



# Biological Safety Cabinets

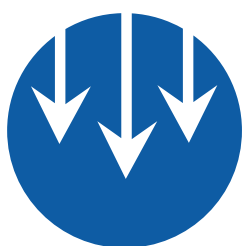
Roylab Biosafety Cabinets set the standard in quality, design, and innovation that comes from a heritage of over 25 years experience. At Roylab, we know how important it is to offer a high level of protection to operator, sample and environment with advanced technology. With an extensive track record of safety, reliability and performance, our Biosafety cabinets make ideal investments for a wide range of applications including work with infectious agents that require Biosafety Level 1, 2 or 3 containment.



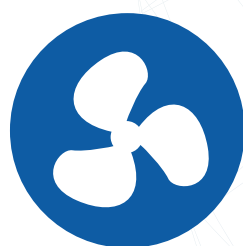
**Class II Type A2  
(recirculating)**



**Class II Type B2  
(100% exhaust)**



**Flow Safe**  
Designed to ensure  
your safety.



**Low-Vel**  
Save Energy,  
maintains sterility.



**Lab-Alert**  
Makes the  
monitoring of your  
biosafety cabinet



**Hy-Chamber**  
Designed with long  
life and lasting  
containment  
surrounding  
contaminated areas.

# Biological Safety Cabinet

We are more professional



- Professional R&D team with more than ten years of R&D experience
- R&D, production and installation are all based on the concept of "safety", so you can use it with confidence
- The core components are sourced from well-known brands



### LCD Screen

The 4.3-inch LCD screen dynamically displays more data information in real time, and the display content is clear, which is convenient for observing equipment conditions.



### Tempered Explosion - Proof Glass

The front window is made of tempered explosion-proof glass with a thickness of 6mm, providing better protection.



### Tilt Angle Design

Adopt 8° inclination angle design, more ergonomic, improve the convenience of use.



### Glass Door Lock Device

The work area can be locked through glass to assist the overall management of laboratory equipment.



### Three-sided One-Piece Stainless Steel

The inner wall adopts a three-sided integrated design, the large arc and rounded comers are easy to clean, and the entire operating area and liquid collection tank are made of 304 stainless steel.

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## Interlock System

With glass door and UV lamp/fluorescent lamp/blower linkage function.



## Reserved Valve Interface

One valve channel interface is reserved on the left and right, and air valve, water valve and vacuum valve are optional.



## Single Blower Structure

Single blower structure design ensures low failure rate, stable flow rate ratio of descending airflow and inflow airflow, and adopts well-known brand blower which guarantees low noise, energy saving and environmental protection.



## Ultra High Efficiency

The ultra-efficient air filter (ULPA) made of well-known brand borosilicate glass fiber material has the filtration efficiency of 99.999% for 0.12um particles.



## Counterweight Glass Door Design

The counterweight glass door adopts the sliding rail method, which can be easily opened and closed with one hand, and the operation is convenient.



