

Vaccine / Pharmacy Refrigerator

백신 냉장고 / 의약품 냉장고

For safely storing **vaccines**, reagents, samples
백신을 안전하게 냉장 보관하기 위한 의약품 냉장고

Approved as medical device
의료기기 허가 완료

- 의료기기 제조업 허가 완료

- 의료기기 제조 및 품질관리기준 적합 인증 완료

- 의료기기 제조 신고 완료

품목허가번호[제신19-904호]



Vaccine / Pharmacy Refrigerator

백신 냉장고 / 의약품 냉장고

Temperature Range 2°C ~ 8°C

Safely store vaccines

with excellent temperature uniformity



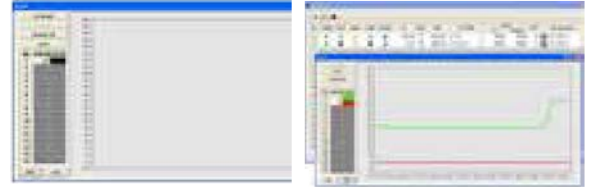
정밀한 온도 분포도로
안전한 백신 보관



LCV-212GR
with Sliding Wire Drawer Shelf (option)
with recorder (option)

PC Interface through USB port (Standard)

PC 인터페이스 (기본사양)



Graphic monitoring for step programmed process of time and temperature on real-time

실시간으로 단계 프로그래밍된 시간 및 온도 프로세스를 위한 그래픽 모니터링



for convenient connection to PC communication
PC 통신과의 편리한 연결

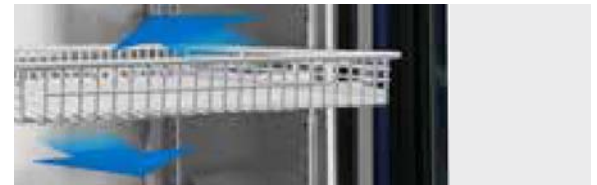


Temperature Sensor with Glycerin for maintaining stable temperature (option)

안정적인 온도 유지를 위한 글리세린 온도센서 장착 (옵션)

Sliding Wire Drawer Shelf (option)

슬라이딩 와이어 드로어 선반 (옵션)



Wire type with good airflow, and convenient to use as drawer type. 통기성이 좋은 와이어 형태이며, 서랍식으로 편리하게 사용

Top & Bottom Temp. Monitoring Dual Temp. Sensor System (option)

냉장고 내 상부, 하부 온도 측정 시스템 (옵션)

Microprocessor Digital Controller with Self-Diagnostic and Alarm System

마이크로프로세서 디지털 조절기



Temperature, Set Value Display
현재 온도, 설정 온도 표시창

Run/Stop, Defrost, Timer, Compressor Operating Status Indicator
동작/정지, 성에 제거, 타이머, 컴프레서 작동 상태 표시

Run/Stop, Mode, Temperature and Parameter Setting, Temperature Check Button
실행/정지, 모드, 온도 및 파라미터 설정, 온도 점검 버튼

실행/정지, 모드, 온도 및 파라미터 설정, 온도 점검 버튼

High / Low Temperature Alarm, Low Battery, Power Failure Status Indicator
고온/저온 경보, 배터리 부족, 전원 연결 상태 표시기

고온/저온 경보, 배터리 부족, 전원 연결 상태 표시기

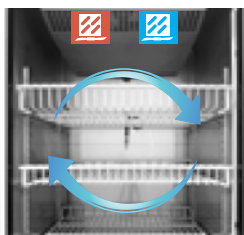
Buzzer
부저

Battery Backup On/Off, Buzzer On/Off, Lamp On/Off Button
배터리 백업 On/Off, 부저 On/Off, 램프 On/Off 버튼

Forced Air Circulation

with fan provides excellent temperature uniformity

강력한 팬을 이용한 강제 순환 방식으로 보다 정밀한 온도 분포도 실현



Automatic Defrost System

removes water condensation, no ice build up

자동 제상 시스템으로 응축수 및 얼음 생성 방지

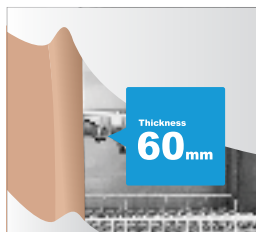


Insulation

High density polyurethane Insulation (Thickness: 60mm) provides constant cool temperature

고밀도 폴리 우레탄 단열 (두께: 60mm)로 우수한 냉장 효과

for LCV-201GR, 50mm



LED Lamp Installation

Energy saving LED lamp installation provides easy observation with less heat generation inside

에너지 절감형 LED 램프 장착으로 내부 시료 관찰이 용이하고 자체 발열량을 최소화시켜 균일한 온도 유지에 효율적



Glass Door with Heating Glass

protects from water condensation on the glass door

성애방지용 열선 히팅 필름 내장 유리 도어 장착으로 가동 중에도 도어에 물생김 방지



Automatic Fan Stop

to prevent leakage of cold air and maintain the temperature inside even when the door is opened

문이 열려도 찬 공기가 새지 않도록 하고 내부 온도를 유지



Specialized Sealing Structure

Specialized plastic cool sealing structure for precise temperature control

외부로의 냉기 유출 방지를 위한 특수 냉 차단 플라스틱 설계 구조로 정밀한 온도 제어 가능



Door Key Lock

is equipped as standard for preventing foreign access to the refrigerator

백신 담당자 외의 접근을 방지할 수 있는 잠금장치(열쇠) 기본 제공



Adjustable Wire Shelf as Standard

조절가능한 와이어 선반 기본 제공



SAFETY

- **Battery back up in case of power failure is equipped as standard**
정전 시를 위한 배터리 백업 기능 기본 장착
- **Over & under temperature protection**
과온 & 저온 보호 기능 장착
- **Temperature deviation alarm for high & low temperature**
온도 이탈 알람 기능 (고온, 저온 모두 가능)
- **Door open alarm**
장시간 도어 열림 알람 기능

Optional Accessory



Paper Recorder
1 CH or 2 CH | 6 CH
Thermal-type recorder
감열식 레코더

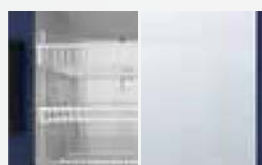
Dot-type, Set recording range and speed
기록 범위 및 속도 설정 가능



7 days Chart Recorder
24/7 circular chart recorder
24 Hour / 7-Day 원형 온도 기록계



Solid Door
Safely store vaccines, medicines, etc. for long periods of time
백신과 의약품 등을 장기간 안전하게 보관



Smart Glass
Choice of transparent, translucent depending on the situation
상황에 따라 투명, 반투명으로 선택 가능



STS Drawer Shelf
Hygienic and convenient as drawer type
견고한 스테인리스 재질의 서랍식 구조로 내부 수납이 용이



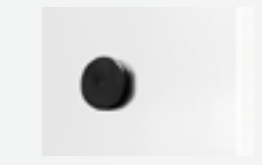
Sliding Wire Drawer Shelf
Wire type with good airflow, and convenient to use as drawer type
통기성이 좋은 와이어 형태이며, 서랍식으로 편리하게 사용



Monitoring System & Mobile Alarm
Wire & Wireless Sensor Monitoring system / SMS, Phone Voice Alarm
유무선 센서 데이터 실시간 모니터링 SMS, 전화음성 알람 경보 지원



Power Failure Alarm
Maintains standard alarm function in case of power failure
정전 시 기본 알람 기능 유지



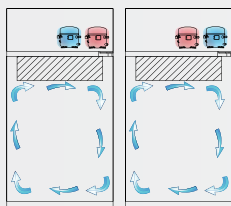
Access Port
for external data monitoring and supplying
외부 데이터 모니터링 및 공급용



Security Box with Lock
자물쇠가 있는 보안 상자

Option

Dual Ref. System / 이원 냉장 시스템



Dual Compressor

Run alternately to prevent temperature rise in case of one compressor breakdown to keeps temperature stable
한 대의 컴프레서 고장 시, 교대로 작동하여 온도를 안정적으로 유지

IQ/OQ Validation Documentation at Factory

* Available with the product on site only
IQ/OQ 밸리데이션 현장 진행

Optional Size Available for LCV-204GR

LCV-204GR 옵션 사이즈
· Interior: W 1,370 x D 700 x H 1,440 (mm)
· Exterior: W 1,490 x D 850 x H 2,000 (mm)
· Capacity: 1352 ℓ

MODEL		LCV-201GR	LCV-202GR	LCV-212GR	LCV-203GR	LCV-204GR
Type		Benchtop		Floor Standing		
Dimensions (W×D×Hmm)	Interior	460 x 420 x 630	560 x 660 x 800	500 x 640 x 1400	620 x 700 x 1410	1140 x 700 x 1410
	Exterior	560 x 627 x 850	683 x 796 x 1490	600 x 750 x 1640	740 x 805 x 1985	1260 x 805 x 1998
	Shelf	440 x 380 x 50	540 x 615 x 50	480 x 600 x 50	600 x 615 x 50	560 x 615 x 50
Capacity		105 ℓ	295 ℓ	421 ℓ	612 ℓ	1125 ℓ
Temperature	Range	2°C to 8°C				
	Uniformity	± 1°C at 4°C				
Refrigeration System		Air cooled condensing hermetic compressor, CFC free refrigerant gas				
Defrost		Automatic defrost system with automatic evaporation of condensate water				
Display		4 Digit LED display and signal lamps				
Controller		Microprocessor digital controller				
Material	Interior	Stainless steel grade 304				
	Exterior	Epoxy powder coated steel				
	Door	Vacuum sealed pair glass swing door : invisible heat film embedded, key locker, adjustable tension spring, magnetic packing				
Insulation		High density polyurethane insulation				
	Thickness	50 mm	60 mm			
Air Circulation		Turbo fan with automatic stop / run during door open				
Coating Wire Shelf		2 EA	3 EA	5 EA	5 EA	10 EA
Safety Device		High / Low temp. alarm, ELCB, audible and visible alarm				
Electric Supply		220V 50 / 60 Hz 1Phase (Option: 110V, 60Hz)				
Power Consumption (220V, 60Hz)		300 W	600 W	600 W	600 W	800 W
Net Weight (Approx.)		70 kg	123 kg	140 kg	145 kg	265 kg
Shipping Dimensions (Approx.) (W×D×Hmm)		720 x 630 x 1050	850 x 720 x 1860	900 x 800 x 1640	810 x 880 x 2040	1370 x 960 x 2050
Shipping Weight (Approx.)		80 kg	140 kg	160 kg	165 kg	285 kg

※ Specifications can be changed without prior notice for quality improvement.

