

**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 Microbiological, Research, Genetics, Cell Biology, Molecular Biology, Plant, Animal Cell culturing, Laboratory.

Also known as Class II BSC, Biosafety Cabinet.

BC21 SERIES CLASS II BIOLOGICAL SAFETY CABINET

- 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
- Foot switch to adjust the height of the front window
- LCD display: filter and UV lamp working time, Filter life, Exhaust filter and down flow filter pressure, Humidity and temperature, System working time, Inflow and down flow velocity etc.



SPECIFICATIONS

Model	BC211	BC212	BC213	BC214
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 \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		28 Wx2	40 Wx2
UV Lamp	30 Wx1		40 Wx1	40 Wx2
Illumination	≥ 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	1710 \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	1870 \times 750 \times 2290 mm
Package Size	1220 \times 1000 \times 1840 mm	1460 \times 1050 \times 1800 mm	1630 \times 1000 \times 1820 mm	2000 \times 950 \times 1820 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: 500 W			
Noise Level	EN12469 \leq 58 dB / NSF \leq 61 dB			
Weight	243 kg	280 kg	316 kg	395 kg
Power	760 W	1060 W	1300 W	1350 W
Power Supply	100/220 V \pm 10%, 50/60 Hz			
Minimum Face Velocity	-	-	-	-
LED Lamp	-	-	-	-
Chamber Material	-	-	-	-
Airflow System	-	-	-	-

Model	BC215	BC216	BC217
Type	Class II, Type A2		-
HEPA Filter	2		
HEPA Filter Efficiency	99.999% efficiency at 0.3 μ m. Filter life Indicator	99.999% efficiency at 0.3 μ m, Filter life Indicator	99.999% efficiency at 0.3 μ m
Air Circulation	0.7		
Exhaust Air	0.3		
Inflow Velocity	0.53 \pm 0.025 m/s	0.53 \pm 0.025 m/s	0.53 \pm 0.025 m/s
Down Flow Velocity	0.33 \pm 0.025 m/s	0.33 \pm 0.025 m/s	0.33 \pm 0.025 m/s
Fluorescent Lamp	40 Wx2	-	-
UV Lamp	40 Wx1	15 Wx1	30 Wx1, UV timer
Illumination	\geq 1000 lux		\geq 1000 lux
Work Surface Height	750 mm		
Tested Opening	200 mm		Safety Height: 200 mm
Max Opening	400 mm	370 mm	400 mm
Inner Dimension (WxDxH)	1800 \times 600 \times 660 mm	600 \times 500 \times 540 mm	1100 \times 540 \times 600 mm
Overall Dimension (WxDxH)	1950 \times 800 \times 2305 mm	700 \times 650 \times 1230 mm	1200 \times 750 \times 2200 mm
Package Size	2090 \times 1050 \times 1860 mm	860 \times 960 \times 1450 mm (with base stand) 860 \times 800 \times 1450 mm (without base stand)	1390 \times 1000 \times 1650 mm
Caster	Universal Wheel with brake and levelling feet	Yes	Universal caster with brake and leveling feet
Front Window	Motorized, two layer laminated toughened glass ≥ 5 mm, Anti UV	Two-layer toughened glass ≥ 5 mm, Anti UV	Motorized, 5 mm toughened, Anti UV
Clean Level	Class 100		-
Control System	Microprocessor	Microprocessor	
Socket	Two, Total load of two sockets: 500 W		
Noise Level	EN12469 \leq 58 dB / NSF \leq 61 dB	EN12469 \leq 58 dB / NSF49 \leq 61 dB	EN12469 \leq 58 dB/NSF49 \leq 61 dB

Weight	420 kg	196 kg (with base stand) 164 kg (without base stand)	200 kg
Power	1700 W	500 W	760 W
Power Supply	100/220 V±10%, 50/60 Hz	220 V~240 V/50 Hz~60 Hz; 110 V~130 V/60 Hz	AC220 V±10%,50/60 HZ; 110 V±10%, 60 HZ
Minimum Face Velocity	-	75 linear feet per minute (lfpm)	-
LED Lamp	-	40 Wx1	21 Wx2
Chamber Material	-	Cold-rolled steel coated with anti-bacteria powder coating	Work table: Stainless steel; Back side: Cold-rolled steel; Body: Cold-rolled steel with anti-bacteria powder coating.
Airflow System	-	-	70% air recirculation, 30% air exhaust