# Biological Safety Cabinets

## General Specifications, Roylab LC Biological Safety Cabinets (Class II Type A2)

Model	RLBSA2-900LC	RLBSA2-1200LC	RLBSA2-1500LC	RLBSA2-1800LC
Nominal Size	0.9 meters(3')	1.2 meters (4')	1.5 meters (5')	1.8 meters(6')
External Dimensions with Base Stand (W×D×H)	1040×790×2130mm 40.9"×31.1"×83.9"	1340×790×2130mm 52.8"×31.1"×83.9"	1640×790×2130mm 64.60"×31.1"×83.9"	1940×790×2130mm 76.4"×31.1"×83.9"
Internal Work Area, Dimensions (W×D×H)	950×575×625mm 37.4"×22.6"×24.6"	1250×575×625mm 49.2"×22.6"×24.6"	1550×575×625mm 61.0"×22.6"×24.6"	1850×575×625mm 72.8"×22.6"×24.6"
Internal Work Area, Space	0.54m <sup>2</sup> (5.8 sq.ft)	0.72m <sup>2</sup> (7.8 sq.ft)	0.9m <sup>2</sup> (9.7 sq.ft)	1.08m <sup>2</sup> (11.6 sq.ft)
Average Airflow Velocity *				
Inflow	0.53±0.025m/s (104.3±4.92fpm)			
Downflow	0.35±0.025m/s (68.9±4.92fpm)			
Airflow Volume				
Inflow	363m <sup>3</sup> (213cfm)	477m <sup>3</sup> (281cfm)	592m <sup>3</sup> (348cfm)	706m <sup>3</sup> (416cfm)
Downflow	718m <sup>3</sup> (422cfm)	945m <sup>3</sup> (556cfm)	1172 m <sup>3</sup> (689cfm)	1280m <sup>3</sup> (753cfm)
Exhaust	363m <sup>3</sup> (213cfm)	477m <sup>3</sup> (281cfm)	591m <sup>3</sup> (348cfm)	705m <sup>3</sup> (415 cfm)
ULPA Filter Typical Efficiency				
Downflow	Filters provide 99.9995% typical efficiency for particle size of 0.1 to 0.2 microns			
Exhaust	Filters provide 99.9995% typical efficiency for particle size of 0.1 to 0.2 microns			
Biosafety Protection Test				
Personnel Protection Test	KI-Discus containment and microbiological testing is performed			
Product Protection Test 1~8×10 <sup>6</sup> (three times in succession)	≤5CFU	≤5CFU	≤5CFU	≤5CFU
Cross-contamination test 1~8×10 <sup>6</sup> (three times in succession)	≤2CFU	≤2CFU	≤2CFU	≤2CFU
Sound Emission (Typical)				
NSF/ANSI 49	<60dBA	<62dBA	<60dBA	<65dBA
EN 12469	<57&BA	<59dBA	<60dBA	<62dBA
Fluorescent Light Intensity	≥650Lux (≥60 foot candles)			
Excellent light distribution	Yes	Yes	Yes	Yes
RMS	≤5um	≤5um	≤5um	≤5um
Cabinet Construction				
Main Body	1.2mm(0.05") steel with white oven-baked epoxy-polyester			
Work Zone	1.5mm(0.06') stainless steel, type 304			
Side Walls	1.5mm(0.06') stainless steel. type 304			
Electrical Sliding Windows Option	HFsafe-900LA	HFsafe-1200LA	N/A	N/A
Window Material	Hardened/laminated safety glass			
Electrical				
Cabinet Full Load Amp(FLA)	2A	2A	4A	4A
Fuses	10A	10A	10A	10A
Cabinet Nominal Power	361W	452W	813W	850W
Optional Outlets FLA	5A	5A	5A	5A
Total Cabinet FLA	7A	7A	9A	9A
Power Supply*				
220V/50HZ	Yes	Yes	Yes	Yes
220V/60HZ	Yes	N/A	Yes	Yes
110V/60Hz	Yes	Yes	N/A	N/A
Net Weight				
Manual Type	120kg(264lbs)	225kg(496lbs)	280kg(617lbs)	320kg(705lbs)
Shipping Weight				
Manual Type	175kg(386lbs)	295kg(650lbs)	350kg(772lbs)	390kg(860lbs)
Shipping Dimensions Maximum(W×D×H)	1125×945×1717mm 46.3"×37.2"×67.3"	1425×945×1717mm 56.1"×37.2"×67.3"	1725×945×1717mm 67.9"×37.2"×67.3"	2026×945×1717mm 79.8"×37.2"×67.3"
Shipping Volume, Maximum	1.81m <sup>3</sup> (63.9cu.ft.)	2.30m <sup>3</sup> (81.2cu.ft.)	2.79m <sup>3</sup> (98.5cu.ft.)	3.27m <sup>3</sup> (115.5cu.ft.)

