

SAFETY CABINETS



JSR

[주] 제이에스리서치
JS Research Inc.

Safety

CABINET

BIOHAZARD LAMINAR FLOW Clean Bench

Biological Safety Cabinet Class II Type A2

Cabinet enclosure designed Class II Type A2 provides personnel, product and environmental protection from hazardous particles such as bacteria, viruses and genetically manipulated materials such as nucleic acids that require Biosafety Level 1, 2 or 3 containments.

Various applications in medical, biomedical, biotechnology, pharmaceutical, cell culture, tissue culture, virology and pathology applications using pathogens, genetic materials, carcinogens, allergens may generates hazardous airborne particles.



Biological Safety
Class II Type A2



HEPA Filter
99.993 % for 0.3 um particles



ULPA Filter
99.999% for 0.12 um particles



9 Step Air Velocity Control
0.3 m/sec ~ 0.6 m/sec



Cold White
Fluorescent Work Lamp



Germicidal UV Lamp
/w Timer

Vertical Laminar Flow Clean Bench



Vertical Laminar Flow Cabinet enclosure designed to maintain ISO Class 5 (formerly Class 100) clean air. HEPA filtered laminar air down flow over the work area to protect products or samples being handled in the cabinet from dust or biological contaminants such as bacteria, fungus and genetic materials.

Various applications in plant tissue culture, microbial inoculation, media preparation, PCR, electronic or medical parts inspection and assembly where dust particles and contaminants should not be present in the air of working area essentially needed.



Vertical Laminar Flow
ISO Class 5 (Class 100)



HEPA Filter
99.993 % for 0.3 um particles



ULPA Filter
99.999% for 0.12 um particles



9 Step Air Velocity Control
0.3 m/sec ~ 0.6 m/sec



Cold White
Fluorescent Work Lamp



Germicidal UV Lamp
/w Timer

Safety CABINET

BIOHAZARD LAMINAR FLOW Clean Bench

JSCB-SB Series BSC Cabinet Class II Type A2



MODEL	WIDTH	AIR VELOCITY	PROTECTION
JSCB-900SB	830 mm	0.3 m/sec. ~ 0.6 m/sec.	Personnel Product Environment
JSCB-1200SB	1205 mm		
JSCB-1500SB	1490 mm		
JSCB-1800SB	1790 mm		

Digital LCD Control



Performance

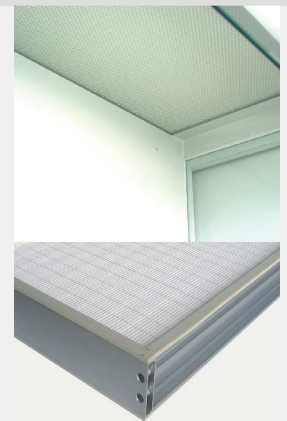
Digital Control

- ▶ Back light LCD display
- ▶ 9 Step Air velocity control
- ▶ UV sterilization timer
- ▶ Total using time counter
- ▶ LCD 디지털 컨트롤러
- ▶ 9 단계 풍속 제어 기능
- ▶ 자외선 살균시간 타이머
- ▶ 총 사용 시간 로그
- ▶ 필터 교체 시기 알람



HEPA Filter

- ▶ Aluminum frame mini-pleated HEPA Filter efficiency 99.993 ~ 99.995% with guard mesh
- ▶ Optional ULPA Filter efficiency 99.999%
- ▶ 알루미늄 프레임 mini-pleated HEPA Filter 99.993% ~ 99.995% 여과효율
- ▶ 필터보호 메쉬 장착
- ▶ 옵션 : ULPA Filter 99.999%



Safety

- ▶ UV Lamp cut-off in case of Fluorescent lamp turned on
- ▶ TOTAL USING TIME LOG
- ▶ HEPA FILTER REPLACEMENT ALARM
- ▶ OVER CURRENT CUT-OFF : Fuse
- ▶ 멸균램프 소등장치
- ▶ 형광등 켜면 멸균등이 자동으로 소등되어 유해 자외선으로부터 사용자 보호
- ▶ 총사용시간적산기록
- ▶ HEPA 필터 교체시기 알람
- ▶ 퓨즈 : 전기누설 시 주전원 차단

