

# CLASS II BIOLOGICAL SAFETY CABINET



# CLASS II BIOLOGICAL SAFETY CABINET

It operates with a negative air pressure for personnel protection and HEPA filtered laminar airflow for product protection to meet the requirements for the environment from microorganisms and aerosols. Features like Time reverse function, Interlock function, low noise and Filter Life Indicator makes the product beneficial and reliable.

Used in Cell culturing, Genetics, Microbiological, Research, Cell Biology, Molecular Biology, Plant, Laboratory.

Also known as Class II BSC, Biosafety Cabinet.

## BSC21-0600A2 CLASS II BIOLOGICAL SAFETY CABINET

Stainless Steel 304 table for operation

Digital LCD display for easy monitoring of all parameters

Emission of 253.7 nm for highly efficient decontamination

Motored front window with timer function

Two-layered marinated toughened glass ( $\geq 5\text{mm}$ ) motorized front window

Negative air pressure provides personnel protection by constant movement of air in working area

Remote control operation including front sash movement and fan speed control

Foot switch to adjust the height of the front window

Centrifugal fan speed adjustable: H14 HEPA filter

Intrinsic sterilization is achieved after activating cabinet for 30 min via UV timing

Filter Life Indicator: Pressure value displayed to show life utility of main filter

Low noise and high energy efficiency for operational cost savings

Audio and visual alarm for filter replacement, front window over height and abnormal airflow



## SPECIFICATIONS

Model	BSC21-0600A2
Type	Class II, Type A2
HEPA Filter	2
HEPA Filter Efficiency	99.999% efficiency at 0.3 $\mu\text{m}$ , Filter life Indicator
Air Circulation	0.7
Exhaust Air	0.3
Minimum Face Velocity	75 linear feet per minute (lfpm)
Inflow Velocity	0.53 $\pm$ 0.025m/s
Down Flow Velocity	0.33 $\pm$ 0.025m/s
LED Lamp	40Wx1
UV Lamp	15Wx1
Illumination	$\geq 1000$ lux
Work Surface Height	750 mm
Tested Opening	200 mm
Max Opening	370 mm
Inner Dimension (WxDxH)	600x500x540 mm
Overall Dimension (WxDxH)	700x650x1230 mm
Package Size	860x960x1450 mm (with base stand) 860x800x1450 mm (without base stand)
Caster	Yes

Front Window	Two-layer toughened glass $\geq 5$ mm, Anti UV
Clean Level	Class 100
Control System	Microprocessor
Chamber Material	Cold-rolled steel coated with anti-bacteria powder coating
Socket	Two, Total load of two sockets: 500W
Noise Level	EN12469 $\leq$ 58dB / NSF49 $\leq$ 61dB
Weight	196 kg (with base stand) 164 kg (without base stand)
Power	500 W
Power Supply	220V~240V/50Hz~60Hz

## ACCESSORIES

Accessory Code	Name	Description
LS53467	Fluorescent Lamp	
LS53479	UV Lampx2	
LS53503	Remote Control	
LS53527	Drain Valve	
LS53539	Waterproof Sockets	

## OPTIONAL ACCESSORIES

Accessory Code	Name	Description	External Dimension	Package Size (mm)
LS53006	Infrared Sterilizer		150x95x210 mm	
LS53018	Airflow Tester			
LS53030	Formalin Fumigation Sterilizer			300x200x160 mm
LS53042	Ammonium Hydrogen Carbonate Neutralizer			300x200x160 mm
LS53054	Armrest			
LS53066	Laboratory Chair			
LS53078	Dust Particle Counter			
LS53090	Digital Sound Level Meter			
LS53102	Illumination Meter			
LS53114	Air Flow Anemometer			
LS53126	Protective Garment			
LS53138	Protective Gloves			