\* Please contact us for more optional power supply information

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# Biological Safety Cabinets

## General Specifications, Royleb BSCB2 Biological Safety Cabinets (Class II Type B2)

Model	RLBSCB2-900LCB2	RLBSCB2-1200LCB2	RLBSCB2-1500LCB2	RLBSCB2-1800LCB2
Nominal Size	0.9 meters(3')	1.2 meters(4')	1.5 meters(5')	1.8 meters(6')
External Dimensions with Base Stand (W×D×H)	1040×790×2200mm 40.9"×31.1"×86.6"	1340×790×2200mm 52.8"×31.1"×86.6"	1640×790×2200mm 64.6"×31.1"×86.6"	1940×790×2200mm 76.4"×31.1"×86.6"
Internal Work Area, Dimensions (W×D×H)	950×575×625mm 37.4"×22.6"×24.6"	1250×575×625mm 49.2"×22.6"×24.6"	1550×575×625mm 61.0"×22.6"×24.6"	1850×575×625mm 72.8"×22.6"×24.6"
Internal Work Area, Space	0.54m <sup>2</sup> (5.8 sq.ft)	0.72m <sup>2</sup> (7.8 sq.ft)	0.9m <sup>2</sup> (9.7 sq.ft)	1.06m <sup>2</sup> (11.4 sq.ft)
Average Airflow Velocity *				
Inflow	0.53±0.025m/s (104.3±4.92fpm)			
Downflow	0.35±0.025m/s (68.9±4.92fpm)			
Airflow Volume				
Downflow	605m <sup>3</sup> (356cfm)	796m <sup>3</sup> (468cfm)	987m <sup>3</sup> (581cfm)	1178m <sup>3</sup> (693 cfm)
Exhaust	967m <sup>3</sup> (569cfm)	1273m <sup>3</sup> (749cfm)	1579m <sup>3</sup> (929cfm)	1884m <sup>3</sup> (1108cfm)
Filter Typical Efficiency				
Downflow	ULPA filters provide 99.9995% typical efficiency for particle size of 0.1 to 0.2 microns			
Exhaust	HEPA filters provide 99.97% typical efficiency for particle size of 0.3 microns			
Biosafety Protection Test				
Personnel Protection Test	KI-Discus containment and microbiological testing is performed			
Product Protection Test 1~8×10 <sup>6</sup> (three times in succession)	≤5CFU	≤5CFU	≤5CFU	≤5CFU
Cross-contamination Test 1~8×10 <sup>6</sup> (three times in succession)	≤2CFU	≤2CFU	≤2CFU	≤2CFU
Sound Emission (Typical)	≥650Lux (≥60 foot candles)			
NSF/ANSI 49	<65dBA	<65dBA	<65dBA	565dBA
EN 12469	<57dBA	<59dBA	<60dBA	<62dBA
Fluorescent Light Intensity				
Excellent light distribution	Yes	Yes	Yes	Yes
RMS	≤5um	≤5um	≤5um	≤5um
Cabinet Construction				
Main Body	1.2mm(0.05") steel with white oven-baked epoxy-polyester			
Work Zone	1.5mm(0.06") stainless steel, type 304			
Side Walls	1.5mm(0.06") stainless steel, type 304			
Electrical Sliding Windows Option	N/A	N/A	N/A	N/A
Window Material	Hardened/laminated safety glass			
Electrical				
Cabinet Full Load Amp(FLA)	4A	4A	5A	5A
Fuses	10A	10A	10A	10A
Cabinet Nominal Power	850W	855W	1200W	1200W
Optional Outlets FLA	5A	5A	5A	5A
Total Cabinet FLA	9A	9A	10A	10A
Power Supply*				
220V/50HZ	Yes	Yes	Yes	Yes
220V/60HZ	Yes	Yes	Yes	Yes
Net Weight				
Manual Type	210kg(463lbs)	250kg(551lbs)	295kg(650lbs)	340kg(750lbs)
Shipping Weight				
Manual Type	260kg(573lbs)	310kg(683lbs)	365kg(804lbs)	420kg(926lbs)
Shipping Dimensions Maximum(W×D×H)	1125×945×1710mm 44.3"×37.2"×67.3"	1425×945×1710mm 56.1"×37.2"×67.3"	1725×945×1710mm 67.9"×37.2"×67.3"	2026×945×1710mm 79.8"×37.2"×67.3"
Shipping Volume, Maximum	1.81m <sup>3</sup> (64cu.ft.)	2.30m <sup>3</sup> (81cu.ft.)	2.79m <sup>3</sup> (99cu.ft.)	3.27m <sup>3</sup> (115cu.ft.)

\* Please contact us for more optional power supply information