.8 oz x 0.005 or 1/8 oz	7.4oz x 0.005 or 1/8oz	74oz x 0.005 or 1/8oz	144.6oz x 0.01 or 1/8oz	179.9oz x 0.02 or 1/8oz	144.6oz x 0.05 or 1/8oz
			—	1.1 kg x 0.0001 kg	2.1 kg x 0.0001 kg	4.1 kg x 0.0002 kg	5.1 kg x 0.0005 kg	4kg x 0.001kg
Displayed Resolution (g)	1:21000	1:2100	1:5100	1:11000	1:21000	1:20500	1:10200	1:4000
Repeatability / Linearity	0.01 g / ±0.02 g	0.1g/±0.2g	0.1 g / ±0.2 g	0.1 g / ±0.2 g	0.1 g / ±0.2 g	0.2 g / ±0.4 g	0.5 g / ±1 g	1g/±2g
Span Calibration Mass <sup>1</sup>	200 g	200g	300 g	500 g	1 kg	2 kg	3 kg	4000g
Linearity Calibration Mass <sup>1</sup>	100, 200 g	100,200g	300, 500 g	500 g, 1 kg	1, 2kg	2, 4kg	3, 5kg	2,4kg
Battery Power	4 AA (LR6) batteries (not supplied)							
Pan Size (W x D)	4.7 in / 120 mm (dia.)		7.5 x 5.4 in / 190 x 138 mm					
Scale Dimensions (W x D x H)	8 x 8.4 x 2.3 in / 204 x 212 x 58 mm							
Shipping Dimensions (W x D x H)	12 x 10 x 5.3 in / 305 x 255 x 134 mm							
Net Weight	3.1 lb / 1.4 kg							
Shipping Weight	4.2 lb / 1.9 kg							

<sup>1</sup>Calibration weights not included; contact OHAUS to purchase separately

Standard Models – Navigator XL

Model	NVL511/1	NVL1101/1	NVL2101/1	NVL5101/1	NVL10000/1	NVL20000/1
Capacity x Maximum Displayed Readability	510 g x 0.1 g	1,100 g x 0.1 g	2,100 g x 0.1 g	5,100 g x 0.5 g	10,000 g x 1 g	20,000 g x 1 g
	1.1 lb x 0.0005 lb	2.4 lb x 0.0005 lb	4.6 lb x 0.0005 lb	11.2 lb x 0.002 lb	22 lb x 0.005 lb	44 lb x 0.005 lb
	18 x 0.005 or 1/8 oz	38.8 x 0.005 or 1/8 oz	74 x 0.005 or 1/8 oz	179.9 x 0.02 or 1/8 oz	352 x 0.05 or 1/8 oz	705.5 x 0.05 or 1/8 oz
	—	1.1 kg x 0.0001 kg	2.1 kg x 0.0001 kg	5.1 kg x 0.0005 kg	10 kg x 0.001 kg	20 kg x 0.001 kg
Displayed Resolution (g)	1:5100	1:11000	1:21000	1:10200	1:10000	1:20000
Repeatability / Linearity	0.1 g / ±0.2 g	0.1 g / ±0.2 g	0.1 g / ±0.2 g	0.5 g / ±1 g	1 g / ±2 g	1 g / ±2 g
Span Calibration Mass <sup>1</sup>	300 g	1 lb / 500 g	2 lb / 1 kg	5 lb / 3 kg	10 lb / 5 kg	20 lb / 10 kg
Linearity Calibration Mass <sup>1</sup>	300 g, 500 g	1 lb, 2 lb 500 g, 1000 g	2 lb, 5 lb 1 kg, 2 kg	5 lb, 10 lb 3 kg, 5 kg	10 lb, 20 lb 5 kg, 10 kg	20 lb, 50 lb 10 kg, 20 kg
Battery Power	Internal rechargeable lead acid battery, 6V1.2AH (100-hour typical operation with 12-hour full charge), or 4C (LR14) batteries (not included)					
Pan Size (W x D)	7.6 x 8 in / 194 x 203 mm					
Scale Dimensions (W x D x H)	8 x 11.1 x 2.9 in / 204 x 282 x 74 mm					
Shipping Dimensions (W x D x H)	16 x 12.8 x 6.7 in / 390 x 325 x 170 mm					
Net Weight	4.3 lb / 2.0 kg					
Shipping Weight	6.1 lb / 2.8 kg					

<sup>1</sup>Calibration weights not included; contact OHAUS to purchase separately

# Features (Navigator NVT shown)

## Internal Rechargeable Battery

Enhance mobility by being able to work anywhere! The sealed lead acid battery operates up to 100 hours on a full charge to minimize battery replacement and reduce maintenance costs.