※ Custom made order is available

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Laminar Flow Clean Bench Bio Hazard Safety Cabinet

Product Catalog



LabTech
DAIHAN LABTECH CO., LTD
주식회사 대한랩테크

Laminar Flow Clean Bench - Benchtop Type

Economic model - Vertical / Horizontal Type

Vertical Type



with stand option



Horizontal Type



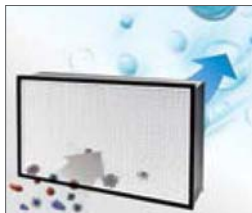
with stand option



In compliance with ISO 14644-1, ISO Class 5 (Class 100) standards

2 HEPA Filter

High-efficiency particulate air filter that provides 99.99% efficiency for particle sizes of 0.3µm is installed



1 Pre-Filter

is installed to protect the HEPA filter and increase its lifetime by trapping large particles



3 Pressure Gauge

is installed as standard to check filter lifetime status



4 High Efficiency Centrifugal Blower

is installed to provide reduced noise and vibration



5 Tempered Safety Glass Door

for easy viewing inside



6 Tempered Glass Side Wall

for convenient observance (for LCB-VEW/HEW series only)



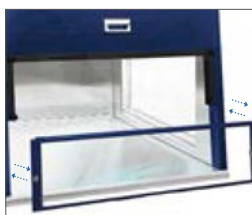
7 Stainless Steel Work Space

for easy cleaning



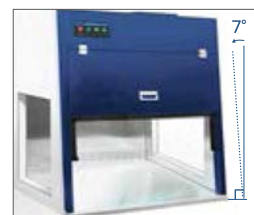
8 Acrylic Door Cover

is easily removable with magnetic catcher



9 Ergonomic Design

7° angled ergonomic structure allows easy reach and viewing while also minimizes stress on user's neck and arm



Analog Controller



- The controller enables: UV&FL lamp on/off, Fan on/off, Power on/off

Optional Accessories



Frame Type Stand with Castors

Option:
Leveling feet



ULPA Filter



Arm Support

to prevent blocking of the intake grill and for better arm support



Height Adjustable Foot Rest

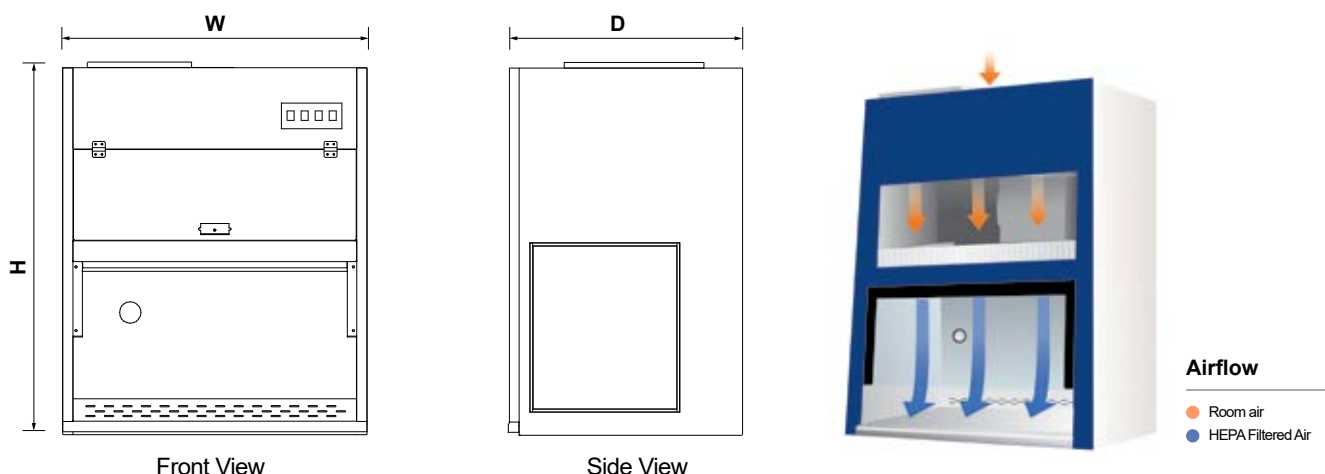
for comfortable working posture



IQ/OQ Validation Documentation at Factory

* Available with the product on site only

Vertical Air Flow Type



MODEL	LCB-1101VE	LCB-1121VE	LCB-1151VE
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Without side viewing window

MODEL	LCB-1101VEW	LCB-1121VEW	LCB-1151VEW
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With side viewing window (392mm x 527mm)

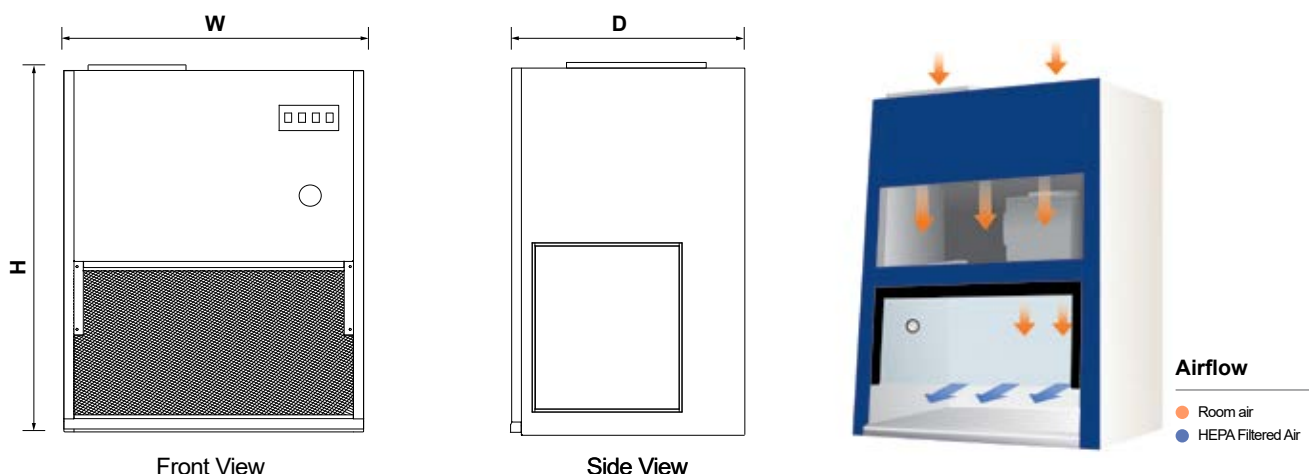
Dimensions (W×D×Hmm)	Interior	890 x 565 x 600	1190 x 565 x 600	1490 x 565 x 600
	Exterior (Closed)	950 x 635 x 1140	1250 x 635 x 1140	1550 x 635 x 1140
	(Opened)	890 x 235	1190 x 235	1490 x 235
	Movable Stand (Option)	950 x 630 x 750	1250 x 630 x 750	1550 x 630 x 750
	Total Dimension with Stand Option	950 x 635 x 1890	1250 x 635 x 1890	1550 x 635 x 1890
Maximum Door Opening Height		560 mm		
Working Door Opening Height		260 mm		
Controller		Main S/W, UV lamp S/W, FL lampS/W, FanS/W		
Centrifugal Blower		340~400 w	440~680 w	480~750 w
Air Volume (Approx.)		23~25 m ³ /min	46~50 m ³ /min	46~50 m ³ /min
Filter Type		Standard: HEPA Filter, Aluminum framed particle removal 99.99% Class 100 Option - PTFE ULPA Filter		
Prefilter		3~30 μm Particle Removal, Built-in Back panel		
Air flow		Standard Average 0.3m/sec, Range 0.28~0.36 m/sec		
Noise Sound Level		Standard < 60 dB, Range 56~65 dB(A)		
Illumination		FL Lamp 20 W x 1 EA	FL Lamp 40 W x 1 EA	
UV Disinfection		UV Lamp 20 W x 1 EA	UV Lamp 40 W x 1 EA	
Utility Device		1/4 pt Gas Valve, Air Valve, 110V or 220V, Electric Socket		
Material		Interior: Stainless steel grade 304 with hair lined finish Exterior: Standard - Epoxy powder coated electro galvanized steel Door: T. 5mm Tempered Glass Viewing Window		
Door Cover		Removable Acrylic Door Cover		
Electric Supply		110 V 60 Hz or 220 V 50/60 Hz described order		
Net Weight (Approx.)	Cabinet	127 kg	138 kg	160 kg
	Stand (Option)	23 kg	25 kg	27 kg
Shipping Dimensions (Approx.) (Cabinet only) (W×D×Hmm)		1140 x 880 x 1390	1350 x 820 x 1400	1800 x 900 x 1300
Shipping Weight (Approx.) (Cabinet only)		177 kg	192 kg	210 kg

Optional Stand	LST-1101V	LST-1121V	LST-1151V
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※ Specifications can be changed without prior notice for quality improvement.

