Nexus™ Horizontal Clean Bench

Introduction

The **Nexus Horizontal Clean Bench** rethinks everything you've come to know about laminar airflow enclosures. Designed to be efficient, intelligent and reliable, the Nexus protects your non-hazardous applications with horizontal unidirectional (laminar) ISO Class 4 air across the work area. Combined with an easily cleanable interior and CAP™ airflow, your work is always protected from contamination.

The **Nexus OS** gives full user control over the enclosure. The 5" touchscreen interface features an intuitive home screen for monitoring airflow and filter life. A quick swipe accesses everything else – from user preferences to system data logs and certification records.

Nexus™ Horizontal Clean Bench

Advanced Design

Complete Protection

- Maximum cleanability is achieved with easily wipeable, coved corners and tempered glass that stands up to any disinfectant

- Stainless steel models offer a full 304 stainless steel interior, work surface, and diffuser for maximum corrosion protection. The easily-removable diffuser allows for deep cleaning with ease

- Unidirectional ISO Class 4 airflow is 3rd party validated and cleaner than standard ISO Class 5 laminar airflow workstations

- A long-life HEPA filter (99.99+%) and easy-change prefilter keep your work area clean and lasting

Constant Airflow Profile™

The first of its kind, CAP™ technology delivers precision airflow within 2% of its calibration — at all times. Proprietary algorithms drive the electronically commutated motor (ECM blower) to deliver perfect airflow and quiet operation.

Pass-throughs & Connections

Dual cord pass-throughs and four laser-etched service fixture locations provide flexibility and maximum cleanability.

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Features & Benefits

Superior clean air
Particle counts in the work area conform to ISO 14644–1 and 2 providing ISO Class 4 conditions.

Constant Airflow Profile™
CAP technology monitors and maintains airflow as filters load to ensure samples are protected.

ECM blower
Advanced technology uses minimal energy, reduces noise and provides reliably constant airflow.

Night-Smart™
Reduces fan speed during off hours to conserve energy and help maintain a clean work area.

Adaptive side panels
Allow passage of equipment cables and addition of service fixtures.

Quality construction
Durable materials, including safety glass and steel, withstand routine disinfection.

Nexus OS™
5" touchscreen display provides status and performance information.

Multiple configurations

Standard — epoxy coated steel interior with PVC work surface.
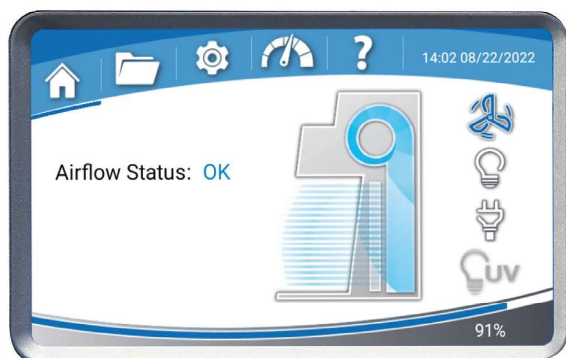Stainless Steel — 304 stainless steel interior and work surface.

Quality filtration
HEPA filters are 99.99+% efficient and provide ISO Class 4 air. 99.999% ULPA filters available.

Optional UV light
Germicidal UV lamp (254 nm) with safety interlocked protection shade provides secondary decontamination.

Nexus Operating System

Intuitive Software
Easy to use, familiar features allow quick access to the blower, light and UV functions.

Filter Monitor
HEPA filter life continuously displayed on home screen. Alerts when nearing end of use.

Practical Features
Includes experiment timer, user and admin passwords, display settings, certification logs and maintenance records.

Intelligent Display
Intuitive graphics ensure clear communication of operational status.

Alerts & Alarms
Full sentence visual and audible signals notify users of unsafe airflow conditions.

Connectivity
Easily export system performance records via the USB in CSV or PDF format for easy record keeping.

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Ordering Information

Catalog Number Configuration:

Use this key to configure the seven digit catalog number to order your Nexus Horizontal Clean Bench.

$$5\ 3\ \square\ \square\ \square\ \square\ \square$$

Select the **WIDTH**. This is the third digit of your catalog number.

3 = 3'   **4** = 4'   **5** = 5'   **6** = 6'   **8** = 8'

Select the working **DEPTH** of your enclosure. This is the fourth digit of your catalog number.

