LORDERAN

TECHNICAL DATASHEET
DS-CB-H-EN · REV. B · NOV 2026

CLEAN AIR EQUIPMENT

5 / 6 ft Horizontal Laminar Flow Hood

Clean air that flows toward you — an **H14 HEPA** across the back wall, an **ISO Class 5** work zone, 5 or 6 ft wide, on a touch screen.

MODELS

- CB-H1500
- CB-H1800





1500 MM



1800 MM

ISO 5 CLASS 100 WORK ZONE	**99.995 %** HEPA H14 AT 0.3 MM	**0.2–0.45 m/s** AIRFLOW VELOCITY	**≤ 65 dB(A)** NOISE
≤ 0.5 CFU PER 30 MIN PLATE	**≤ 5 µm** VIBRATION, RMS	**1–3** OPERATORS	**3 years** WARRANTY

01 Self-compensating airflow
Velocity stays steady as the filter loads.

02 Scheduled and one-touch UV
Automatic start, shut-down and UV disinfection.

03 10° inclined front
A wider view, comfortable lighting and legroom.

APPLICATIONS

Plant tissue culture · Media preparation · Electronics & optics · Sterile compounding

3-year warranty
Major defects: full refund or replacement.

Free DDP shipping
Duties paid, no surprise import charges.

30-day returns
Most new, unopened items.

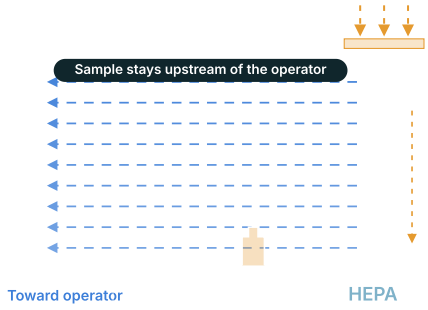
PRODUCT OVERVIEW

Clean air that flows toward you

A horizontal laminar flow clean bench with touch-screen control. A HEPA (H14) filter across the back wall sends clean air straight over the work surface toward you, so your sample always sits **upstream of your hands and the room**.

A pre-filter catches large particles, then the H14 HEPA filter cleans the air before it crosses the work surface in parallel streams. The airflow compensates itself as the filter loads, so the work zone stays at ISO Class 5.

Horizontal flow. Sample sits upstream of the operator; clean air leaves through the front opening.



HOW IT WORKS

01 Pre-filter
Initial-effect filter catches large particles and protects the HEPA filter.

02 HEPA H14
≥ 99.995 % at 0.3 µm across the back wall.

03 Horizontal flow
Parallel streams from back to front at 0.2–0.45 m/s.

04 Self-compensation
Blower adjusts as the filter loads to hold velocity.

05 Alarms
High filter pressure and filter replacement warnings.

CLEAN GRADE
ISO 5
Class 100 work zone

AIRFLOW
0.2–0.45 m/s
self-compensating

NOISE
≤ 65 dB(A)
energy-efficient blower

MICROBIAL
≤ 0.5 CFU
per 30 min settle plate

CLEAN-AIR VOLUME

$$Q = v \times A$$

Air volume = face velocity × filter face area. 1 m/s across 1 m² moves 3,600 m³/h of HEPA-filtered air.

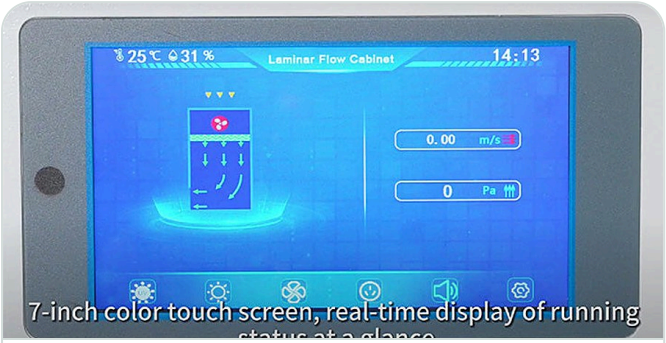
Sample protection only
A laminar flow cabinet protects the work, not the operator. Use a biosafety cabinet for hazardous material.

Keep upstream clean
Nothing should sit between the filter and the sample; hands and tools go downstream.

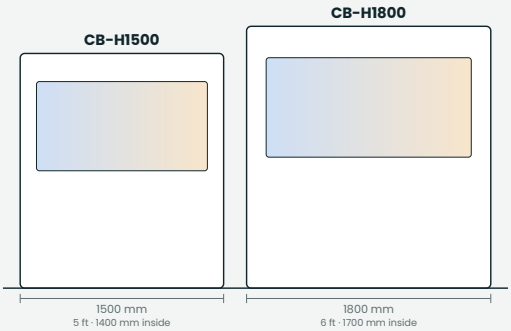
Purge before work
Run the fan for several minutes before starting so the zone is flushed with filtered air.