# BSC21 CLASS II BIOLOGICAL SAFETY CABINET

- Time reserve function
- Stainless Steel 304 table for operation
- Emission of 253.7 nm for highly efficient decontamination
- Remote control operation including front sash movement and fan speed control
- Motored front window with timer function
- Two-layered marinated toughened glass ( $\geq 5\text{mm}$ ) motorized front window
- Negative air pressure provides personnel protection by constant movement of air in working area
- Foot switch to adjust the height of the front window
- 2 waterproof sockets located inside panel
- Automatic air speed adjustable with filter block
- Filter Life Indicator: Pressure value displayed to show life utility of main filter
- Interlock function: Fluorescent lamp, UV lamp and front window, Blower and front window, UV lamp and blower
- Low noise and high energy efficiency for operational cost savings
- Audio and visual alarm for filter replacement, front window over height and abnormal airflow velocity
- LCD display: filter and UV lamp working time, Filter life, Exhaust filter and downflow filter pressure, Humidity and temperature, System working time, Inflow and downflow velocity etc.



## SPECIFICATIONS

Model	BSC21-0940A2	BSC21-1150A2	BSC21-1350A2
Type	Class II, Type A2		
HEPA Filter	2		
HEPA Filter Efficiency	99.999% efficiency at 0.3 $\mu\text{m}$ . Filter life Indicator		
Air Circulation	0.7		
Exhaust Air	0.3		
Inflow Velocity	0.53 $\pm$ 0.025 m/s		
Down Flow Velocity	0.33 $\pm$ 0.025 m/s	0.33 $\pm$ 0.025 m/s	
Fluorescent Lamp	21Wx2		28Wx2
UV Lamp	30Wx1		40Wx1
Illumination	$\geq 1000$ lux		
Work Surface Height	750 mm		
Tested Opening	200 mm		
Max Opening	420 mm		400 mm
Inner Dimension (WxDxH)	940 $\times$ 600 $\times$ 660 mm	1150 $\times$ 600 $\times$ 660 mm	1350 $\times$ 600 $\times$ 660 mm
Overall Dimension (WxDxH)	1100 $\times$ 750 $\times$ 2250 mm	1300 $\times$ 750 $\times$ 2250 mm	1500 $\times$ 750 $\times$ 2250 mm
Package Size	1220 $\times$ 1000 $\times$ 1840 mm	1460 $\times$ 1050 $\times$ 1800 mm	1630 $\times$ 1000 $\times$ 1820 mm
Caster	Universal Wheel with brake and levelling feet		
Front Window	Motorized, two layer laminated toughened glass $\geq 5$ mm, Anti UV		
Clean Level	Class 100		
Control System	Microprocessor		
Socket	Two, Total load of two sockets: 500W		
Noise Level	EN12469 $\leq$ 58dB / NSF $\leq$ 61dB		
Weight	243 kg	280 kg	316 kg

Power	760 W	1060 W	1300 W
Power Supply	100/220V±10%, 50/60Hz		

Model	BSC21-1710A2	BSC21-1800A2
Type	Class II, Type A2	
HEPA Filter	2	
HEPA Filter Efficiency	99.999% efficiency at 0.3 µm. Filter life Indicator	
Air Circulation	0.7	
Exhaust Air	0.3	
Inflow Velocity	0.53±0.025 m/s	
Down Flow Velocity	0.33±0.025 m/s	
Fluorescent Lamp	40Wx2	
UV Lamp	40Wx2	40Wx1
Illumination	≥ 1000 lux	
Work Surface Height	750 mm	
Tested Opening	200 mm	
Max Opening	400 mm	
Inner Dimension (WxDxH)	1710×600×660 mm	1800×600×660 mm
Overall Dimension (WxDxH)	1870×750×2290 mm	1950×800×2305 mm
Package Size	2000x950x1820 mm	2090x1050x1860 mm
Caster	Universal Wheel with brake and levelling feet	
Front Window	Motorized, two layer laminated toughened glass ≥5 mm, Anti UV	
Clean Level	Class 100	
Control System	Microprocessor	
Socket	Two, Total load of two sockets: 500W	
Noise Level	EN12469≤58dB / NSF≤61dB	
Weight	395 kg	420 kg
Power	1350 W	1700 W
Power Supply	100/220V±10%, 50/60Hz	