※ Custom made order is available

Horizontal Air Flow Type



MODEL	LCB-1102HE	LCB-1122HE	LCB-1152HE
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Without side viewing window

MODEL	LCB-1102HEW	LCB-1122HEW	LCB-1152HEW
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With side viewing window (392mm x 527mm)

Dimensions (W×D×Hmm)	Interior	890 x 525 x 640	1190 x 525 x 640	1490 x 525 x 640
	Exterior (Closed)	950 x 635 x 1140	1250 x 635 x 1140	1550 x 635 x 1140
	(Opened)	890 x 235	1190 x 235	1490 x 235
	Movable Stand (Option)	950 x 630 x 750	1250 x 630 x 750	1550 x 630 x 750
	Total Dimension with Stand Option	950 x 635 x 1890	1250 x 635 x 1890	1550 x 635 x 1890
Maximum Door Opening Height		560 mm		
Working Door Opening Height		260 mm		
Controller		Main S/W, UV lamp S/W, FL lampS/W, FanS/W		
Centrifugal Blower		340~400 w	440~680 w	480~750 w
Air Volume (Approx.)				
Filter Type		Standard: HEPA Filter, Aluminum framed particle removal 99.99% Class 100 Option - PTFE ULPA Filter		
Prefilter		3~30 μm Particle Removal, Built-in Back panel		
Air flow		Standard Average 0.3m/sec, Range 0.28~0.36 m/sec		
Noise Sound Level		Standard < 60 dB, Range 56~65 dB(A)		
Illumination		FL Lamp 20 W x 1 EA		FL Lamp 40 W x 1 EA
UV Disinfection		UV Lamp 20 W x 1 EA		UV Lamp 40 W x 1 EA
Utility Device		1/4 pt Gas Valve, Air Valve, 110V or 220V, Electric Socket		
Material		Interior: Stainless steel grade 304 with hair lined finish Exterior: Standard - Epoxy powder coated electro galvanized steel Door: T. 5mm Tempered Glass Viewing Window		
Door Cover		Removable Acrylic Door Cover		
Electric Supply		110 V 60 Hz or 220 V 50/60 Hz described order		
Net Weight (Approx.)	Cabinet	127 kg	138 kg	160 kg
	Stand (Option)	23 kg	25 kg	27 kg
Shipping Dimensions (Approx.) (Cabinet only) (W×D×Hmm)		1140 x 880 x 1390	1350 x 820 x 1400	1800 x 900 x 1300
Shipping Weight (Approx.) (Cabinet only)		177 kg	192 kg	210 kg

Optional Stand	LST-1102H	LST-1122H	LST-1152H
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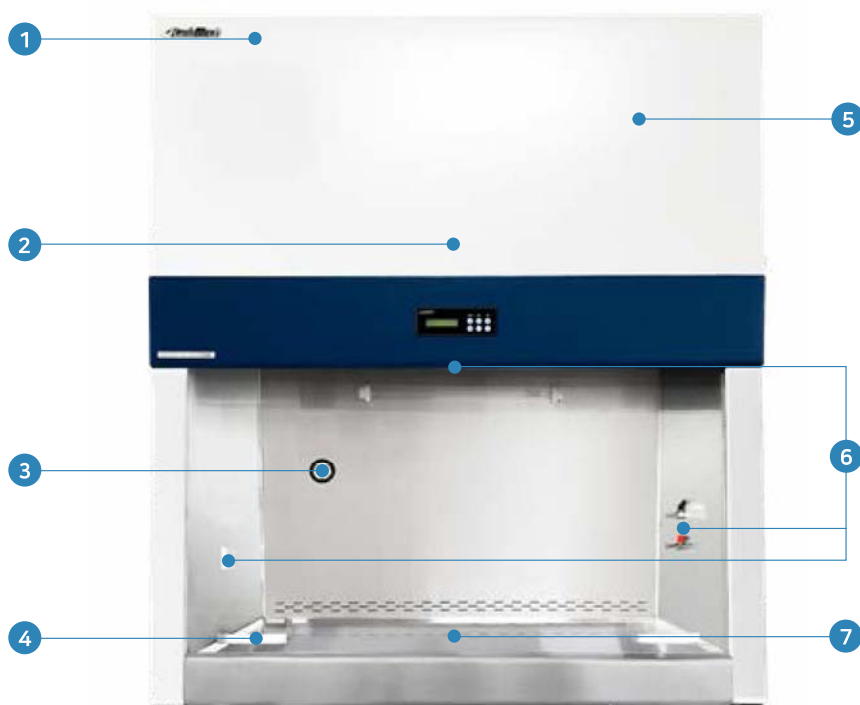
Laminar Flow Clean Bench - Benchttop Type

Vertical / Horizontal Type

Vertical Type



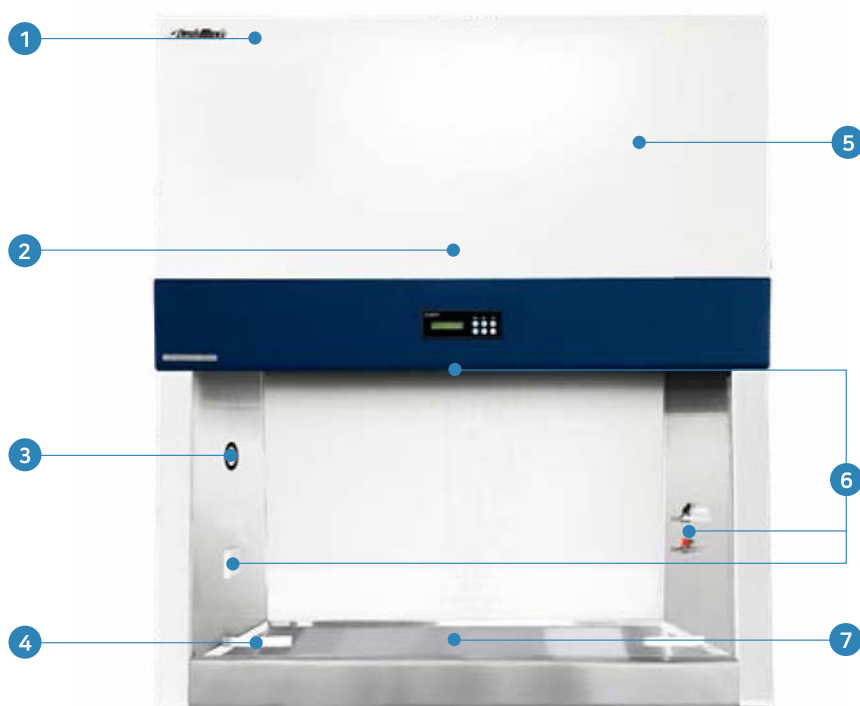
with stand option



Horizontal Type



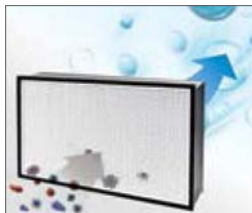
with stand option



In compliance with ISO 14644-1, ISO Class 5 (Class 100) standards

2 HEPA Filter

High-efficiency particulate air filter that provides 99.99% efficiency for particle sizes of 0.3µm is installed



1 Pre-Filter

is installed to protect the HEPA filter and increase its lifetime by trapping large particles



3 Pressure Gauge

is installed as standard to check filter lifetime status



4 Tempered Safety Glass Door

for easy viewing inside and for protecting users from UV exposure



5 High Efficiency Centrifugal Blower

is installed to provide reduced noise and vibration



6 Utility Device

includes npt 1/4 air valve, gas valve, 110V or 220V electric socket (selectable), and DOP test valve



7 Stainless Steel Single Piece Dished Work Space

for easy cleaning and to prevent contaminants

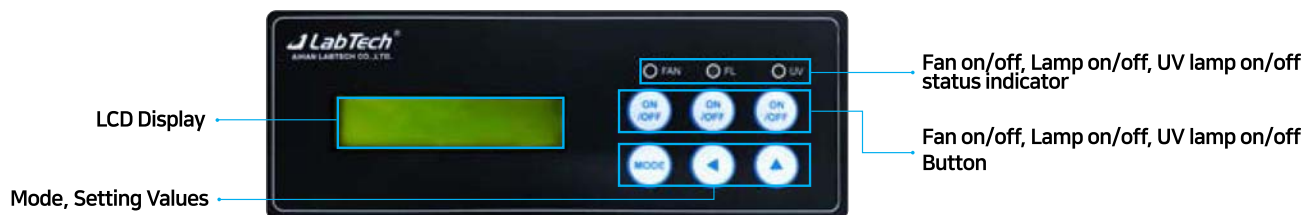


8 Ergonomic Design

7° angled ergonomic structure allows easy reach and viewing while also minimizes stress on user's neck and arm



Microprocessor Digital Controller with LCD Display



- The controller enables: velocity setting, alarms, filter lifetime check, UV&FL lamp on/off, Fan on/off, UV lamp timer, present date and time