ACCESSORIES

Accessory Code	Name	For Models
BX1026	Fluorescent Lamp	BC211, BC212, BC213, BC214, BC215, BC216
BX1027	UV Lampx2	All
BX1028	Base Stand	BC211, BC212, BC213, BC214, BC215, BC217
BX1029	Remote Control	All
BX1030	Foot switch	BC211, BC212, BC213, BC214, BC215, BC217

Accessory Code	Name	For Models
BX1031	Drain Valve	All
BX1032	Waterproof Sockets	BC211, BC212, BC213, BC214, BC215, BC216
BX1022	Total load of two waterproof sockets: 500W	BC217
BX1039	LED Lamp	BC217

OPTIONAL ACCESSORIES

Accessory Code	Name	External Dimension	Package Size(mm)	For Models
BX1001	Infrared Sterilizer	150x95x210 mm		BC211, BC212, BC213, BC214, BC215, BC216
BX1002	Airflow Tester			BC211, BC212, BC213, BC214, BC215, BC216
BX1003	Formalin Fumigation Sterilizer		300x200x160	BC211, BC212, BC213, BC214, BC215, BC216
BX1004	Ammonium Hydrogen Carbonate Neutralizer		300x200x160	BC211, BC212, BC213, BC214, BC215, BC216
BX1005	Armrest			BC211, BC212, BC213, BC214, BC215, BC216
BX1006	Laboratory Chair			BC211, BC212, BC213, BC214, BC215, BC216
BX1007	Dust Particle Counter			BC211, BC212, BC213, BC214, BC215, BC216
BX1008	Digital Sound Level Meter			BC211, BC212, BC213, BC214, BC215, BC216
BX1009	Illumination Meter			BC211, BC212, BC213, BC214, BC215, BC216
BX1010	Air Flow Anemometer			BC211, BC212, BC213, BC214, BC215, BC216
BX1011	Protective Garment			BC211, BC212, BC213, BC214, BC215, BC216
BX1012	Protective Gloves			BC211, BC212, BC213, BC214, BC215, BC216
BX1017	water tap			BC217
BX1018	Gas tap			BC217



BC211, BC212, BC213, BC214,
BC215



BC216



BC217

BC22 SERIES 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



FEATURES

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

BC221 BC222 BC223 BC224

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SPECIFICATIONS

Model	BC221	BC222	BC223	BC224
Type	Class II, Type B2			
HEPA Filter	2			
HEPA Filter Efficiency	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 \pm 0.025 m/s			
Down Flow Velocity	0.33 \pm 0.025 m/s			
Airflow System	0% air re-circulation, 100% air exhaust			
LED Lamp	21 Wx2		28 Wx2	40 Wx2

UV Lamp	30 Wx1	18 Wx1	40 Wx1	40 Wx2
Illumination	≥1000 lux			
Work Surface Height	750 mm			
Tested Opening	200 mm			
Max Opening	420 mm		500 mm	
Inner Dimension (WxDxH)	940×600×660 mm	1150×600×660 mm	1350×600×660 mm	1670×600×660 mm
Overall Dimension (WxDxH)	1100×750×2250 mm	1300×750×2250 mm	1500×760×2250 mm	1820×750×2250 mm
Package Size	1220x1000x1840 mm (Main Body) 970x810x630 mm (Exhaust blower)	1460x1050x1800 mm (Main Body) 970x810x630 mm (Exhaust blower)	1650x990x1800 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 ≥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: 500 W			
Tap	Water tapx1, Gas tapx1			
Noise Level	NSF 49≤61 dB / EN 12469≤58 dB	≤62 dB		
Weight	246 kg	276 kg	302 kg	408 kg
Power	700 W	850 W	900 W	1200 W
Power Supply	110~240 V/50~60 Hz			AC220 V±10%, 50 Hz

ACCESSORIES

Accessory Code	Name	Description
BX1026	Fluorescent Lamp	
BX1027	UV Lampx2	
BX1028	Base Stand	
BX1029	Remote Control	
BX1030	Foot switch	