Convenience

▶ Working Area

- ▶ Ergonomic arm rest
- ▶ Removable working zone plate for cleaning and decontamination
- ▶ Front service access panel for comfortable maintenance
- ▶ Base stand with caster

- ▶ 인체공학적으로 설계된 팔받침
- ▶ 분리 가능한 SUS 304 작업 바닥판
- ▶ 유지보수가 편리한 서비스 판넬
- ▶ 이동식 캐비닛 스탠드



▶ FL and UV Lamp

- ▶ Cold white fluorescent lamp
- ▶ 253nm Germicidal UV lamp

- ▶ 주광색 형광등 작업 램프
- ▶ 253nm 자외선 멸균램프



▶ Utility

- ▶ Tempered Safety Glass Sash Door
- ▶ Power receptacle
- ▶ Gas and air supply valve

- ▶ 상하 슬라이딩 전면 유리 도어
- ▶ 220V 전원 콘센트
- ▶ 가스 및 에어 공급 밸브



JSCB-SL Series Vertical Laminar Flow Cabinet



MODEL	WIDTH	AIR VELOCITY	PROTECTION
JSCB-900SL	830 mm	0.3 m/sec. ~ 0.6 m/sec.	Product
JSCB-1200SL	1205 mm		
JSCB-1500SL	1490 mm		
JSCB-1800SL	1790 mm		

Biological

SAFETY

JSCB-SB Series Biological Safety Cabinet Class II Type A2



Specifications

Class	Class II Type A2
Air Flow	Vertical Laminar Flow 70% Recirculation 30% Exhaust
Filtration	Aluminum Frame Mini-Pleated HEPA Optional ULPA Filter
Efficiency	HEPA : 99.993% for 0.3um particles ULPA : 99.999% for 0.12um particles
Controller	Microprocessor Control 9 Step Air Velocity Control
Material	Work Platform : Satinless Steel 304 Body : Epoxy Powder Coated Steel
Sterilization	253nm Germicidal UV Lamp with Timer
Safety	Over Current Cut-Off
Electric	220 ± 10% VAC 50/60Hz 1-Phase

Plug config.



or



CEE 7/7 Schuko

BS 1363

Control Capability

- Integrated Digital microprocessor control system with back-light LCD display
- Fan ON/OFF and 9-step adjustable air velocity
- Fluorescent lamp ON/OFF
- UV lamp ON/OFF
- Adjustable UV sterilization timer
- Elapsed time counter and alarm for HEPA filter replacement
- 통합형 LCD 디스플레이 디지털 콘트롤러
- 블로어 ON/OFF 및 9단계 풍속 제어 기능
- 조명 형광등 ON/OFF
- 자외선 살균 램프 ON/OFF 및 살균시간 타이머
- 총사용시간 로그 및 필터 교체 시기 알람