Optional Accessories



Base Stand with Castors

Option: Leveling feet



ULPA Filter



Arm Support

to prevent blocking of the intake grill and for better arm support



Height Adjustable Foot Rest

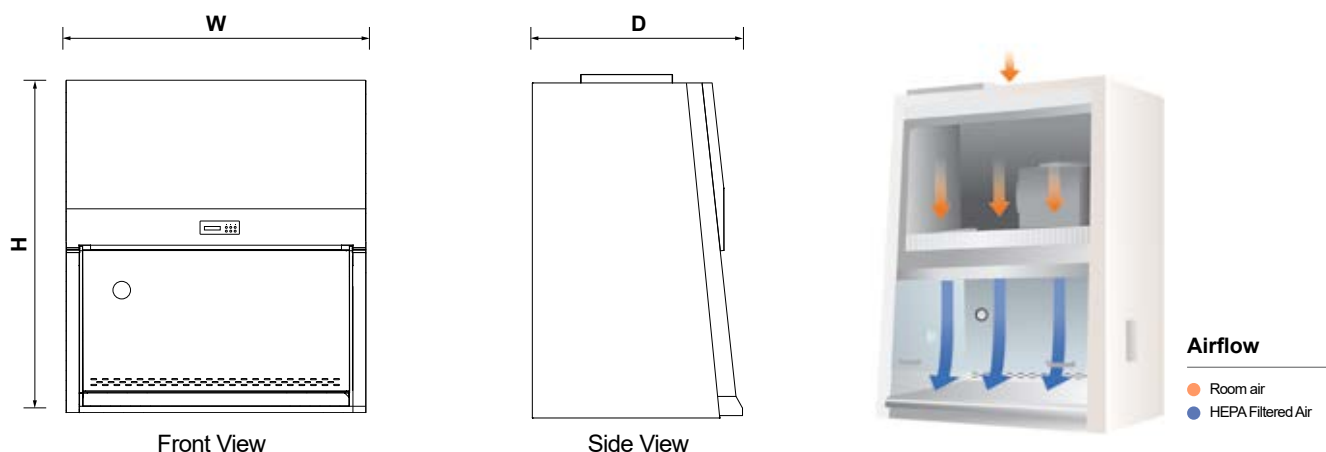
for comfortable working posture



IQ/OQ Validation Documentation at Factory

* Available with the product on site only

Vertical Air Flow Type

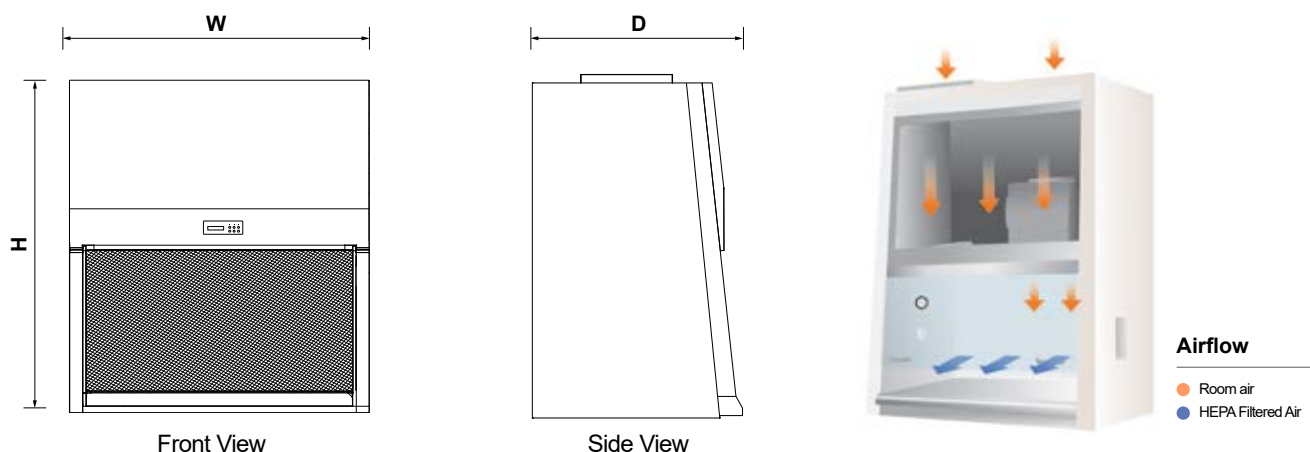


MODEL		LCB-0101V	LCB-0121V	LCB-0151V	LCB-0181V
Standard Type		Without side view window glass			
MODEL		LCB-0101VW	LCB-0121VW	LCB-0151VW	LCB-0181VW
Window Type		With both side view window glass (W: 392mm x H: 527mm x 2ea)			
Dimensions (W×D×Hmm)	Interior	900 x 620 x 680	1200 x 620 x 680	1500 x 620 x 680	1800 x 620 x 680
	Exterior	1050 x 800 x 1350	1350 x 800 x 1350	1650 x 800 x 1350	1950 x 800 x 1350
	Work Top	890 x 600	1190 x 600	1490 x 600	1790 x 600
	Movable Stand (Option)	1050 x 765 x 690	1350 x 765 x 690	1650 x 765 x 690	1950 x 765 x 690
	Total Dimension with Stand Option	1050 x 800 x 2040	1350 x 800 x 2040	1650 x 800 x 2040	1950 x 800 x 2040
Maximum Door Opening Height		540 mm			
Working Door Opening Height		200 mm			
Controller		Digital 9 stage velocity control with total using hour meter, Fan, UV/FL Lamp, on/off mode key			
Centrifugal Blower		200~260 w	300~360 w	400~520 w	400~520 w
Air Volume (Approx.)		23~25 m ³ /min	23~25 m ³ /min	46~50 m ³ /min	46~50 m ³ /min
Filter Type		Standard: HEPA Filter, Aluminum framed particle removal 99.99% 0.3μm Class 100 Option - PTFE ULPA Filter			
Prefilter		3~30 μm Particle Removal, Built-in Back panel			
Air flow		Standard Average 0.3m/sec, Range 0.28~0.36 m/sec			
Noise Sound Level		Standard < 60 dB, Range 56~65 dB(A)			
Illumination		FL Lamp 20 W x 1 EA		FL Lamp 40 W x 1 EA	
UV Disinfection		UV Lamp 20 W x 1 EA		UV Lamp 40 W x 1 EA	
Utility Device		npt 1/4 Air/Gas Valve, Vacuum Valve, 110 V or 220 V Electric Socket(selectable), PAO test Valve			
Material	Interior	Stainless steel grade 304 with hair lined finish			
	Exterior	Standard - Epoxy powder coated electro galvanized steel Option - Stainless steel grade 304			
	Door	Slope 7° T. 5mm tempered safety glass sliding door with plastic guided frame			
Electric Supply		110 V 60 Hz or 220 V 50/60 Hz described order			
Net Weight (Approx.)	Cabinet	160 kg	190 kg	220 kg	280 kg
	Stand (Option)	22 kg	29 kg	35 kg	40 kg
Shipping Dimensions (Approx.) (Cabinet only) (W×D×Hmm)		1120 x 920 x 1650	1460 x 920 x 1650	1780 x 920 x 1650	2070 x 920 x 1650
Shipping Weight (Approx.) (Cabinet only)		205 kg	240 kg	280 kg	320 kg
Optional Stand		LST-0101V	LST-0121V	LST-0151V	LST-0181V

※ Specifications can be changed without prior notice for quality improvement.

※ Custom made order is available

Horizontal Air Flow Type



MODEL		LCB-0102H	LCB-0122H	LCB-0152H	LCB-0182H
Standard Type		Without side view window glass			
MODEL		LCB-0102HW	LCB-0122HW	LCB-0152HW	LCB-0182HW
Window Type		With both side view window glass (W: 392mm x H: 527mm x 2ea)			
Dimensions (W×D×Hmm)	Interior	900 x 545 x 680	1200 x 545 x 680	1500 x 545 x 680	1800 x 545 x 680
	Exterior	1050 x 800 x 1350	1350 x 800 x 1350	1650 x 800 x 1350	1950 x 800 x 1350
	Work Top	890 x 520	1190 x 520	1490 x 520	1790 x 520
	Movable Stand (Option)	1050 x 765 x 690	1350 x 765 x 690	1650 x 765 x 690	1950 x 765 x 690
	Total Dimension with Stand Option	1050 x 800 x 2040	1350 x 800 x 2040	1650 x 800 x 2040	1950 x 800 x 2040
Maximum Door Opening Height		540 mm			
Working Door Opening Height		200 mm			
Controller		Digital 9 stage velocity control with total using hour meter, Fan, UV/FL Lamp, on/off mode key			
Centrifugal Blower		200~260 w	300~360 w	400~520 w	400~520 w
Air Volume (Approx.)		23~25 m ³ /min	23~25 m ³ /min	46~50 m ³ /min	46~50 m ³ /min
Filter Type		Standard: HEPA Filter, Aluminum framed particle removal 99.99% 0.3μm Class 100 Option - PTFE ULPA Filter			
Prefilter		3~30 μm Particle Removal, Built-in Back panel			
Air flow		Standard Average 0.3m/sec, Range 0.28~0.36 m/sec			
Noise Sound Level		Standard < 60 dB, Range 56~65 dB(A)			
Illumination		FL Lamp 20 W x 1 EA		FL Lamp 40 W x 1 EA	
UV Disinfection		UV Lamp 20 W x 1 EA		UV Lamp 40 W x 1 EA	
Utility Device		npt 1/4 Air/Gas Valve, Vacuum Valve, 110 V or 220 V Electric Socket(selectable), PAO test Valve			
Material	Interior	Stainless steel grade 304 with hair lined finish			
	Exterior	Standard - Epoxy powder coated electro galvanized steel Option - Stainless steel grade 304			
	Door	Slope 7° T. 5mm tempered safety glass sliding door with plastic guided frame			
Electric Supply		110 V 60 Hz or 220 V 50/60 Hz described order			
Net Weight (Approx.)	Cabinet	160 kg	190 kg	220 kg	280 kg
	Stand (Option)	22 kg	29 kg	35 kg	40 kg
Shipping Dimensions (Approx.) (Cabinet only) (W×D×Hmm)		1120 x 920 x 1650	1460 x 920 x 1650	1780 x 920 x 1650	2070 x 920 x 1650
Shipping Weight (Approx.) (Cabinet only)		205 kg	240 kg	280 kg	320 kg
Optional Stand		LST-0102H	LST-0122H	LST-0152H	LST-0182H