## Security Bracket

The integral security bracket accommodates the optional locking cable to secure the scale to a workstation.



## Optional RS232, USB or Ethernet Interface Kits

These easily installed user options allow connecting the scale to peripheral devices for printing and/or data collection. The connecting cable is integrated in each kit, eliminating the need for additional interface cables.



## Backlit Display

The bright backlit LCD provides optimal visibility in any lighting condition. Used indoors or outdoors, the large digits and indicators also make the weighing results fast and easy to read.



## Transportation Lock

The transportation lock prevents undue pressure on the load cell to ensure the scale is received in operational condition. Unlock before use and lock when moving around different locations.

## Skid-Resistant Leveling Feet

Independently adjustable, the feet also have skid-resistant rubber pads to provide superior stability, and vibration resistance.

## Touchless Sensors

Two touchless sensors can be set up independently to operate up to 36 combinations of operations without touching the keys. Prolongs the life of the keys and keeps the scale clean. Sensors control: Tare, Zero, Print, Function and Display Backlight.

## Menu Lock Switch

A menu lock switch acts as an extra supervisor control to prevent unwanted changes to protected scale settings. Simply set up the scale to meet your specific needs then slide the lock switch to avoid changes and calibration.

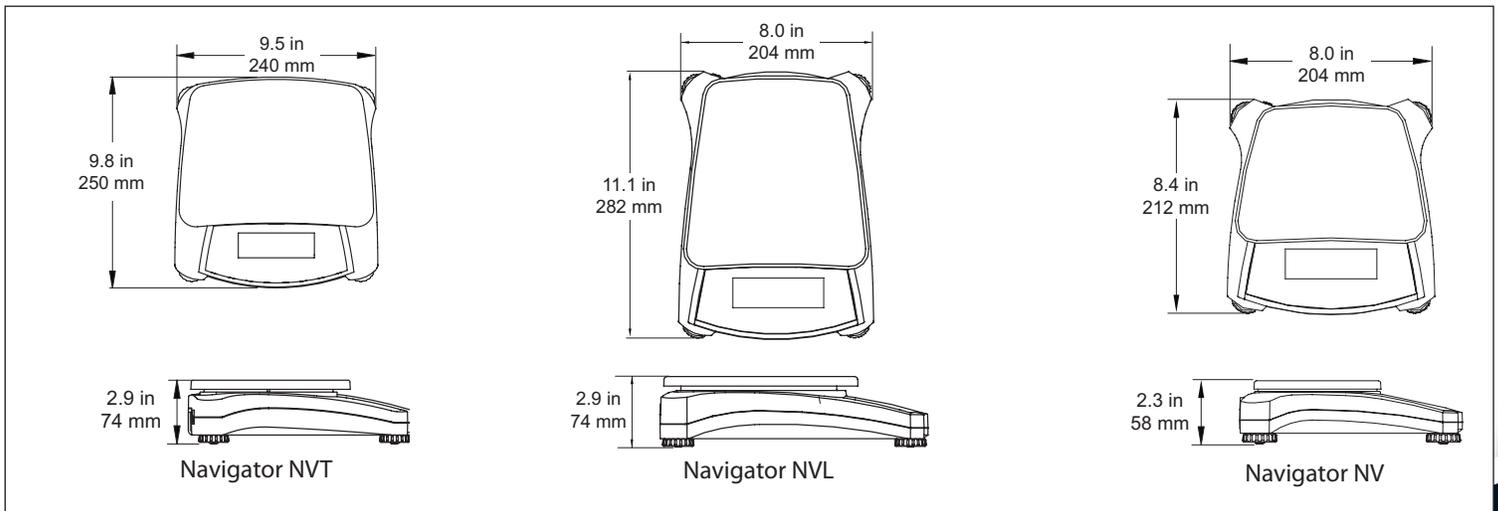


## Illuminated Up-front Level Indicator

The integral level bubble is illuminated at power up to aid in visibility, and serves as a reminder to level the scale prior to use.