0 = 21"   **1** = 26"

Select the **MATERIAL** for the **INTERIOR, UV OPTION AND BASE STAND**. This is the fifth digit of your catalog number.

Standard Interior:

0 = Bench Only

2 = Includes UV

5 = Includes Base Stand

7 = Includes UV, Base Stand

Stainless Steel Interior:

1 = Bench Only

3 = Includes UV

6 = Includes Base Stand

8 = Includes UV, Base Stand

Select the **ELECTRICAL CONFIGURATION** and **OUTLET TYPE**. These are the sixth and seventh digits of your catalog number.

00 = 115V, 15/20A, 60 Hz, with plug for North America

10 = 230V, 50/60 Hz, with plug for North America

30 = 230V, 50/60 Hz, with Schuko plug

40 = 230V, 50/60 Hz, with plug for China/Australia

50 = 230V, 50/60 Hz, with plug for Great Britain (UK)

70 = 230V, 50/60 Hz, with plug for India

Outlet Configurator

115V, 15A for North America (3' and 4' widths)	115V, 20A for North America (5', 6' and 8' widths)	230V for North America	230V Schuko	230V for China/Australia	230V for Great Britain (UK)	230V for India

Technical Specifications

Nominal Width/Work Surface Depth	Electrical Requirements (Dedicated, non-GFI outlet required)		Shipping Weight	Shipping Weight with Base Stand
	115V	**230V**		
3' x 21"	12A	6A	275 lbs. (125 kg)	335 lbs. (152 kg)
3' x 26"			290 lbs. (132 kg)	350 lbs. (159 kg)
4' x 21"			396 lbs. (180 kg)	474 lbs. (215 kg)
4' x 26"			411 lbs. (186 kg)	489 lbs. (222 kg)
5' x 21"	16A	8A	531 lbs. (241 kg)	648 lbs. (294 kg)
5' x 26"			564 lbs. (256 kg)	681 lbs. (309 kg)
6' x 21"			646 lbs. (293 kg)	783 lbs. (355 kg)
6' x 26"			679 lbs. (308 kg)	816 lbs. (370 kg)
8' x 21"			792 lbs. (359 kg)	948 lbs. (430 kg)
8' x 26"			822 lbs. (373 kg)	978 lbs. (444 kg)

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Specifications

All models feature:
- Supply HEPA filter, 99.99% efficient at 0.3 microns, 99.999% @ 0.12 micron ULPA filter available
- Electronically Commutated Motor (ECM)
- Unidirectional, laminar airflow
- ❊ Constant Airflow Profile™ (CAP) airflow monitoring system
- ❊ Nexus Operating System and full color, 5" touchscreen featuring:
  - Simplified home screen for easy start up and shut down operations
  - Night-Smart™ for idling the blower when the system isn't in use
  - Full operational, maintenance and certification logs for detailed record keeping
  - Numeric and visual HEPA Filter Life graphic for easy HEPA filter monitoring
  - Password security lock (optional activation) that requires user or admin password to operate the cabinet
  - Status line for alarm conditions and alerts to warn when filter life diminishes to 20% and 10% before alarming at 0%
  - Interval/elapsed timer for experiment monitoring
  - UV light timer (on models with UV)
  - 8 Languages
- Spill-Stopper™ design protects HEPA filter from spills
- USB port for data record export
- Remote connectivity via Ethernet port
- Prefilters to help extend HEPA filter life
- Bright, glare-free LED lighting

- ❊ Tempered safety glass and stainless steel side walls offer one utility pass-through port and two service fixture punch-outs
- ❊ Electrical outlet(s)-ceiling mount, flat stainless steel cover
  - R side on 3' and 4' models, right and left side on 5'–8' models
  - 115V GFCI, double receptacle, maximum amperage draw 5A.
  - 230V, single receptacle, maximum amperage draw 3A.
- ❊ 30.2" interior height
- Optic White epoxy-coated steel
- Nominal face velocity 85 fpm (0.43 m/s)
- 10' (3 m) power cord with plug
- Five year warranty

Models conform to the following standards:
- ISO Class 4 (Grade A) per ISO 14644–1 & 2
- UL Standard 61010–1
- CAN/CSA 22.2 No. 61010–1
- CE and UKCA Mark (230V models)