## ACCESSORIES

Accessory Code	Name	Description
LS53467	Fluorescent Lamp	
LS53479	UV Lampx2	
LS53491	Base Stand	
LS53503	Remote Control	

Accessory Code	Name	Description
LS53515	Foot switch	
LS53527	Drain Valve	
LS53539	Waterproof Sockets	

## OPTIONAL ACCESSORIES

Accessory Code	Name	Description	External Dimension	Package Size (mm)
LS53006	Infrared Sterilizer		150x95x210 mm	
LS53018	Airflow Tester			
LS53030	Formalin Fumigation Sterilizer			300x200x160 mm
LS53042	Ammonium Hydrogen Carbonate Neutralizer			300x200x160 mm
LS53054	Armrest			
LS53066	Laboratory Chair			

LS53078	Dust Particle Counter			
LS53090	Digital Sound Level Meter			
LS53102	Illumination Meter			
LS53114	Air Flow Anemometer			
LS53126	Protective Garment			
LS53138	Protective Gloves			



## BSC21 CLASS II BIOLOGICAL SAFETY CABINET



### SPECIFICATIONS

Model	BSC21-0940B2	BSC21-1100A2	BSC21-0910
Type	Class II, Type B2	-	-
HEPA Filter	2		
HEPA Filter Efficiency	99.999% efficiency at 0.3 $\mu\text{m}$ . Filter life Indicator	99.999% efficiency at 0.3 $\mu\text{m}$	99.999% efficiency at 0.3 $\mu\text{m}$ , filter life Indicator
Pre-Filter	Washable	-	-
Minimum Face Velocity	75 linear feet per minute (lfpm)	-	-

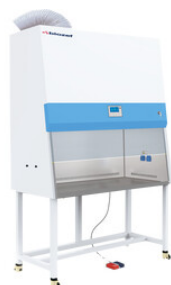
Inflow Velocity	0.53±0.025 m/s		-
Down Flow Velocity	0.33 ±0.025 m/s		-
Airflow System	0% air re-circulation, 100% air exhaust	70% air recirculation, 30% air exhaust	-
LED Lamp	21 Wx2		-
UV Lamp	30 Wx1	30 Wx1, UV timer	18 W, Germicidal UV lamp
Illumination	≥1000 lux		
Work Surface Height	750 mm		
Tested Opening	200 mm	Safety Height: 200 mm	
Max Opening	420 mm	400 mm	550 mm
Inner Dimension (WxDxH)	940×600×660 mm	1100x540x600 mm	910x600x600 mm
Overall Dimension (WxDxH)	1100×750×2250 mm	1200x750x2200 mm	1087x775x2265 mm
Package Size	1220x1000x1840 mm (Main Body) 970x810x630 mm (Exhaust blower)	1390x1000x1650 mm	1250x1080x1840 mm
Caster	Universal Wheel with brake and levelling feet	Universal caster with brake and leveling feet	-
Front Window	Motorized, two layer laminated toughened glass ≥5 mm, Anti UV	Motorized, 5 mm toughened, Anti UV	Motorized, two layer laminated toughened glass ≥5 mm, Anti UV
Control System	Microprocessor		-
Chamber Material	Cold-rolled steel coated with anti-bacteria powder coating	Wrok table: Stainless steel	Working Area: 304 Stainless steel, Frame and Decorative Plate: Cold-rolled steel with anti-bacteria power coating.
Socket	Two, Total load of two sockets: 500 W		Two, Total consumption: ≤500 W
Ground Resistance	Water tapx1, Gas tapx1	-	Water tapx1, Gas tapx1
Weight	NSF 49≤61 dB / EN 12469≤58 dB	EN12469≤58 dB/NSF49≤ 61 dB	NSF 49≤61 dB/EN 12469≤58 dB
Power	246 kg	200 kg	270 kg
Power Supply	700 W	760 W	≤500 W
Air Circulation	-	0.7	-
Exhaust Air	-	0.3	-
Back side			
Cold-rolled steel	-	Body: Cold-rolled steel with anti-bacteria powder coating.	-
Airflow Volume Inflow	-	-	349 m3 / h (205 cfm)
Airflow Volume Downflow	-	-	64%: 638 m3 / h (375 cfm)
Airflow Volume Exhaust	-	-	36%: 359 m3/h (211cfm)
Filter Guard Type	-	-	Aluminum alloy frame
Tap	-	-	Abnormal airflow velocity
Filter change	-	-	Front window over height.
Shelf with IV bar	-	-	One Ecm motor, 110 V & 220 V acceptable, Speed adjustable, high efficiency and low power consumption.
Noise Level	-	-	≤0.10 Ω