Accessory Code	Name	Description
BX1031	Drain Valve	
BX1032	Waterproof Sockets	
BX1034	Exhaust Blower	4 meter PVC Duct, 300 mm Diameter
BX1035	Exhaust Duct	

OPTIONAL ACCESSORIES

Accessory Code	Name	External Dimension	Package Size(mm)
BX1001	Infrared Sterilizer	150x95x210 mm	
BX1002	Airflow Tester		
BX1003	Formalin Fumigation Sterilizer		300x200x160
BX1004	Ammonium Hydrogen Carbonate Neutralizer		300x200x160
BX1005	Armrest		
BX1006	Laboratory Chair		
BX1007	Dust Particle Counter		

BX1008	Digital Sound Level Meter		
BX1009	Illumination Meter		
BX1010	Air Flow Anemometer		
BX1011	Protective Garment		
BX1012	Protective Gloves		

BC23 SERIES CLASS II BIOLOGICAL SAFETY CABINET

- LCD Display: Large LCD display is easy to monitor all the safety parameters at a glance; and ergonomically sized control panel improves user interface.
- UV Lamp: Emission of 253.7nanometers for most efficient decontamination.
- Motored Front Window with timing function, Two-layered laminated toughened glass>5mm, anti UV
- Footmaster Caster: Universal caster with brake and leveling feet.



FEATURES

	BC231	BC232	BC233	BC234	BC235
Stainless Steel 304 table for operation	•		•		
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	•		•		
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	•		•		
SS Water Tap and Gas Tap		•		•	•
Work Zone: Unibody design		•		•	•
Waterproof Socket		•		•	•

SPECIFICATIONS

Model	BC231	BC232	BC233
Type	Class II, Type A2	-	Class II, Type A2
HEPA Filter	2		
HEPA Filter Efficiency	99.999% efficiency at 0.3 µm, filter life Indicator	99.999% efficiency at 0.3 µm	99.999% efficiency at 0.3 µm. Filter life Indicator
Airflow Volume Inflow	349 m3 / h (205 cfm)	465m3 / h (275 cfm)	649 m3 / h (382 cfm)
Airflow Volume Downflow	64%: 638 m3/h (375 cfm)	64%: 868m3 / h (498 cfm)	64%: 1190 m3 / h (700 cfm)
Airflow Volume Exhaust	36%: 359 m3/h (211cfm)	36%: 488 m3/h (287cfm)	36%: 669 m3/h (394 cfm)

Filter Guard Type	Aluminum alloy frame		
Minimum Face Velocity	75 linear feet per minute (lfpm)	-	75 linear feet per minute (lfpm)
Inflow Velocity	0.53±0.025 m/s	-	0.53±0.025 m/s
Down Flow Velocity	0.35±0.025 m/s	-	0.35±0.025 m/s
UV Lamp	18 Wx1	30 W, Germicidal UV lamp	40 Wx1
Illumination	> 1000 lux	≥1000 lux	≥1000 lux
Work Surface Height	750 mm		
Tested Opening	200 mm	Safety Height: 200 mm	200 mm
Max Opening	550 mm		
Inner Dimension (WxDxH)	910x600x600 mm	1210x660x660 mm	1700x600x660 mm
Overall Dimension (WxDxH)	1087x775x2265 mm	1383x775x2295 mm	1873x775x2295 mm
Package Size	1250x1080x1840 mm	1540x1080x1900 mm	2020x1080x1900 mm
Caster	None	-	None
Front Window	Motorized. Two layer laminated toughened glass≥5 mm, Anti UV	Motorized, two layer laminated toughened glass ≥5 mm, Anti UV	Motorized. Two layer laminated toughened glass≥5 mm, Anti UV
Chamber Material	Cold-rolled steel coated with anti-bacteria powder coating	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
Tap	Water tapx1, Gas tapx1		
Ground Resistance	≤0.10 Ω		
Noise Level	NSF 49≤61 dB/EN 12469≤58 dB		
Weight	270 kg	334 kg	363 kg
Power	300 W	400 W	500 W
Power Supply	AC220 V/110 V, 50 Hz/60 HZ, 9A, BTU/Hr: 1689	AC220 V±10%,50/60 HZ; 110 V±10%, 60 HZ	AC220 V/110 V, 50 Hz/60 HZ, 9A, BTU/Hr: 1689
Alarm	-	Abnormal airflow velocity; Filter change; Front window over height.	-
Motor	-	One Ecm motor, 110 V & 220 V acceptable, Speed adjustable, high efficiency and low power consumption.	-