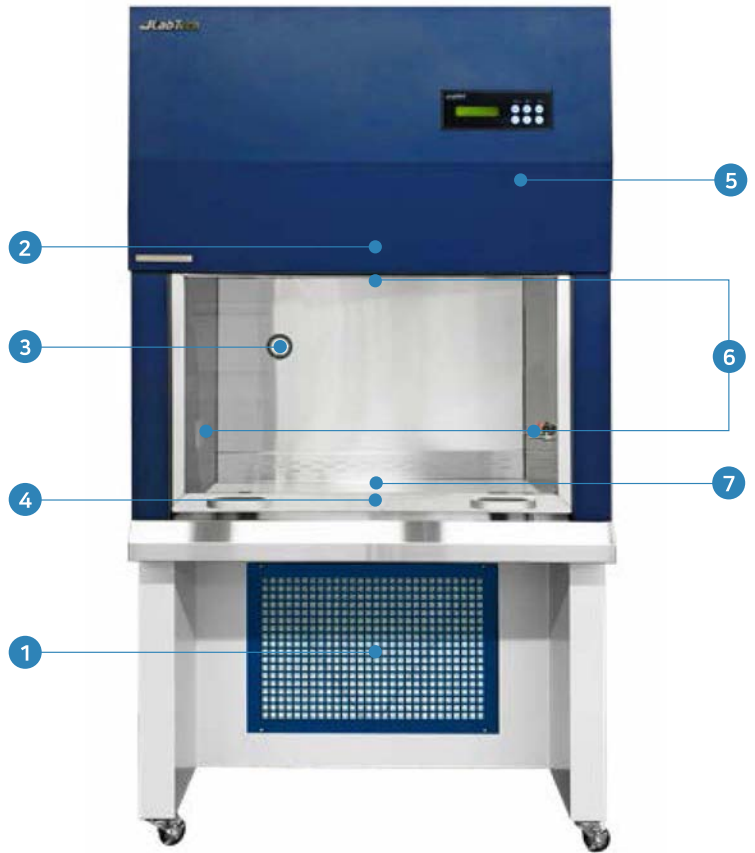
※ Specifications can be changed without prior notice for quality improvement.

※ Custom made order is available

Laminar Flow Clean Bench - Floor Standing Type

Vertical / Horizontal Type

Vertical Type

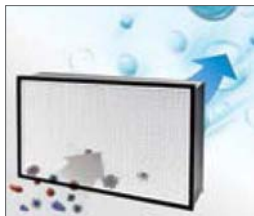


Horizontal Type



In compliance with ISO 14644-1, ISO Class 5 (Class 100) standards

2 HEPA Filter
High-efficiency particulate air filter that provides 99.99% efficiency for particle sizes of 0.3µm is installed



1 Pre-Filter
is installed to protect the HEPA filter and increase its lifetime by trapping large particles



3 Pressure Gauge
is installed as standard to check filter lifetime status



4 Tempered Safety Glass Door
for easy viewing inside and for protecting users from UV exposure



5 High Efficiency Centrifugal Blower
is installed to provide reduced noise and vibration



6 Utility Device
includes npt 1/4 air valve, gas valve, 110V or 220V electric socket (selectable), and DOP test valve



7 Stainless Steel Work Space
for easy cleaning



Microprocessor Digital Controller with LCD Display



- The controller enables: velocity setting, alarms, filter lifetime check, UV&FL lamp on/off, Fan on/off, UV lamp timer, present date and time

Optional Accessories



ULPA Filter



Arm Support
to prevent blocking of the intake grill and for better arm support



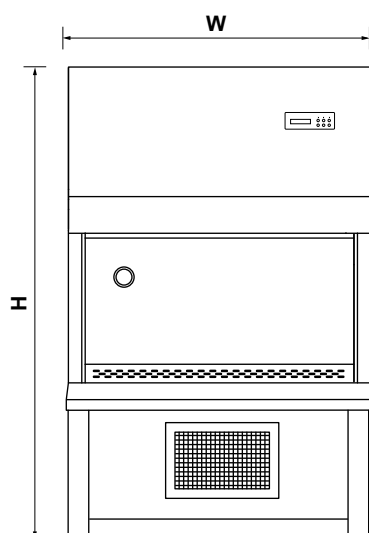
Height Adjustable Foot Rest
for comfortable working posture



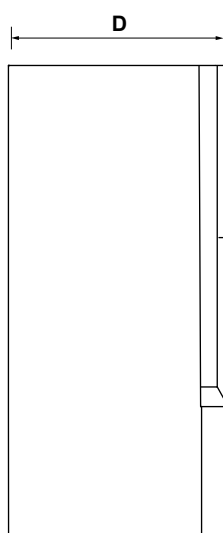
IQ/OQ Validation Documentation at Factory

* Available with the product on site only

Vertical Air Flow Type



Front View



Side View



Airflow

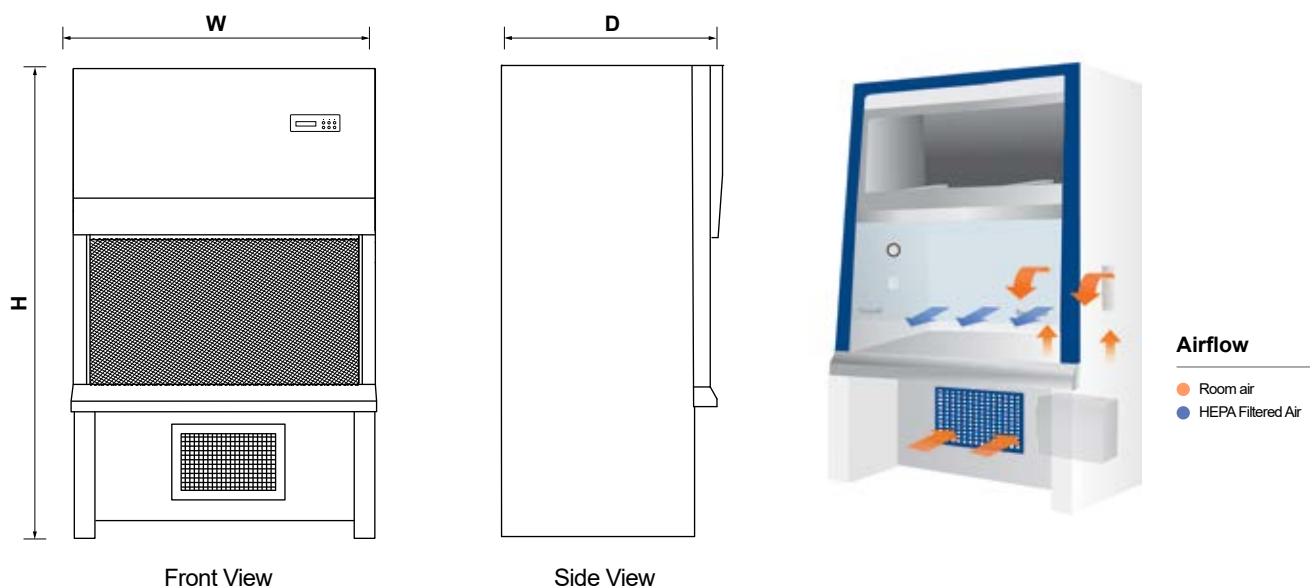
- Room air
- HEPA Filtered Air

MODEL		LCB-901V	LCB-1201V	LCB-1501V	LCB-1801V
Vertical Air Flow Type					
Dimensions (W×D×Hmm)	Interior	890 x 550 x 650	1200 x 550 x 650	1500 x 550 x 650	1800 x 550 x 650
	Exterior	1050 x 800 x 1880	1350 x 800 x 1880	1650 x 800 x 1880	1950 x 800 x 1880
	Work Top	890 x 600	1190 x 600	1490 x 600	1790 x 600
Maximum Door Opening Height		540 mm			
Working Door Opening Height		200 mm			
Controller		Digital 9 stage velocity control with total using hour meter, Fan, UV/FL Lamp, on/off mode key			
Centrifugal Blower		200~260 w	300~360 w	400~520 w	400~520 w
Air Volume (Approx.)		980 m ³ /h	1350 m ³ /h	1700 m ³ /h	2030 m ³ /h
Filter Type		Standard: HEPA Filter, Aluminum framed particle removal 99.99% Class5 (Class 100) Option - PTFE ULPA Filter			
Prefilter		3~30 μm Particle Removal, Built-in Back panel			
Air flow		Standard Average 0.3m/sec, Range 0.28~0.36 m/sec			
Noise Sound Level		56~60 dB			
Illumination		FL Lamp 20 W x 1 EA		FL Lamp 40 W x 1 EA	
UV Disinfection		UV Lamp 20 W x 1 EA		UV Lamp 40 W x 1 EA	
Utility Device		npt 1/4 Air/Gas Valve, 110 V or 220 V Electric Socket(selectable)			
Material	Interior	Stainless steel grade 304 with hair lined finish			
	Exterior	Standard - Epoxy powder coated electro galvanized steel Option - Stainless steel grade 304			
	Door	T. 5mm tempered safety glass sliding door			
Electric Supply		110 V 60 Hz or 220 V 50/60 Hz described order			
Net Weight (Approx.)		200 kg	250 kg	285 kg	330 kg
Shipping Dimensions (Approx.) (W×D×Hmm)		1150 x 900 x 2000	1450 x 900 x 1950	1750 x 930 x 1950	2050 x 900 x 1950
Shipping Weight (Approx.)		215 kg	265 kg	305 kg	350 kg

※ Specifications can be changed without prior notice for quality improvement.

