

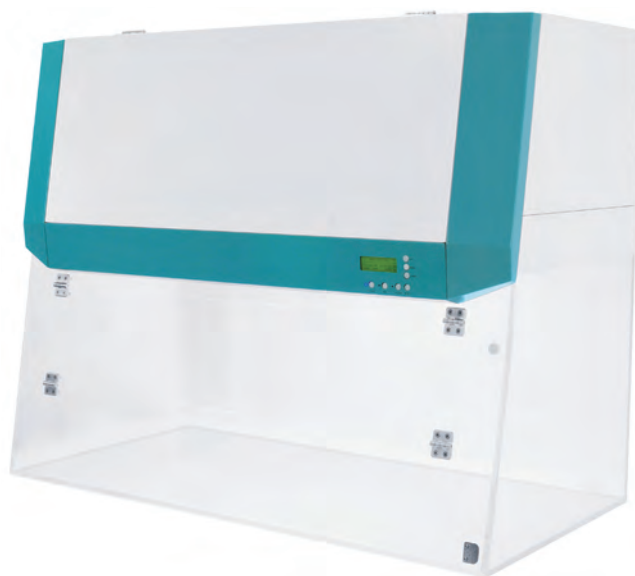
Fume Hoods

PCR Workstations & UV Sterilization Cabinets



Please visit JEIOTECH.com

For further information on Jeio Tech's Fume Hood products
Information is readily available on our website.



PCR Workstations

Included Accessories

• see page 41

- HEPA Filter
- Pre Filter
- UV Lamp
- Fluorescent Lamp



UV Sterilization Cabinets

Included Accessories

• see page 41

- UV Lamp
- Fluorescent Lamp

Fume Hoods

PCR Workstations & UV Sterilization Cabinets

Specially designed to minimize the sample contamination during PCR applications by combining ISO Class 4 (US Class 10) clean air environment with UV light sterilization capability. – PW Models

Ideal for effective decontamination of reagents and equipments before carrying out sensitive PCR experiments using a high-quality UV lamp with timer control – UVC Models

► Safety Features

- Built-in safety interlock switch which shuts off the UV light automatically when the door is opened.
- UV-blocking door and side panels made of transparent acrylic resin providing clear inside view.
- Audible alarm for protecting the samples against UV over-exposure.
- Protection against overcurrent.

► Constructional Features

- Effective sterilization using a long-life 254 nm UV lamp. (average life span : 8,000 hour lifespan)
- Anti-glare fluorescent lamp installed on the center ceiling of the workspace area minimizing shadows and relieving eye strain.
- Programmable digital UV light timer with Delayed OFF function.
- User-friendly microprocessor-based control panel with an LCD (PW Models) or VFD (UVC Models) with responsive touch buttons.
- Easy blower speed adjustment by the control panel. (PW Models)
- Easy-to-clean grade 304 stainless steel work surface with high chemical resistance against various organic solvents. (UVC Models)

► Additional PW Features

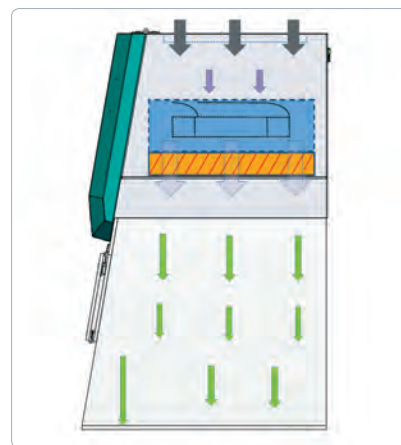
Filtration

- ISO Class 4 (US Class 10) HEPA filter for optimal protection against cross-contamination.
- Neoprene gaskets ensuring that the HEPA filter is airtight to the body unit.
- Durable HEPA filter.
(The HEPA filters life span depending on the test room conditions has a life span of 3 years.)
- High-quality polyester fiber pre-filter (with minimal pressure loss and 85% arrestance on the A.F.I. test) for trapping larger particles and increasing the life of the main HEPA filter.
- Convenient change of filter cartridges by opening the upper front cover.
- Adjustable digital blower speed switch located in the front with use of large capacity blower is adopted into the equipment.