Biological Safety
Class II Type A2



HEPA Filter
99.993 % for 0.3 um particles



ULPA Filter
99.999% for 0.12 um particles



9 Step Air Velocity Control
0.3 m/sec ~ 0.6 m/sec



Cold White
Fluorescent Work Lamp



Germicidal UV Lamp
/w Timer

Performance

- ▶ Biological Safety Level Class II Type A2 design provides a higher level of personnel, product and cross contamination protection by keep filtrate airborne particles from the air stream
- ▶ Inflow moves from the room air is drawn into the inlet grille at the work access opening and pass through a negative pressure planum to blower creates HEPA filtered down ward laminar air stream over the work area
- ▶ Approximately 70% of the HEPA-filtered air is re-circulated through the cabinet into the work zone, while 30% passes through an exhaust HEPA filter and is discharged into the laboratory room air
- ▶ Aluminum Frame Mini-pleated HEPA filters with nominal filtration efficiency of 99.993% ~ 99.995% for airborne particles larger than 0.3um
- ▶ Optional ULPA filter had higher filtration efficiency of 99.999% for airborne particles larger than 0.12 um
- ▶ The front door can also be closed fully to keep the cabinet interior clean during non-use period as well as to prevent exposure to UV radiation during sterilization
- ▶ Epoxy powder coated SPCC exterior for durability
- ▶ Silent and vibration free blower fan motor for comfortable working environment
- ▶ Cold white fluorescent lamp working light
- ▶ 253 nm Germicidal UV lamp on working zone
- ▶ Supplied with Base Stand

- ▶ Class II Type A2 설계는 공기 중 존재 하는 Biosafety Level 1, 2, 3 에 해당되는 오염원으로 부터 작업자, 시료, 실험실 공기를 보호하는 목적으로 사용
- ▶ 작업대 입구의 그릴을 통해 흡입된 공기는 블로어를 통해 HEPA 필터에 여과되어 벤치 내부로 vertical lamiar air stream을 형성하고 약 70%의 공기는 재순환되고 약 30%의 공기는 HEPA 필터로 여과되어 실험실 내부로 배출
- ▶ HEPA 필터로 여과된 공기는 캐비닛의 위에서 아래 방향으로 일정한 속도의 기류를 형성하여 실험 샘플의 오염 및 교차오염 실험실 내부 공기의 오염을 방지
- ▶ 알루미늄 프레임 Mini-pleated HEPA Filter 는 0.3um 크기 이상의 입자를 99.993% ~ 99.995% 여과
- ▶ 옵션 : ULPA Filter 는 0.12um 크기 이상의 입자를 99.9999% 여과
- ▶ 전면 유리도어는 사용 전후 완전히 밀폐하여 멸균시 자외선이 외부로 조사 되지 않도록 설계
- ▶ 내구성이 뛰어난 에폭시 분체도장 분체
- ▶ 소음과 진동이 작아 쾌적한 작업환경 제공
- ▶ 주광색 형광등 작업 램프
- ▶ 253nm UV 멸균램프

Options

Art No.	Descriptions
	ULPA Filter Option (Factory Built-in)
OHF-U01	for JSCB-900SB
OHF-U02	for JSCB-1200SB
OHF-U03	for JSCB-1500SB
OHF-U04	for JSCB-1800SB

Ordering Information

	JSCB-900SB	JSCB-1200SB	JSCB-1500SB	JSCB-1800SB
Working Width mm	830 mm (3 ft)	1205 mm (4 ft)	1490 mm (5 ft)	1790 mm (6 ft)
Dimensions Inner	830 x 526 x 585	1205 x 526 x 585	1490 x 526 x 585	1790 x 526 x 585
W x D x H mm Outer	900 x 792 x 1990	1275 x 792 x 1990	1560 x 792 x 1990	1860 x 792 x 1990
HEPA Filter	0.3um Particle Removal 99.993% ~ 99.995%			
ULPA Filter Option	0.3um Particle Removal 99.999%			
Air Circulation	70% Re-circulation / 30% Exhaust			
Controller Display	Back Light Digital LCD			
Speed Control	9 Step Air Velocity Control from 0.3m/sec. ~ 0.6m/sec.			
Control	FL Lamp ON/OFF, UV Lamp ON/OFF, UV Timer / Total Using Time / Filter Replace Alarm			
Working Lamp	FL 20 W x 2 ea	FL 30 W x 2 ea	FL 30 W x 2 ea	FL 36 W x 2 ea
Germicidal UV Lamp	UV 20 W x 1 ea	UV 30 W x 1 ea	UV 30 W x 1 ea	UV 40 W x 1 ea
Utility	2 x Power Consent, 1 x Gas Cock, 1 x Air Cock			
Power Rating	0.9 Amp	1.6 Amp	1.6 Amp	1.7 Amp
Power Plug	CEE 7/7 Schuko			