Options include:
- Standard Option: Epoxy coated steel interior and non-shedding PVC work surface
- Stainless Steel Option: 304 stainless steel interior and stainless steel work surface
- 21" or 26" interior depth
- 254 nm UV lamp with safety interlocked UV protection screen
- Unassembled, Optic White epoxy coated steel, non-welded telescoping base stand with leveling feet
- Hydraulic base stand: See page 16

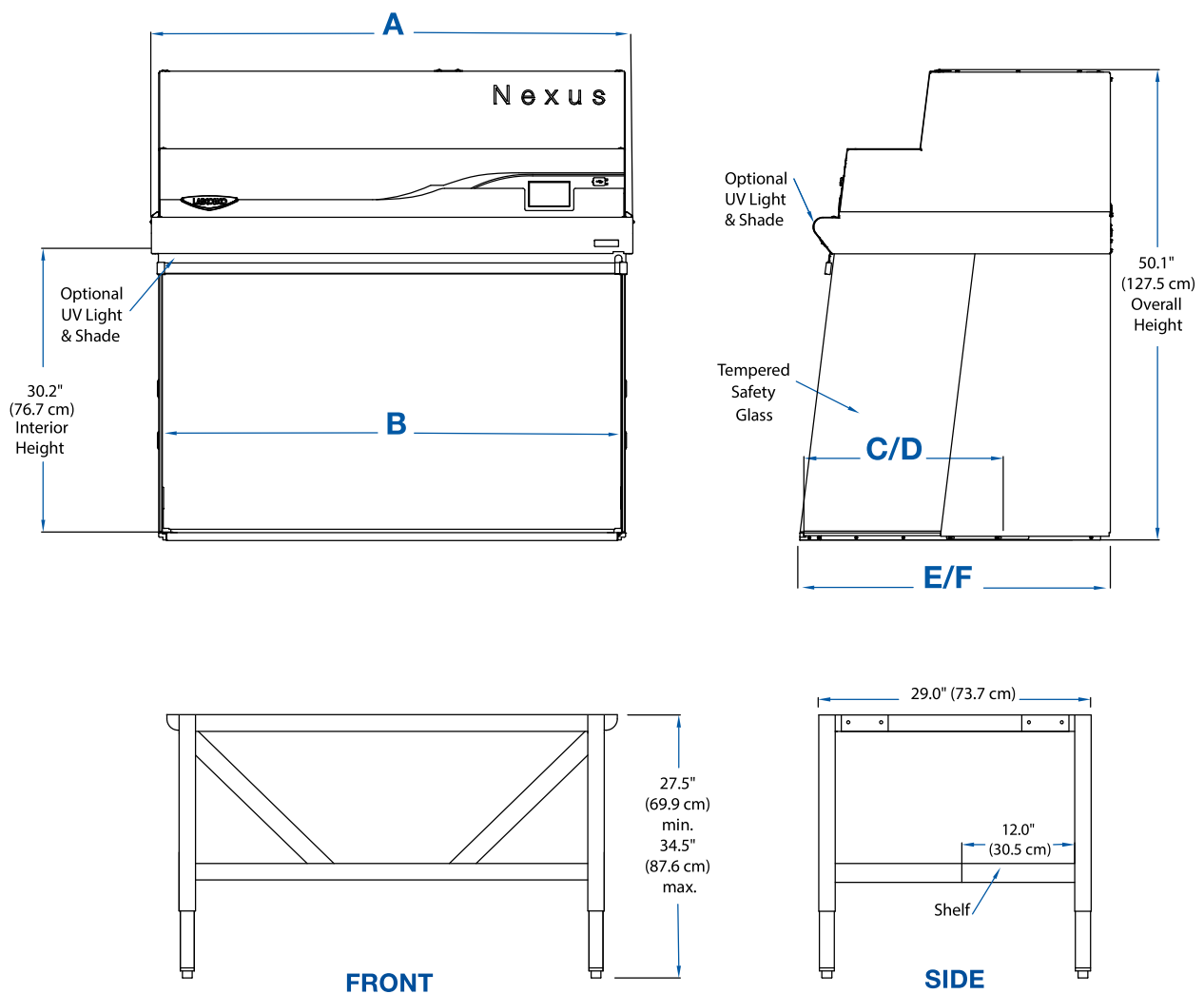### All models require (not included):
- Supporting base (if non-welded stand option is not selected)