FEATURES

Designed for clean, effortless work



Touch-screen control panel



01 Control

- **Touch-screen controller**
- **Appointment timing**: automatic start-up, shut-down and UV
- **One-touch** UV disinfection at 253.7 nm

02 Clean air

- **HEPA H14** + initial-effect pre-filter
- ≥ 99.995 % at 0.3 µm
- **Self-compensating** airflow, 0.2–0.45 m/s
- Filter pressure and replacement alarms

03 Ergonomics

- **10° inclined front** for view, light and legroom
- Work surface height 750 mm
- 5 ft for 1–2 users · 6 ft for 1–3 users
- Base stand included

04 Efficiency

- Energy-efficient blower
- Noise **≤ 65 dB(A)**
- Vibration ≤ 5 µm rms
- 110 V and 220 V versions

TECHNICAL SPECIFICATIONS

Technical specifications

Parameter	CB-H1500	CB-H1800
DIMENSIONS		
External Size(W*D*H)	1500*800*1730mm	1800*800*1930mm
Internal Size(W*D*H)	1400*500*600mm	1700*500*730mm
Work Surface Height	750mm	
Net Weight	220kg	260kg
Gross Weight	299kg	355kg
Package Size(W*D*H)	1760*1010*1340mm	2060*1010*1500mm
PERFORMANCE		
Flow Mode	Horizontal Flow	
Number of Users	1~2	1~3
Airflow Velocity	0.2 m/s～0.45 m/s	
Noise	≤65dB(A)	
Vibration	≤5μm(rms)	
Safety	ColoniesNumber ≤ 0.5CFU/30min	
Clean Grade	ISOLevel 5（100 levels）	
Filtration Efficiency	HEPA (H14) filter, filtration efficiency for 0.3μm particle≥99.995%	
ELECTRICAL		
Rated Power	1000VA (including operating area socket load 500VA)	2000VA (including operating area socket load 500VA)

Specifications from the LORDERAN product documentation. Subject to change without notice for product improvement.

AT A GLANCE

MODEL

CB-H1500 · 5 ft

External size
1500 × 800 × 1730 mm

Work zone
1400 × 500 × 600 mm

Rated power
1000 VA incl. 500 VA sockets

Net weight
220 kg

MODEL

CB-H1800 · 6 ft

External size
1800 × 800 × 1930 mm

Work zone
1700 × 500 × 730 mm

Rated power
2000 VA incl. 500 VA sockets

Net weight
260 kg

AIR CLEANLINESS · ISO 14644-1 LIMITS, PARTICLES PER M³

Class	≥ 0.1 µm	≥ 0.2 µm	≥ 0.3 µm	≥ 0.5 µm	≥ 1 µm
ISO 5 (Class 100)	100,000	23,700	10,200	3,520	832
ISO 6	1,000,000	237,000	102,000	35,200	8,320
ISO 7	—	—	—	352,000	83,200
ISO 8	—	—	—	3,520,000	832,000

Maximum permitted concentration of particles equal to or larger than each size (ISO 14644-1:2015). A HEPA unidirectional work zone is typically ISO Class 5.

WHICH CLEAN-AIR CABINET?

	Laminar flow cabinet	Class II biosafety cabinet	Fume hood
Protects the sample	Yes	Yes	No
Protects the operator	No	Yes	Yes
Protects the room	No	Yes (filtered exhaust)	Yes (ducted exhaust)
Typical work	Sterile, non-hazardous preparation	Infectious or hazardous biological material	Volatile chemicals

General guidance; choose by the hazard of the material, not only by the cleanliness you need.

APPLICATIONS & SERVICE

Where it works, and what comes with it

Plant tissue culture
Sterile transfers upstream of the operator.

Media preparation
Pouring plates and dispensing in clean air.

Electronics & optics
Particle-free assembly and inspection.

Sterile compounding
Non-hazardous preparations in an ISO 5 zone.

INSTALLATION

Supply
110 V or 220 V versions; rated power includes 500 VA for the work-area sockets.

Room
Keep the front free of draughts and people walking past.

Packages
1760 × 1010 × 1340 / 2060 × 1010 × 1500 mm

WARRANTY & SERVICE

3-year warranty
Major defects under warranty: full refund or replacement.

30-day returns
Return most new, unopened items within 30 days.

Free DDP shipping
Delivered duty paid, no surprise import charges.

Formal quotation
PDF quote on request, with a confirmed ship date.

Request a quotation

Send your application, model and quantity through www.lorderan.com and we will reply with a formal PDF quotation.

DS-CB-H-EN · Rev. B · Nov 2026 · Calculated values are reference figures.
Specifications may change without notice for product improvement.

LORDERAN
www.lorderan.com
Laboratory and environmental test equipment