※ Custom made order is available

Horizontal Air Flow Type



MODEL		LCB-902H	LCB-1202H	LCB-1502H	LCB-1802H
Horizontal Air Flow Type					
Dimensions (W×D×Hmm)	Interior	890 x 550 x 650	1200 x 550 x 650	1500 x 550 x 650	1800 x 550 x 650
	Exterior	1050 x 800 x 1880	1350 x 800 x 1880	1650 x 800 x 1880	1950 x 800 x 1880
	Work Top	890 x 600	1190 x 600	1490 x 600	1790 x 600
Maximum Door Opening Height		540 mm			
Working Door Opening Height		200 mm			
Controller		Digital 9 stage velocity control with total using hour meter, Fan, UV/FL Lamp, on/off mode key			
Centrifugal Blower		200~260 w	300~360 w	400~520 w	400~520 w
Air Volume (Approx.)		980 m ³ /h	1350 m ³ /h	1700 m ³ /h	2030 m ³ /h
Filter Type		Standard: HEPA Filter, Aluminum framed particle removal 99.99% Class5 (Class 100) Option - PTFE ULPA Filter			
Prefilter		3~30 μm Particle Removal, Built-in Back panel			
Air flow		Standard Average 0.3m/sec, Range 0.28~0.36 m/sec			
Noise Sound Level		56~60 dB			
Illumination		FL Lamp 20 W x 1 EA		FL Lamp 40 W x 1 EA	
UV Disinfection		UV Lamp 20 W x 1 EA		UV Lamp 40 W x 1 EA	
Utility Device		npt 1/4 Air/Gas Valve, 110 V or 220 V Electric Socket(selectable)			
Material	Interior	Stainless steel grade 304 with hair lined finish			
	Exterior	Standard - Epoxy powder coated electro galvanized steel Option - Stainless steel grade 304			
	Door	T. 5mm tempered safety glass sliding door			
Electric Supply		110 V 60 Hz or 220 V 50/60 Hz described order			
Net Weight (Approx.)		200 kg	245 kg	285 kg	330 kg
Shipping Dimensions (Approx.) (W×D×Hmm)		1150 x 1000 x 1950	1450 x 1000 x 2000	1780 x 900 x 1950	2020 x 900 x 2000
Shipping Weight (Approx.)		225 kg	265 kg	310 kg	350 kg

※ Specifications can be changed without prior notice for quality improvement.

※ Custom made order is available

Biohazard Safety Cabinet - Benchtop Type

Compliance with KS J 0012:2005, ISO 14644-1, EN 12469 and NSF 49 type-tested, EN 61010-1



with stand option



Class II Type A2

30% Exhaust



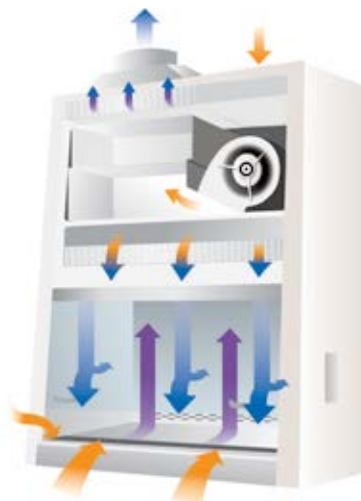
70% of the air is recirculated and 30% of the air is exhausted

Airflow

- Room air
- ULPA Filtered Air
- Unfiltered/Potentially Contaminated Air

Class II Type B2

100% Exhaust



100% of the air is exhausted

※ External blower should be separately installed for 100% exhaust.

Airflow

- Room air
- ULPA Filtered Air
- Unfiltered/Potentially Contaminated Air

In Compliance with KS J 0012:2005, ISO 14644-1, EN 12469 and NSF 49 type-tested, EN 61010-1, ISO Class 5 (Class 100) standards

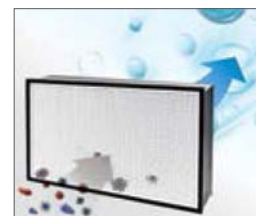
2 Pressure Gauge

is installed as standard to check filter lifetime status



1 ULPA Filters

that provide 99.999% efficiency for particle sizes of 0.3µm are installed for both supply and exhaust filters



3 Tempered Safety Glass Door with Safety Alarm

in case the door is opened above the proper height



4 High Efficiency Dual Inlet Blower

is installed to provide reduced noise and vibration



5 Utility Device

includes npt 1/4 air valve, gas valve, 110V or 220V electric socket (selectable), DOP test valve, UV lamps and FL lamps are installed as standard



6 Stainless Steel Single Piece Dished Work Space

for easy cleaning and to prevent contaminants



7 Arm Rest

Provides comfortable user working posture



8 Paper Catch

is installed as standard



9 Ergonomic Design

7° angled ergonomic structure allows easy reach and viewing while also minimizes stress on user's neck and arm



Microprocessor Digital Controller with LCD Display



- The controller enables: velocity setting, alarms, filter lifetime check, UV&FL lamp on/off, UV lamp timer, room temperature, present date and time

Control Function



MODE



UV time setting



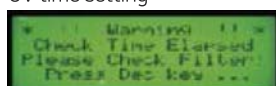
Alarm for Air Velocity



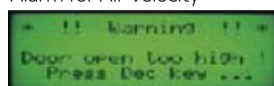
Air Velocity Set



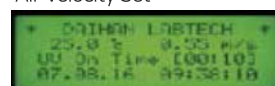
MODE



Alarm for Filter

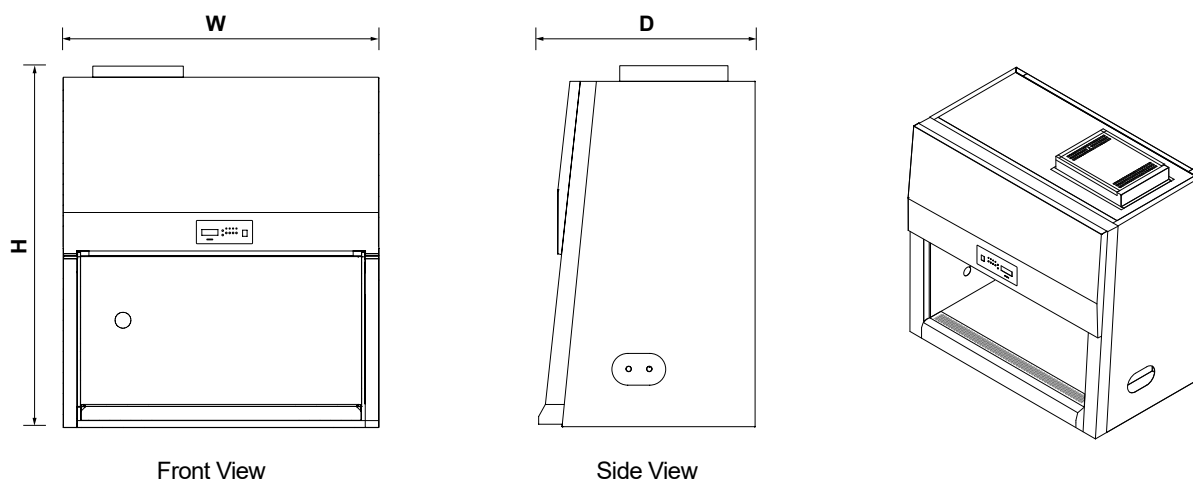


Alarm for Door Open



Display for Working

Class II Type A2

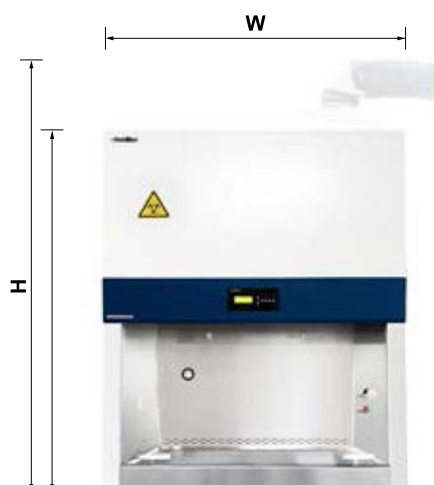


MODEL		LCB-0103B-A2	LCB-0123B-A2	LCB-0153B-A2	LCB-0183B-A2
Dimensions (W×D×Hmm)	Interior	900 x 620 x 680	1200 x 620 x 680	1500 x 620 x 680	1800 x 620 x 680
	Exterior	1050 x 800 x 1500	1350 x 800 x 1500	1650 x 800 x 1500	1950 x 800 x 1500
	Work top	890 x 520	1190 x 520	1490 x 520	1790 x 520
	Movable Stand (Option)	1050 x 765 x 690	1350 x 765 x 690	1650 x 765 x 690	1950 x 765 x 690
	Total Dimension with Stand Option	1050 x 800 x 2190	1350 x 800 x 2190	1650 x 800 x 2190	1950 x 800 x 2190
Maximum Door Opening Height		540 mm			
Working Door Opening Height		200 mm			
Controller		Microprocessor Controller with Air velocity set, Low air speed alarm, Record working time and date set, Temperature monitoring, UV & FL Lamp operation			
Double Inlet Centrifugal Blower		340~400 w	440~680 w	480~750 w	680~800 w
Air Volume (Approx.)		34 m ³ /min	50 m ³ /min	57 m ³ /min	68 m ³ /min
Filter Type		Standard: ULPA U15 Filter, Aluminum framed particle removal 99.9999% ISO Class 3, Class 10 Option - PTFE ULPA Filter			
Air flow	Downflow	Standard average 0.3 m/sec, Range 0.25~0.35 m/sec			
	Inflow	Standard average 0.5 m/sec, Range 0.45~0.65 m/sec			
Noise Sound Level		Standard < 60 dB, Range 56~65 dB(A)			
Illumination		FL Lamp 20 W x 1 EA		FL Lamp 40 W x 1 EA	
UV Disinfection		UV Lamp 20 W x 1 EA		UV Lamp 40 W x 1 EA	
Utility Device		npt 1/4 Air/Gas Valve, Vacuum Valve, 110 V or 220 V Electric Socket(selectable), PAO test Valve			
Material	Interior	Stainless steel grade 304 with hair lined finish			
	Exterior	Standard - Epoxy powder coated electro galvanized steel Option - Stainless steel grade 304			
	Door	Slope 7° T. 5mm tempered safety glass sliding door			
Electric Supply		110 V 60 Hz or 220 V 50/60 Hz described order			
Net Weight (Approx.)	Cabinet	160 kg	190 kg	220 kg	280 kg
	Stand (Option)	22 kg	29 kg	35 kg	40 kg
Shipping Dimensions (Approx.) (Cabinet only) (W×D×Hmm)		1120 x 920 x 1650	1460 x 920 x 1650	1780 x 920 x 1650	2070 x 920 x 1650
Shipping Weight (Approx.) (Cabinet only)		205 kg	240 kg	280 kg	320 kg
Optional Stand		LST-0103	LST-0123	LST-0153	LST-0183

* Specifications can be changed without prior notice for quality improvement.