Model	BSC21-1210	BSC21-1350B2
Type	-	Class II, Type B2
HEPA Filter	2	

HEPA Filter Efficiency	99.999% efficiency at 0.3 µm	99.999% efficiency at 0.3 µm. Filter life Indicator
Pre-Filter	-	Washable
Minimum Face Velocity	-	75 linear feet per minute (lfpm)
Inflow Velocity	-	0.53±0.025 m/s
Down Flow Velocity	-	0.33 ±0.025 m/s
Airflow System	-	0% air re-circulation, 100% air exhaust
LED Lamp	-	28 Wx2
UV Lamp	30 W, Germicidal UV lamp	40 Wx1
Illumination	≥ 1000 lux	
Work Surface Height	750 mm	
Tested Opening	Safety Height: 200 mm	200 mm
Max Opening	550 mm	500 mm
Inner Dimension (WxDxH)	1210x660x660 mm	1350×600×660 mm
Overall Dimension (WxDxH)	1383x775x2295 mm	1500×760×2250 mm
Package Size	1540x1080x1900 mm	1650x990x1800 mm (Main Body) 970x810x630 mm (Exhaust blower)
Caster	-	Universal Wheel with brake and levelling feet
Front Window	Motorized, two layer laminated toughened glass ≥5 mm, Anti UV	
Control System	-	Microprocessor
Chamber Material	Working Area: 304 Stainless steel, Frame and Decorative Plate: Cold-rolled steel with anti-bacteria power coating.	Cold-rolled steel coated with anti-bacteria powder coating
Socket	Two, Total consumption: ≤500 W	Two, Total load of two sockets: 500 W
Ground Resistance	Water tapx1, Gas tapx1	
Weight	NSF 49≤61 dB/EN 12469≤58 dB	≤62 dB
Power	334 kg	302 kg
Power Supply	400 W	900 W
Air Circulation	-	-
Exhaust Air	-	-
Back side		
Cold-rolled steel	-	-
Airflow Volume Inflow	465m <sup>3</sup> / h (275 cfm)	-
Airflow Volume Downflow	64%: 868m <sup>3</sup> / h (498 cfm)	-
Airflow Volume Exhaust	36%: 488 m <sup>3</sup> /h (287cfm)	-
Filter Guard Type	Aluminum alloy frame	-
Tap	Abnormal airflow velocity	-
Filter change	Front window over height.	-
Shelf with IV bar	One Ecm motor, 110 V & 220 V acceptable, Speed adjustable, high efficiency and low power consumption.	-
Noise Level	≤0.10 Ω	-







BSC21-1350B2

## BSC21 CLASS II BIOLOGICAL SAFETY CABINET

Time reserve function

Stainless Steel 304 table for operation

Digital VFD display for easy monitoring of all parameters

Emission of 253.7 nm for highly efficient decontamination

Two-layered marinated toughened glass ( $\geq 5\text{mm}$ ) motorized front window

Negative air pressure provides personnel protection by constant movement of air in working area

Remote control operation including front sash movement and fan speed control

Motored front window with timer function

Intrinsic sterilization is achieved after activating cabinet for 30 min via UV timing

