LORDERAN

TECHNICAL DATASHEET
DS-BKCB-V600-EN · REV. B · NOV 2026

CLEAN AIR EQUIPMENT

Benchtop **Vertical Laminar Flow Cabinet**

ISO Class 5 on a benchtop — an **H14 HEPA**, vertical flow at **0.2–0.45 m/s** and a 7-inch touch screen in a **600 mm** footprint.

MODEL BKCB-V600



ISO 5 CLASS 100 CLEAN GRADE	**99.995 %** H14 HEPA AT 0.3 MM	**0.2–0.45 m/s** VERTICAL AIRFLOW	**600 mm** BENCHTOP WIDTH
50 kg NET WEIGHT	**≤ 65 dB(A)** NOISE	**240 mm** MAX OPENING	**7-inch** TOUCH SCREEN

01 Full feature set
Everything a full-size clean bench offers, for one person.

02 Positive-pressure surround
Left, right, rear and bottom sides.

03 Glass on three sides
Clear view; hidden counterweight holds the window.

APPLICATIONS
Single-user culture work · PCR set-up · Sample handling · Teaching labs

Warranty
Major defects: full refund or replacement.

Free DDP shipping
Duties paid, no surprise import charges.

30-day returns
Most new, unopened items.

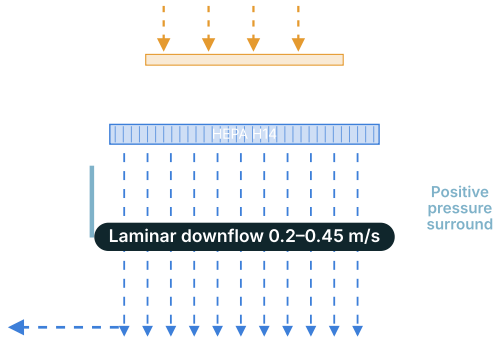
PRODUCT OVERVIEW

Clean air that falls straight down

A compact benchtop clean bench that gives a single user an ISO Class 5 work zone in a 600 mm footprint. Room air passes a washable pre-filter and an H14 HEPA filter, then falls vertically over the work surface at **0.2–0.45 m/s**.

The clean air moves down in parallel streams and leaves through the front, so particles shed by hands or tools are carried away instead of drifting onto the sample. Four sides are kept at positive pressure.

Section. Four sides are kept at positive pressure around the vertical downflow.



HOW IT WORKS

01 Pre-filter
Initial-effect pre-filter protects the HEPA.

02 H14 HEPA
≥ 99.995 % above the work zone.

03 Vertical flow
Parallel streams at 0.2–0.45 m/s.

04 Positive pressure
Left, right, rear and bottom surround.

05 Interlocks
Fan–window and UV–window–lamp interlocks with alarms.

CLEAN GRADE
ISO 5
Class 100

WORK ZONE
505 × 345 × 375
mm

OPENING
240 mm
safety height 200 mm

LIGHTING
≥ 300 lx
≤ 5 µm vibration

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

Small footprint, full feature set

01 Control

- **7-inch color touch screen** with live status
- Appointment (scheduled) timing
- **One-key** disinfection
- Front window height and filter status monitoring

02 Safety

- Fan and front window interlock
- UV lamp, front window and lamp interlock
- Front window height alarm
- Filter over-pressure and replacement alarms

03 Build

- Vertical-surface cabinet design
- Cold-rolled steel body
- **304 stainless** work surface
- 5 mm tempered front and side glass
- Initial-effect pre-filter

04 Supplied

- LED lamp × 2
- UV lamp × 2
- Waterproof socket × 2
- Rated power 650 VA incl. 500 VA sockets

TECHNICAL SPECIFICATIONS

Technical specifications

Parameter	BKCB-V600
DIMENSIONS	
External Size (W*D*H)	600*460*700mm
Internal Size (W*D*H)	505*345*375mm
Front Window Safety Height	200mm
Max Opening	240mm
Net Weight	50kg
Gross Weight	62kg
Package Size (W*D*H)	740*600*860mm
AIRFLOW AND CLEANLINESS	
Flow Mode	Vertical Flow
Airflow Velocity	0.2 m/s～0.45 m/s
Clean Grade	ISO Level 5 (100 levels)
Filtration Efficiency	HEPA (H14) high efficiency filter, filtration efficiency for 0.3μm particle≥99.995%
Safety	Colonies Number ≤ 0.5CFU/30min
PERFORMANCE	
Number of Users	Single
Noise	≤65dB(A)
Lighting	≥300lx
Vibration	≤5μm(rms)
Rated Power	650VA (including operating area socket load 500VA)
ACCESSORIES	
Standard Accessory	LED lamp*2, UV lamp*2, Waterproof socket*2

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

AT A GLANCE

MODEL

BKCB-V600

External size
600 × 460 × 700 mm

Internal size
505 × 345 × 375 mm

Net / gross weight
50 / 62 kg

Package
740 × 600 × 860 mm

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

Single-user culture work
ISO 5 clean air on a crowded bench.

PCR set-up
Clean preparation area for reagents.

Sample handling
Small sterile transfers.

Teaching labs
Compact aseptic workstation.

INSTALLATION

Bench
Rigid bench for 50 kg.

Supply
650 VA rated, including 500 VA for the sockets.

Room
Away from doors and air diffusers.

WARRANTY & SERVICE

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.

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Laboratory and environmental test equipment