* Custom made order is available

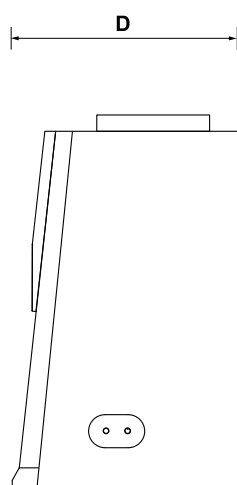
Class II Type B2



LCB-0123B-B2

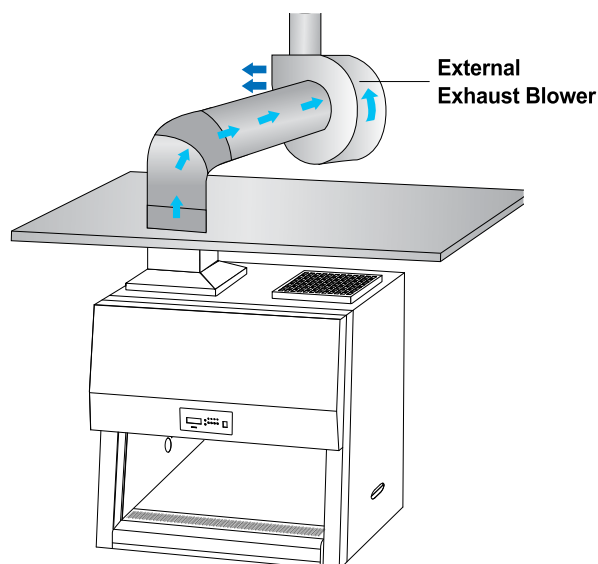
※ Canopy is provided as standard for B2 type

Front View



Side View

Recommended B2 Cabinet Installation



※ Exhaust Blower installation at the terminal end should be installed.

MODEL		LCB-0103B-B2	LCB-0123B-B2	LCB-0153B-B2	LCB-0183B-B2
Dimensions (W×D×Hmm)	Interior	900 x 620 x 680	1200 x 620 x 680	1500 x 620 x 680	1800 x 620 x 680
	Exterior	1050 x 800 x 1700	1350 x 800 x 1700	1650 x 800 x 1700	1950 x 800 x 1700
	Work top	890 x 520	1190 x 520	1490 x 520	1790 x 520
	Movable Stand (Option)	1050 x 765 x 690	1350 x 765 x 690	1650 x 765 x 690	1950 x 765 x 690
	Total Dimension with Stand Option	1050 x 800 x 2190	1350 x 800 x 2190	1650 x 800 x 2190	1950 x 800 x 2190
Maximum Door Opening Height		540 mm			
Working Door Opening Height		200 mm			
Controller		Microprocessor Controller with Air velocity set, Low air speed alarm, Record working time and date set, Temperature monitoring, UV & FL Lamp operation			
Double Inlet Centrifugal Blower		340~400 w	440~680 w	480~750 w	680~800 w
Air Volume (Approx.)		34 m ³ /min	50 m ³ /min	57 m ³ /min	68 m ³ /min
Filter Type		Standard: ULPA U15 Filter, Aluminum framed particle removal 99.9999% ISO Class 3, Class 10 HEPA Filter & Prefilter Option - PTFE ULPA Filter			
Prefilter		3~30 μm Particle Removal, Built-in Back panel			
Air flow	Downflow	Standard average 0.3 m/sec, Range 0.25~0.35 m/sec			
	Inflow	Standard average 0.5 m/sec, Range 0.45~0.65 m/sec			
Noise Sound Level		Standard < 60 dB, Range 56~65 dB(A)			
Illumination		FL Lamp 20 W x 1 EA		FL Lamp 40 W x 1 EA	
UV Disinfection		UV Lamp 20 W x 1 EA		UV Lamp 40 W x 1 EA	
Utility Device		npt 1/4 Air/Gas Valve, Vacuum Valve, 110 V or 220 V Electric Socket (selectable), PAO test Valve			
Material	Interior	Stainless steel grade 304 with hair lined finish			
	Exterior	Standard - Epoxy powder coated electro galvanized steel Option - Stainless steel grade 304			
	Door	Slope 7° T. 5mm tempered safety glass sliding door			
Electric Supply		110 V 60 Hz or 220 V 50/60 Hz described order			
Net Weight (Approx.)	Cabinet	160 kg	190 kg	220 kg	280 kg
	Stand (Option)	22 kg	29 kg	35 kg	40 kg
Shipping Dimensions (Approx.) (Cabinet only) (W×D×Hmm)		1120 x 920 x 1650	1460 x 920 x 1650	1780 x 920 x 1650	2070 x 920 x 1650
Shipping Weight (Approx.) (Cabinet only)		205 kg	240 kg	280 kg	320 kg
Optional Stand		LST-0103	LST-0123	LST-0153	LST-0183

※ Specifications can be changed without prior notice for quality improvement.

※ Custom made order is available

Optional Accessories



Base Stand with Castors

Option:
Leveling feet
Electric Sockets



Tempered Glass Side Wall
for convenient observance



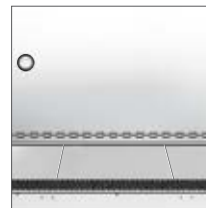
Exhaust Air-Break Canopy Transition
to connect with the duct
(for A2 type only)



Arm Support
to prevent blocking of the intake grill and for better arm support



Height Adjustable Foot Rest
for comfortable working posture



3 Pieces Work Space
for easy sterilization in sterilizers / autoclaves



Motorized Up&Down Door



IQ/OQ Validation Documentation at Factory

* Available with the product on site only

Motorized Up&Down Door



Biohazard Safety Cabinet - Floor Standing Type

Compliance with KS J 0012:2005, ISO 14644-1, EN 12469 and NSF 49 type-tested, EN 61010-1



Class II Type A2

30% Exhaust



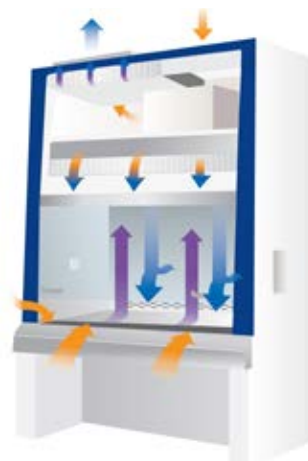
70% of the air is recirculated and 30% of the air is exhausted

Airflow

- Room air
- HEPA Filtered Air
- Unfiltered/Potentially Contaminated Air

Class II Type B2

100% Exhaust



100% of the air is exhausted

Airflow

- Room air
- HEPA Filtered Air
- Unfiltered/Potentially Contaminated Air

In Compliance with KS J 0012:2005, ISO 14644-1, EN 12469 and NSF 49 type-tested, EN 61010-1, ISO Class 5 (Class 100) standards

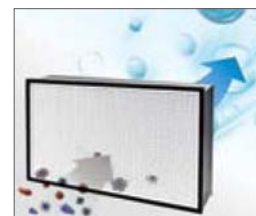
2 Pressure Gauge

is installed as standard to check filter lifetime status



1 ULPA Filters

that provide 99.999% efficiency for particle sizes of 0.3µm are installed for both supply and exhaust filters



3 Tempered Safety Glass Door with Safety Alarm

in case the door is opened above the proper height



4 High Efficiency Dual Inlet Blower

is installed to provide reduced noise and vibration



5 Utility Device

includes npt 1/4 air valve, gas valve, 110V or 220V electric socket (selectable), DOP test valve, UV lamps and FL lamps are installed as standard



6 Stainless Steel Single Piece Dished Work Space

for easy cleaning and to prevent contaminants



7 Arm Rest

Provides comfortable user working posture



8 Paper Catch

is installed as standard



Microprocessor Digital Controller with LCD Display



- **The controller enables:** velocity setting, alarms, filter lifetime check, UV&FL lamp on/off, UV lamp timer, room temperature, present date and time