## Outline Dimensions



# Navigator® Series Portable Scales

Standard Models – Navigator XT

Model	NVT1601/1	NVT3201/1	NVT6401/1	NVT10001/1	NVT16000/1
Capacity x Maximum Displayed Readability	1,600 g x 0.1 g	3,200 g x 0.2 g	6,400 g x 0.5 g	10,000 g x 0.5 g	16,000 g x 1 g
	3.2 lb x 0.0002 lb	6.4 lb x 0.0005 lb	16 lb x 0.001 lb	22 lb x 0.002 lb	32 lb x .002 lb
	51 oz x 0.005 or 1/8 oz	102 oz x 0.01 or 1/8 oz	256 oz x 0.02 or 1/8 oz	352 oz x 0.05 or 1/8 oz	515 oz x 0.05 or 1/8 oz
	1.6 kg x 0.0001 kg	3.2 kg x 0.0002 kg	6.4 kg x 0.0005 kg	10 kg x 0.0005 kg	16 kg x 0.001 kg
Displayed Resolution (g)	1:16000	1:16000	1:16000	1:20000	1:16000
NTEP and Measurement Canada Approved Models	NVT1601N/1	NVT3200N/1	NVT6400N/1		NVT16000N/1
Capacity x Legal for Trade Readability (e)	1,600 g x 0.5 g	3,200 g x 1 g	6,400 g x 2 g		16,000 g x 5 g
	3.2 lb x 0.001 lb	6.4 lb x 0.002 lb	16 lb x 0.005 lb		32 lb x 0.01 lb
	51 oz x 0.02 oz	102 oz x 0.05 oz	256 oz x 0.1 oz		512 oz x 0.2 oz
	46 ozt x 0.02 ozt	93 ozt x 0.05 ozt	233 ozt x 0.1 ozt		466 ozt x 0.2 ozt
	8,000 ct x 5 ct	16,000 ct x 5 ct	32,000 ct x 10 ct		80,000 ct x 50 ct
	1.6 kg x 0.0005 kg	3.2 kg x 0.001 kg	6.4 kg x 0.002 kg		16 kg x 0.005 kg
Legal for Trade Resolution (g)	1:3200	1:3200	1:3200		1:3200
Repeatability / Linearity	0.1g / ±0.2g	0.2g / ±0.4g	0.5g / ±1g	0.5g / ±1g	1g / ±2g
Span Calibration Mass1	2 lb / 1 kg	5 lb / 2 kg	10 lb / 5 kg	10 lb / 5 kg	20 lb / 10 kg
Linearity Calibration Mass1	2 lb, 3 lb 1 kg, 1.5 kg	2 lb, 5 lb 2 kg, 3 kg	10 lb, 15 lb 3 kg, 6 kg	10 lb, 20 lb 5 kg, 10 kg	20 lb, 30 lb 10 kg, 15 kg
Battery Power	Internal rechargeable lead acid battery, 6V1.2AH (100-hour typical operation with 12-hour full charge), or 4C (LR14) batteries (not included)				
Pan Size (W x D)	9 x 6.9 in / 230 x 174 mm				
Scale Dimensions (W x D x H)	9.5 x 9.8 x 2.9 in / 240 x 250 x 70 mm				
Shipping Dimensions (W x D x H)	15.2 x 13.2 x 6.7 in / 385 x 335 x 170 mm				
Net Weight	4.3 lb / 2 kg				
Shipping Weight	6.1 lb / 2.8 kg				



## Other Standard Features and Equipment

Integral security bracket, stability indicator, software overload/underload indicators, low battery indicator, auto shut-off, AC adapter, user selectable backlight settings, user selectable printing options, user selectable communications settings.

### Accessories

<b>RS232 Interface Kit, Navigator Series</b> .....	83032107
<b>USB Interface Kit, Navigator Series</b> .....	83032108
<b>Ethernet Interface Kit, Navigator Series</b> .....	83032109
<b>In Use Cover, Navigator NV</b> .....	83032223
<b>In Use Cover, Navigator NVL</b> .....	83032222
<b>In-Use Cover, Navigator NVT</b> .....	83032221
<b>Carrying Case, Navigator NV</b> .....	83032226
<b>Carrying Case, Navigator NVL</b> .....	83032225
<b>Carrying Case, Navigator NVT</b> .....	83032224
<b>Printers, Cables and Calibration Weights</b> .....	Contact OHAUS for full selection

### Compliance

- Electromagnetic Compatibility: C-Tick, CE Class B, FCC Class B, ICES-003 Class B
- Safety (AC adaptors only): C-Tick, CCC, CE, cCSAus, KTL, PSE, TUV-GS  
Compliant to Directive 2002/96/EC on waste electrical and electronic equipment (WEEE)  
Compliant to Directive 2002/95/EC on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)
- Quality: OHAUS quality management system registered to ISO 9001:2008

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**\*ISO 9001:2008**  
Registered Quality  
Management System