❊ Labconco exclusive feature

Nexus™ Horizontal Clean Bench

Dimensional Data

Nominal Width	A	B	21" Depth C-Interior	26" Depth D-Interior	21" Depth E-Exterior	26" Depth F-Exterior
3'	39.4" (100.1 cm)	37.0" (93.4 cm)	21.2" (53.8 cm)	26.2" (66.6 cm)	33.2" (84.3 cm)	38.2" (97.0 cm)
4'	51.4" (130.6 cm)	49.0" (124.5 cm)	21.2" (53.8 cm)	26.2" (66.6 cm)	33.2" (84.3 cm)	38.2" (97.0 cm)
5'	63.4" (161.0 cm)	61.0" (155.0 cm)	21.2" (53.8 cm)	26.2" (66.6 cm)	33.2" (84.3 cm)	38.2" (97.0 cm)
6'	75.2" (191.1 cm)	73.0" (185.4 cm)	21.2" (53.8 cm)	26.2" (66.6 cm)	33.2" (84.3 cm)	38.2" (97.0 cm)
8'	101.0" (256.6 cm)	98.6" (250.4 cm)	21.2" (53.8 cm)	26.2" (66.6 cm)	33.2" (84.3 cm)	38.2" (97.0 cm)

A

Nexus

Optional UV Light & Shade

30.2" (76.7 cm) Interior Height

B

Optional UV Light & Shade

Tempered Safety Glass

50.1" (127.5 cm) Overall Height

C/D

E/F

27.5" (69.9 cm) min. 34.5" (87.6 cm) max.

FRONT

29.0" (73.7 cm)

12.0" (30.5 cm)

Shelf

SIDE

Nexus™ Horizontal Clean Bench

Accessories

IV Bar Kit. Includes IV bar, mounting hardware and four hangers (two short and two long). **Installation required.**

Catalog Number	Bench Width	Quantity Required	Shipping Weight
3697500	3'	1	4.0 lbs. (1.8 kg)
3697500	4'	1	4.0 lbs. (1.8 kg)
3697501	5'	1	4.0 lbs. (1.8 kg)
3697500	6'	2	6.0 lbs. (2.7 kg)
3697500	8'	2	6.0 lbs. (2.7 kg)

8022000—Logic Cart. Compact storage for common supplies that takes up minimal space. Two inch diameter casters and handle cutouts allow easy movement while working. Right side compartments accommodate longer supplies like serological pipettes. Top compartment with front panel cutouts for wipes and gloves. Single storage drawer and open storage area. Constructed of corrosion-resistant white HDP and ABS that is easy to clean. Overall dimensions: 25.0" w x 19.0" d x 27.0" h (64 x 48 x 69 cm). Shipping weight 71 lbs. (32 kg)

3747500—Service Fixture Kit. Includes serrated hose tip with ball valve, quarter turn control handle and hardware. Mounts on left or right side interior. Benches are factory-prepared for up to four fixtures. **Installation required**. Shipping weight 2.0 lbs. (0.9 kg)

5322300—Nexus Airflow Sensor. Displays airflow velocity on touchscreen display. 5', 6' and 8' models require two sensors. Kit includes the sensor, all hardware needed and installation/calibration instructions. **Installation and certifier calibration required.** Shipping weight 2.0 lbs. (0.9 kg)

5321400—Nexus Remote Communication Board. Kit includes three dry contact relays, USB data output, RS-232 RJ45 data output and an Ethernet pass-through for easy Ethernet connection on the back of the horizontal clean bench. **Installation required**. Shipping Weight 1.0 lb. (0.5 kg)

5190100—Caster Kit. Optic White caster kit for telescoping base stand includes four 5" (12.7 cm) diameter, non-marking polyurethane casters with toe locks. **Installation required**. Shipping weight 10 lbs. (4.5 kg)

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Accessories

5328800—Storage Bin Kit. Organization for syringes, IV bags and other consumables. Mount underneath the work surface of the Nexus. Kit includes one bin and bracket with mounting hardware. Internal bin dimensions: 10" w x 7" d x 6" h (25.4 x 17.8 x 15.2 cm). Compatible with Nexus telescoping and hydraulic base stands. **Installation required**. Shipping weight 7.0 lbs. (3.2 kg)

Bench Width	Max Number of Kits
3'	2
4'	3
5'	4
6'	5
8'	7

Replacement Prefilters. Disposable prefilters trap large particles to extend HEPA filter life. MERV 8 rating. Labconco recommends changing every 3 months, depending on room cleanliness. **Installation required.**