Control Function



MODE



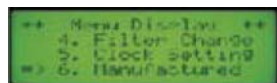
UV time setting



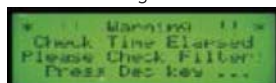
Alarm for Air Velocity



Air Velocity Set



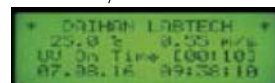
MODE



Alarm for Filter

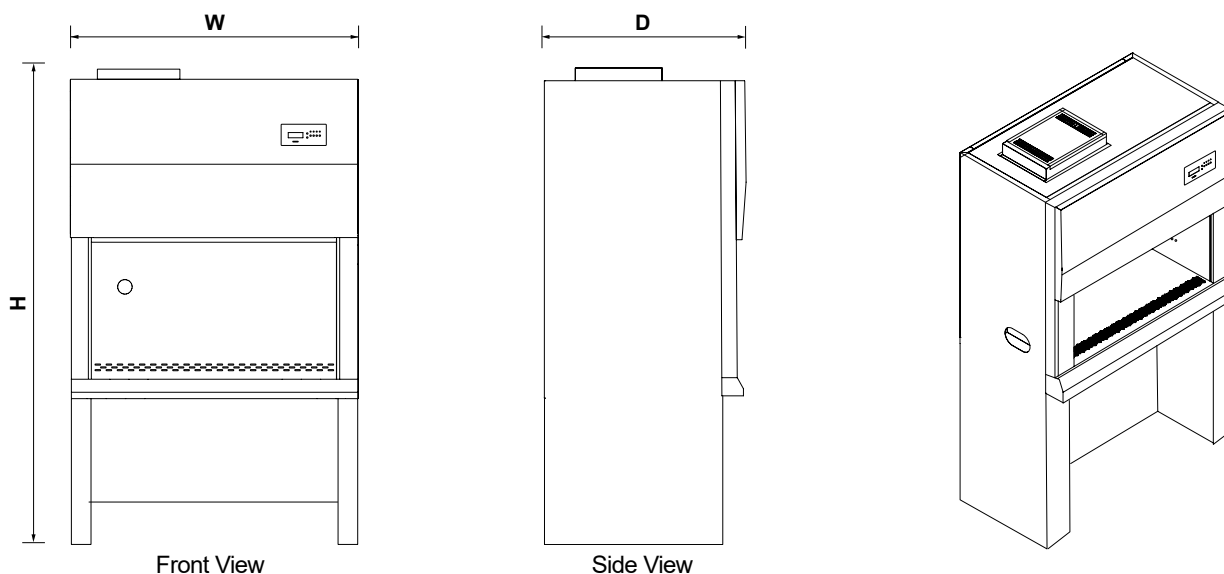


Alarm for Door Open



Display for Working

Class II Type A2

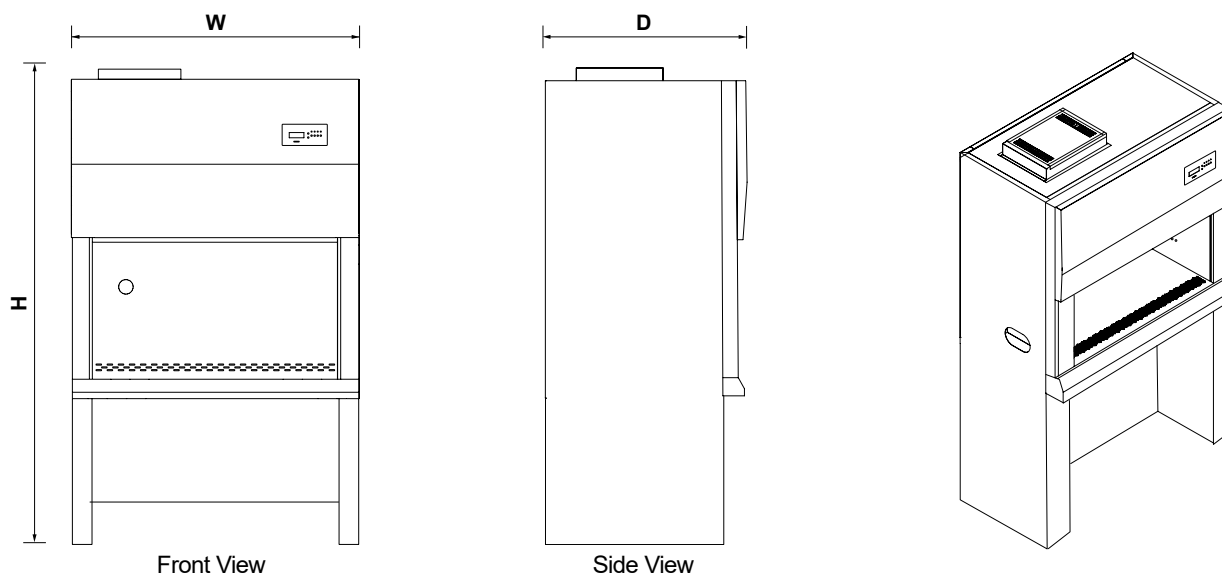


MODEL		LCB-903B-A2	LCB-1203B-A2	LCB-1503B-A2	LCB-1803B-A2
Dimensions (W×D×Hmm)	Interior	890 x 600 x 635	1190 x 600 x 635	1490 x 600 x 635	1790 x 600 x 635
	Exterior	1050 x 800 x 1880	1350 x 800 x 1880	1650 x 800 x 1880	1950 x 800 x 1880
Maximum Door Opening Height		540 mm			
Working Door Opening Height		200 mm			
Controller		Microprocessor Controller with Air velocity set, Low air speed alarm, Record working time and date set, Temperature monitoring, UV & FL Lamp operation			
Double Inlet Centrifugal Blower		340~400 w	440~680 w	480~750 w	680~800 w
Air Volume (Approx.)		34 m ³ /min	50 m ³ /min	57 m ³ /min	68 m ³ /min
Filter Type		Standard: ULPA U15 Filter, Aluminum framed particle removal 99.9999% ISO Class 3, Class 10 Option - PTFE ULPA Filter			
Air flow	Downflow	Standard average 0.3 m/sec, Range 0.25~0.35 m/sec			
	Inflow	Standard average 0.5 m/sec, Range 0.45~0.65 m/sec			
Noise Sound Level		Standard < 60 dB, Range 56~65 dB(A)			
Illumination		FL Lamp 20 W x 1 EA		FL Lamp 40 W x 1 EA	
UV Disinfection		UV Lamp 20 W x 1 EA		UV Lamp 40 W x 1 EA	
Utility Device		npt 1/4 Air/Gas Valve, Vacuum Valve, 110 V or 220 V Electric Socket(selectable), PAO test Valve			
Material	Interior	Stainless steel grade 304 with hair lined finish			
	Exterior	Standard - Epoxy powder coated electro galvanized steel Option - Stainless steel grade 304			
	Door	T. 5mm tempered safety glass sliding door			
Electric Supply		110 V 60 Hz or 220 V 50/60 Hz described order			
Net Weight (Approx.)		220 kg	250 kg	290 kg	330 kg
Shipping Dimensions (Approx.) (W×D×Hmm)		1900 x 1100 x 2030	1450 x 900 x 2000	1750 x 900 x 2000	2100 x 900 x 2100
Shipping Weight (Approx.)		245 kg	275 kg	320 kg	350 kg

※ Specifications can be changed without prior notice for quality improvement.

※ Custom made order is available

Class II Type B2



MODEL		LCB-903B-B2	LCB-1203B-B2	LCB-1503B-B2
Dimensions (W×D×H mm)	Interior	890 x 620 x 635	1190 x 620 x 635	1490 x 620 x 635
	Exterior	1050 x 1000 x 2050	1350 x 1000 x 2050	1650 x 1000 x 2050
Maximum Door Opening Height		540 mm		
Working Door Opening Height		200 mm		
Controller		Microprocessor Controller with Air velocity set, Low air speed alarm, Record working time and date set, Temperature monitoring, UV & FL Lamp operation		
Centrifugal Blower		340~400 w	440~680 w	480~750 w
Air Volume (Approx.)		34 m ³ /min	50 m ³ /min	57 m ³ /min
Filter Type		Standard: ULPA U15 Filter, Aluminum framed particle removal 99.9999% ISO Class 3, Class 10 HEPA Filter & Prefilter Option - PTFE ULPA Filter		
Prefilter		3~30 μm Particle Removal, Built-in Back panel		
Air flow	Downflow	Standard average 0.3 m/sec, Range 0.25~0.35 m/sec		
	Inflow	Standard average 0.5 m/sec, Range 0.45~0.65 m/sec		
Noise Sound Level		Standard < 60 dB, Range 56~65 dB(A)		
Illumination		FL Lamp 20 W x 1 EA		FL Lamp 40 W x 1 EA
UV Disinfection		UV Lamp 20 W x 1 EA		UV Lamp 40 W x 1 EA
Utility Device		npt 1/4 Air/Gas Valve, Vacuum Valve, 110 V or 220 V Electric Socket(selectable), PAO test Valve		
Material	Interior	Stainless steel grade 304 with hair lined finish		
	Exterior	Standard - Epoxy powder coated electro galvanized steel Option - Stainless steel grade 304		
	Door	T. 5mm tempered safety glass sliding door		
Electric Supply		110 V 60 Hz or 220 V 50/60 Hz described order		
Net Weight (Approx.)		290 kg	340 kg	360 kg
Shipping Dimensions (Approx.) (W×D×H mm)		1150 x 1100 x 2100	1450 x 1050 x 2120	1750 x 900 x 2100
Shipping Weight (Approx.)		310 kg	355 kg	380 kg

※ Specifications can be changed without prior notice for quality improvement.

※ Custom made order is available

Optional Accessories



Tempered Glass Side Wall
for convenient observance



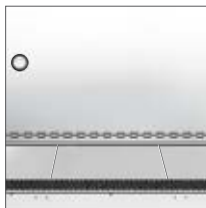
Exhaust Air-Break Canopy Transition
to connect with the duct



Arm Support
to prevent blocking of the intake grill and for better arm support



Height Adjustable Foot Rest
for comfortable working posture



3 Pieces Work Space
for easy sterilization in sterilizers /autoclaves



Motorized Up&Down Front Door



IQ/OQ Validation Documentation at Factory

* Available with the product on site only

IQ/OQ Validation

Our experienced validation engineers perform Installation Qualification (IQ) and Operational Qualification (OQ)



<p>1 Filter Integrity Test To check for cleanliness and safety of the filters</p>	<p>Airflow Smoke Pattern Test (PAO Test) To check the airflow is downward without flowing backwards or leakage</p>	<p>2 Downflow & Inflow Velocity Test To check if the air is supplied uniformly and stably</p>	<p>3 Lighting Intensity Test To check the lighting inside the cabinet is in proper range</p>
<p>4 Vibration Test To check the vibration of the cabinet during operation is in proper range</p>	<p>5 Particle Count Test To check whether the cabinet maintains proper cleanliness pertinent to the standards</p>	<p>6 Noise Level Test To check for proper noise level during operation</p>	



(주)대한랩테크

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