

# VERTICAL LAMINAR FLOW CABINET **LORICA**



**BAVnp-01-«Laminar-S.» LORICA**

*\* Lorica (in Latin) is a lamina armour in ancient Rome that consisted of overlapping metal strips. Lorica protected the body of the soldier in ancient Rome.*



# Vertical Laminar Flow Cabinet

# LORICA

BAVnp-01-«Laminar-S.»

[www.lamsys.com](http://www.lamsys.com)



Laminar flow cabinet LORICA ensures efficient protection of a product from external and cross-contamination creating clean air environment of Class 5 as per ISO 14644-1 in the work chamber.

The cabinet is used for work with substances that are not hazardous to an operator.

The cabinet is used to equip individual work places in laboratories, institutions and factories with high requirements to air purity in the work zone.

## APPLICATION

- MEDICINE
- MICROBIOLOGY
- PHARMACEUTICAL INDUSTRY
- FOOD INDUSTRY
- OPTICAL MECHANICS
- ELECTRONICS

## FEATURES

Low level of noise and minimal vibration thanks to low-noise radial EC fans ensure comfortable work conditions.

Thanks to static airflow stabilization system AIS LS, constant air balance inside the work chamber is maintained despite the level of filter clogging.

Uniform distribution of the laminar downflow across the whole work area is ensured by the laminarization screen installed downstream of the HEPA filter.

An electronic control panel allows comfortable operation and simple disinfection.

LCD screen displays selected operating modes and alarms generated during operation.

UV light located in the upper part of the rear wall of the work chamber is protected with a grille made of stainless steel and ensures efficient disinfection of the work surfaces.



1200 mm    1500 mm    1800 mm



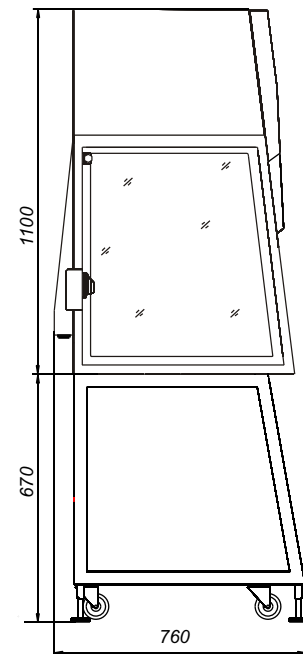
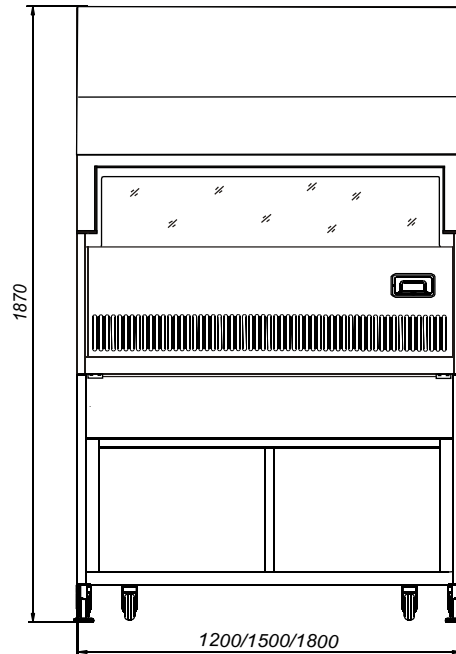
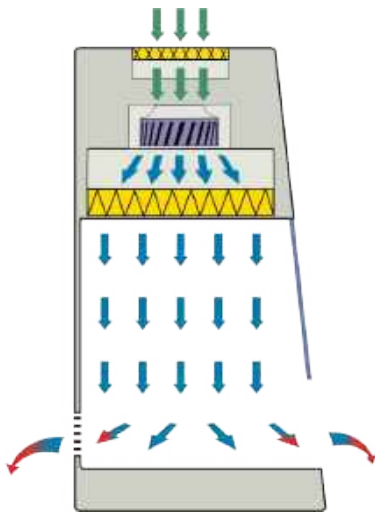
## PRODUCT PROTECTION