Bench Width	Part Number(s) Required	Quantity Required
3'	5326800	2
4'	5326801	2
5'	5326800	2
	5326801	1
6'	5326801	3
8'	5326802	2
	5326801	2

3689700—Ergonomic Chair. 4-way articulating seat for personalized comfort. ISO Class 6 clean room compatible. Seat height adjusts from 19" to 26" (48–66 cm). Five-leg composite base with resistance casters. 24.4" (62.0 cm) wide. Black vinyl upholstery. ⚠ **WARNING:** Cancer - P65Warnings.ca.gov (California only). Shipping weight 43 lbs. (19.5 kg)
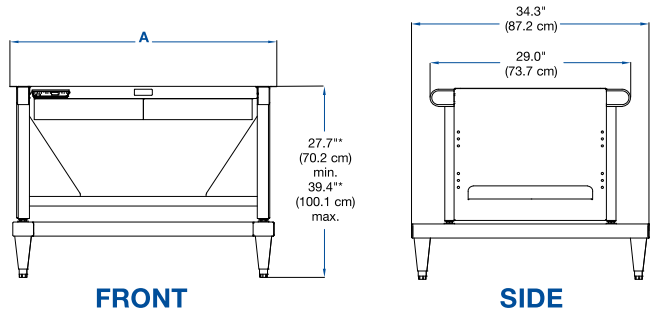
3746000—Adjustable Footrest. Ergonomic design reduces strain and fatigue while working. 18.5" w x 11.5" d x 8.0" h (47 x 29 x 20 cm). Shipping weight 6.0 lbs. (2.7 kg)

5190200—Seismic Kit, Telescoping Base Stand. Secures telescoping base stand to the floor. Includes stainless steel brackets and hardware for attachment to stand. **Floor hardware and installation required**. Shipping weight 22 lbs. (10.0 kg)

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Hydraulic Base Stand

FRONT

34.3"
(87.2 cm)

29.0"
(73.7 cm)

27.7"*
(70.2 cm)
min.
39.4"*
(100.1 cm)
max.

SIDE

Nominal Width	A	Shipping Weight
3'	38.6" (98.0 cm)	178 lbs. (81 kg)
4'	50.6" (128.5 cm)	227 lbs. (103 kg)
5'	62.6" (159.0 cm)	261 lbs. (118 kg)
6'	74.6" (189.5 cm)	295 lbs. (134 kg)

*Casters add 0.5" to overall height and up to 5.2" to overall width/depth depending on wheel orientation.

Standard features
- Support loads up to 1,000 pounds (454 kg)
- Durable epoxy-coated Optic White steel frame
- Infinitely adjustable for working heights of 28–40" (71–101.6 cm)
- Four user-programmable memory positions
- Leveling feet or 5" (12.7 cm) diameter easy-clean casters with toe locks*
- Front-accessible up/down switch, right or left side compatible
- Programmable safety stops to limit upper and lower travel

5190300—Seismic Kit, Hydraulic Base Stand. Secures hydraulic base stand to floor. Includes stainless steel brackets and hardware for attachment to stand. **Floor hardware and installation required.** Shipping weight 12 lbs. (5.4 kg)

Catalog Number Configurator:
Use this key to configure the seven digit catalog number to order your Nexus Hydraulic Base Stand.

5 1 8 ☐ ☐ ☐ ☐

Select the **TYPE OF FEET** required. This is the fourth digit of your catalog number.

0 = Leveling Feet   **1** = Casters

Select the **NOMINAL STAND WIDTH**. This is the fifth digit of your catalog number.

3 = 3'   **4** = 4'   **5** = 5'   **6** = 6'

Select the **ELECTRICAL CONFIGURATION** and **PLUG TYPE**. These are the sixth and seventh digits of your catalog number.

00 = 115V, 15A, 60 Hz, with plug for North America
10 = 230V, 50/60 Hz, with plug for North America
30 = 230V, 50/60 Hz, with plug for Schuko plug
40 = 230V, 50/60 Hz, with plug for China/Australia
50 = 230V, 50/60 Hz, with plug for Great Britain (UK)
70 = 230V, 50/60 Hz, with plug for India

Plug Configurations

115V, 15A for North America	230V for North America	230V Schuko	230V for China/Australia	230V for Great Britain (UK)	230V for India