Filter Life Indicator: Pressure value displayed to show life utility of main filter

Foot switch to adjust the height of the front window

Low noise and high energy efficiency for operational cost savings

Audio and visual alarm for filter replacement, front window over height and abnormal airflow



### SPECIFICATIONS

Model	BSC21-1150B2	BSC21-1670B2
Type	Class II, Type B2	
HEPA Filter	2	
HEPA Filter Efficiency	99.999% efficiency at 0.3 $\mu\text{m}$ . Filter life Indicator	
Pre-Filter	Washable	
Minimum Face Velocity	75 linear feet per minute (lfpm)	
Inflow Velocity	0.53 $\pm$ 0.025m/s	
Down Flow Velocity	0.33 $\pm$ 0.025 m/s	
Airflow System	0% air re-circulation, 100% air exhaust	
LED Lamp	21Wx2	40Wx2
UV Lamp	18Wx1	40Wx2
Illumination	$\geq 1000$ lux	
Work Surface Height	750 mm	
Tested Opening	200 mm	
Max Opening	420 mm	500 mm
Inner Dimension (WxDxH)	1150 $\times$ 600 $\times$ 660 mm	1670 $\times$ 600 $\times$ 660 mm
Overall Dimension (WxDxH)	1300 $\times$ 750 $\times$ 2250 mm	1820 $\times$ 750 $\times$ 2250 mm

Package Size	1460x1050x1800 mm (Main Body) 970x810x630 mm (Exhaust blower)	1950x990x1950 mm (Main Body) 920x710x680 mm (Exhaust blower)
Caster	Universal Wheel with brake and levelling feet	
Front Window	Motorized, two layer laminated toughened glass $\geq 5$ mm, Anti UV	
Control System	Microprocessor	
Chamber Material	Cold-rolled steel coated with anti-bacteria powder coating	
Socket	Two, Total load of two sockets: 500W	
Tap	Water tapx1, Gas tapx1	
Noise Level	$\leq 62$ dB	
Weight	276 kg	408 kg
Power	850 W	1200 W
Power Supply	110~240V/50~60Hz	AC220V $\pm 10\%$ , 50 Hz

## ACCESSORIES

Accessory Code	Name	Description
LS53467	Fluorescent Lamp	
LS53479	UV Lampx2	
LS53491	Base Stand	
LS53503	Remote Control	
LS53515	Foot switch	

Accessory Code	Name	Description
LS53527	Drain Valve	
LS53539	Waterproof Sockets	
LS53563	Exhaust Blower	4 meter PVC Duct, 300mm Diameter
LS53575	Exhaust Duct	

## OPTIONAL ACCESSORIES

Accessory Code	Name	Description	External Dimension	Package Size (mm)
LS53006	Infrared Sterilizer		150x95x210 mm	
LS53018	Airflow Tester			
LS53030	Formalin Fumigation Sterilizer			300x200x160 mm
LS53042	Ammonium Hydrogen Carbonate Neutralizer			300x200x160 mm
LS53054	Armrest			
LS53066	Laboratory Chair			
LS53078	Dust Particle Counter			
LS53090	Digital Sound Level Meter			
LS53102	Illumination Meter			
LS53114	Air Flow Anemometer			
LS53126	Protective Garment			
LS53138	Protective Gloves			



BSC21-1150B2



BSC21-1670B2

# BSC21 CLASS II BIOLOGICAL SAFETY CABINET

- Stainless Steel 304 table for operation
- Digital LCD display for easy monitoring of all parameters
- Emission of 253.7 nm for highly efficient decontamination
- Motored front window with timer function
- Two-layered marinated toughened glass ( $\geq 5\text{mm}$ ) motorized front window
- Negative air pressure provides personnel protection by constant movement of air in working area
- Remote control operation including front sash movement and fan speed control
- Foot switch to adjust the height of the front window
- Centrifugal fan speed adjustable: H14 HEPA filter
- Collecting tank (4000 ml) collects spatters of working area without any leakage
- Intrinsic sterilization is achieved after activating cabinet for 30 min via UV timing
- Air drawn into the cabinet through air grill
- Filter Life Indicator: Pressure value displayed to show life utility of main filter
- Low noise and high energy efficiency for operational cost savings
- Audio and visual alarm for filter replacement, front window over height and abnormal airflow