Model	BC234	BC235
Type	-	-
HEPA Filter	2	
HEPA Filter Efficiency	99.999% efficiency at 0.3 μm, filter life Indicator	
Airflow Volume Inflow	349 m ³ / h (205 cfm)	465m ³ / h (275 cfm)
Airflow Volume Downflow	64%: 638 m ³ / h (375 cfm)	64%: 868 m ³ / h (498 cfm)

Airflow Volume Exhaust	36%: 359 m ³ /h (211cfm)	36%: 488 m ³ /h (287cfm)
Filter Guard Type	Aluminum alloy frame	
Minimum Face Velocity	-	-
Inflow Velocity	-	-
Down Flow Velocity	-	-
UV Lamp	18 W, Germicidal UV lamp	30 W, Germicidal UV lamp
Illumination	≥1000 lux	
Work Surface Height	750 mm	
Tested Opening	Safety Height: 200 mm	
Max Opening	550 mm	
Inner Dimension (WxDxH)	910x600x600 mm	1210x660x660 mm
Overall Dimension (WxDxH)	1087x775x2265 mm	1383x775x2295 mm
Package Size	1250x1080x1840 mm	1540x1080x1900 mm
Caster	-	-
Front Window	Motorized, two layer laminated toughened glass ≥5 mm, Anti UV	
Chamber Material	Working Area: 304 Stainless steel, Frame and Decorative Plate: Cold-rolled steel with anti-bacteria power coating.	
Socket	Two, Total consumption: ≤500 W	
Tap	Water tapx1, Gas tapx1	
Ground Resistance	≤0.10 Ω	
Noise Level	NSF 49≤61 dB/EN 12469≤58 dB	
Weight	270 kg	334 kg
Power	≤500 W	≤600 W
Power Supply	AC230 V, 50 Hz	
Alarm	Abnormal airflow velocity; Filter change; Front window over height.	
Motor	One Ecm motor, 110 V & 220 V acceptable, Speed adjustable, high efficiency and low power consumption.	

ACCESSORIES

Accessory Code	Name	For Models
BX1026	Fluorescent Lamp	BC231, BC233
BX1027	UV Lampx2	All
BX1028	Base Stand	BC231, BC232, BC233
BX1029	Remote Control	BC231, BC233
BX1031	Drain Valve	All
BX1032	Waterproof Sockets	BC231, BC233

Accessory Code	Name	For Models
BX1033	Stainless Steel water & Gas Taps	All
BX1022	Total load of two waterproof sockets: 500W	BC232, BC234, BC235
BX1039	LED Lamp	BC232, BC234, BC235
BX1040	Stainless Steel I.V. bar with 10 hooks	BC232, BC234, BC235
BX1015	Base stand	BC234, BC235

OPTIONAL ACCESSORIES

Accessory Code	Name	External Dimension	Package Size(mm)	For Models
BX1001	Infrared Sterilizer	150x95x210 mm		All
BX1002	Airflow Tester			All
BX1003	Formalin Fumigation Sterilizer		300x200x160	All
BX1004	Ammonium Hydrogen Carbonate Neutralizer		300x200x160	BC231, BC233
BX1005	Armrest			All
BX1006	Laboratory Chair			BC231, BC233
BX1007	Dust Particle Counter			BC231, BC233
BX1008	Digital Sound Level Meter			BC231, BC233
BX1009	Illumination Meter			BC231, BC233
BX1010	Air Flow Anemometer			BC231, BC233
BX1011	Protective Garment			BC231, BC233
BX1012	Protective Gloves			BC231, BC233
BX1029	Remote Control			BC232, BC234, BC235
BX1041	Adjustable Base Stand			BC232, BC234, BC235

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