- Quick adjustment of the downflow velocity within recommended range from 0.25 to 0.5 mps (that guarantees laminarity) optimizes the work conditions.
- Opening, closing and upholding of the front sash is carried out by gas springs. A damper prevents any impact on the front sash at its closing.
- The tabletop is made of 1.5 mm stainless steel AISI 304 that is highly resistant to corrosion as well as mechanical or chemical impact. The metal body of the cabinet is protected with nonflammable and nonabsorbent powder coating. The front sash and the side windows are made of tempered glass.



### AIR FLOW SCHEME

- room air
- clean (filtered) air
- unfiltered air



## MAIN CHARACTERISTICS LORICA

Installation work chamber air cleanliness class for suspended particle (aerosol) concentration as per ISO 14644-1:2015	
– for particles of 0.5µm and more.....	ISO 5
– for particles of 5.0µm and more.....	ISO M (20; ≥5µm); LSAPC*
Class of supply HEPA filter as per EN 1822-1.....	H14
Class of pre-filter as per EN 779.....	G4
Work chamber airflow type.....	unidirectional (laminar) downflow
Average downflow velocity in the work chamber:	
– preset velocity, mps.....	0,4
– recommended velocity range for customized setting that guarantees uniformity (laminarity) of the airflow, mps.....	0,25-0,5
Minimum illumination of the work zone (integral value determined along the whole area of the work zone), lx.....	1000
Clean air inflow capacity, m <sup>3</sup> /h.....	≈ 790**
Maximum noise level at 1 m distance from the cabinet, dB.....	55***

\* Class 4.8 as per ISO 14644-1

\*\* determined based on 0.4 mps preset downflow velocity.

\*\*\* level of noise measured as per DIN EN ISO 11201 in free sound field over the sound-reflecting surface

(noise level in real operating environment depends on the dimensions of the operating site as well as on the total background noise and may vary by 3-4 dB(A))

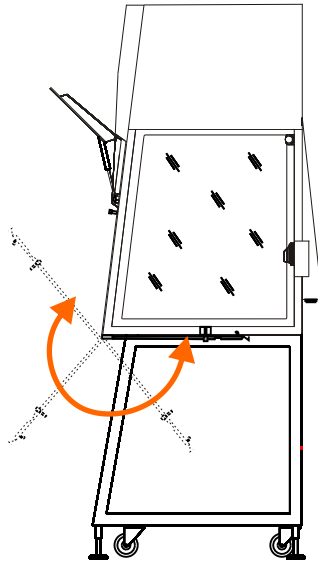
## MAIN PARAMETERS AND DIMENSIONS LORICA

Article	1E-D.001-12.0	1E-D.001-15.0	1E-D.001-18.0
Dimensions of the cabinet assembled with stand (WxDxH).....	1200x760x1870	1500x760x1870	1800x760x1870
Dimensions of the work chamber (WxDxH).....	1130x625x650	1430x625x650	1730x625x650
Maximum net weight of the cabinet assembled with stand, kg, not more than.....	160	186	206
Maximum input power without built-in electric sockets, W, not more than.....	410	410	590
Maximum allowed load on the built-in electric sockets, W, not more than.....	1000	1000	1000

## VERTICAL LAMINAR FLOW CABINET

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A work opening screen is designed for operator protection during UV light operation. The work opening screen can also be used for closing the work chamber when the cabinet is idle.



### ADDITIONAL OPTIONS:

- Technical gas tap without electromagnetic valve
- Inflammable tap without electromagnetic valve
- Vacuum tap without electromagnetic valve
- Additional set of sockets
- High stand
- Polystone tabletop
- Front sash with radial cutout
- Front sash with square cutout
- ULPA filters

For complete list of additional options, please contact our Sales Department  
or visit our website [www.lamsys.com](http://www.lamsys.com)



[www.lamsys.com](http://www.lamsys.com)



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