## SPECIFICATIONS

Model	BSC21-0910A2	BSC21-1700A2
Type	Class II, Type A2	
HEPA Filter	2	
HEPA Filter Efficiency	99.999% efficiency at 0.3 $\mu\text{m}$ , filter life Indicator	99.999% efficiency at 0.3 $\mu\text{m}$ . Filter life Indicator
Airflow Volume Inflow	349 m <sup>3</sup> / h (205cfm)	649 m <sup>3</sup> / h (382cfm)
Airflow Volume Downflow	64%: 638 m <sup>3</sup> /h (375 cfm)	64%: 1190 m <sup>3</sup> / h (700 cfm)
Airflow Volume Exhaust	36%: 359 m <sup>3</sup> /h (211cfm)	36%: 669 m <sup>3</sup> /h (394 cfm)
Filter Guard Type	Aluminum alloy frame	
Minimum Face Velocity	75 linear feet per minute (lfpm)	
Inflow Velocity	0.53 $\pm$ 0.025m/	0.53 $\pm$ 0.025m/s
Down Flow Velocity	0.35 $\pm$ 0.025m/s	
UV Lamp	18Wx1	40Wx1
Illumination	>1000 lux	$\geq$ 1000 lux
Work Surface Height	750 mm	
Tested Opening	200 mm	
Max Opening	550 mm	
Inner Dimension (WxDxH)	910x600x600 mm	1700x600x660 mm
Overall Dimension (WxDxH)	1087x775x2265 mm	1873x775x2295 mm
Package Size	1250x1080x1840 mm	2020x1080x1900 mm
Caster	None	
Front Window	Motorized. Two layer laminated toughened glass $\geq$ 5 mm, Anti UV	
Chamber Material	Cold-rolled steel coated with anti-bacteria powder coating	
Socket	Two, Total consumption: $\leq$ 500W	Two, Total load of two sockets: 500W
Tap	Water tapx1, Gas tapx1	
Ground Resistance	$\leq$ 0.10 $\Omega$	
Noise Level	NSF 49 $\leq$ 61 dB/EN 12469 $\leq$ 58 dB	

Weight	270 kg	363 kg
Power	300 W	500 W
Power Supply	AC220V/110V, 50Hz/60HZ, 9A, BTU/Hr: 1689	

## ACCESSORIES

Accessory Code	Name	Description
LS53467	Fluorescent Lamp	
LS53479	UV Lampx2	
LS53491	Base Stand	
LS53503	Remote Control	

Accessory Code	Name	Description
LS53527	Drain Valve	
LS53539	Waterproof Sockets	
LS53551	Stainless Steel water & Gas Taps	

## OPTIONAL ACCESSORIES

Accessory Code	Name	Description	External Dimension	Package Size (mm)
LS53006	Infrared Sterilizer		150x95x210 mm	
LS53018	Airflow Tester			
LS53030	Formalin Fumigation Sterilizer			300x200x160 mm
LS53042	Ammonium Hydrogen Carbonate Neutralizer			300x200x160 mm
LS53054	Armrest			
LS53066	Laboratory Chair			
LS53078	Dust Particle Counter			
LS53090	Digital Sound Level Meter			
LS53102	Illumination Meter			
LS53114	Air Flow Anemometer			
LS53126	Protective Garment			
LS53138	Protective Gloves			



BSC21-0910A2



BSC21-1700A2



### Biozef

82 Wendell Avenue, STE 100, Pittsfield, MA, 01201, USA

Email: [info@biozef.com](mailto:info@biozef.com) | Website: [biozef.com](http://biozef.com)