PCR Workstations



► Digital Controller



► Air Flow

UV Sterilization cabinet



► Digital Controller

Fume Hoods

PCR Workstations & UV Sterilization cabinets

Specifications & Ordering Information

PCR Workstations



Model			PW-01		PW-11		PW-21			
Air Flow Type			Vertical							
Max. Air Volume (cmh / cfm)			557 / 327		697 / 408		929 / 546			
Min. Air Volume (cmh / cfm)			167 / 97		209 / 121		279 / 162			
Laminar Airflow Velocity (m / s / fpm)			0.3 / 60							
Filter	Air Cleanliness		ISO 14644-1 Class 4							
	HEPA Filter		Typical efficiency of 99.99% at 0.3 μm US MIL-STD-282 ; Micro glass fiber Media, Particle board, Aluminum separator, Neoprene gaskets							
	Pre Filter		Polyester fibers with an efficiency of 85% (A-F-I TEST); AL frame, Polyester fiber media							
Noise level (dBA)			Typically < 60 dBA at initial blower speed							
Material	Work Surface		10mm thick acrylic resin (clear type)							
	Window (Front, Side / Back)		8mm / 10mm thick acrylic resin (clear type)							
Illumination	Intensity	Fluorescent Lamp (lux)	>1000							
		UV Density (μW / cm ²)	165		185		330			
	Capacity	Fluorescent Lamp	15W×1EA		20W×1EA		30W×1EA			
		UV Lamp	15W×1EA		20W×1EA		30W×1EA			
Dimension (W×D×H)	Interior (mm / inch)		700×585×602 / 27.5×23×23.7		880×585×602 / 34.6×23×23.7		1180×585×602 / 46.5×23×23.7			
	Exterior (mm / inch)		720×605×964 / 28×24×38		900×605×964 / 35.4×24×38		1200×605×964 / 47.2×24×38			
	Net Weight (Body) (kg / lbs)		56.2 / 123.9		64.2 / 141.5		77.8 / 171.5			
Electrical Requirements (230V)			60Hz, 1.3A		50Hz, 1.3A		60Hz, 1.5A		50Hz, 1.5A	
Cat. No.			AAHB3001K		AAHB3002K		AAHB3011K		AAHB3012K	
Electrical Requirements (120V)			60Hz, 2.2A		60Hz, 2.7A		60Hz, 2.9A			
Cat. No.			AAHB3003U		AAHB3013U		AAHB3023U			

Specifications & Ordering Information

UV Sterilization cabinets



Model		UVC-01		UVC-11		UVC-21		
Illumination	Intensity	Fluorescent Lamp (Lux)	>800		>900		>1000	
		UV Density (μW / cm ²)	150		385		450	
	Capacity	Fluorescent Lamp	8W×1ea		15W×1ea		20W×1ea	
		UV Lamp	8W×1ea		15W×1ea		20W×1ea	
Material	Work Surface		Stainless steel grade 304					
	Window (Front, Back / Side)		5 mm thick acrylic resin					
Dimension (W×D×H)	Interior (mm / inch)		433×500×468 / 17.0×19.7×18.4		583×500×468 / 23×19.7×18.4		880×500×468 / 34.6×19.7×18.4	
	Exterior (mm / inch)		450×509×610 / 17.7×20×24		600×509×610 / 23.6×20×24		900×509×610 / 35.4×20×24	
	Net Weight (Body) (kg / lbs)		15 / 33.1		17.5 / 38.6		20 / 44.1	
Electrical Requirements (230V)			60Hz, 0.1A	50Hz, 0.1A	60Hz, 0.2A	50Hz, 0.2A	60Hz, 0.3A	50Hz, 0.3A
Cat. No.			AAHB4001K	AAHB4002K	AAHB4011K	AAHB4012K	AAHB4021K	AAHB4022K
Electrical Requirements (120V)			60Hz, 0.2A		60Hz, 0.4A		60Hz, 0.6A	
Cat. No.			AAHB4003U		AAHB4013U		AAHB4023U	

※ Above specifications can be changed without prior notice.

Fume Hoods

Accessories & Options

for PCR Workstations & UV Sterilization Cabinets

General UV Dose and Time Required

Pathogen	Average UV Dose Required ($\mu\text{W} \cdot \text{s}/\text{cm}^2$)	Average UV Time Required ($\mu\text{W}/\text{cm}^2/\text{sec.}$)					
		PW-01	UVC-01	PW-11	UVC-11	PW-21	UVC-21
		165	150	185	385	330	450
<i>S. enteritidis</i>	4,000	25	27	22	10	13	9
<i>B. megatherium</i> sp. (spores)	2,730	17	18	15	7	9	6
<i>B. subtilis</i>	7,100	43	47	39	18	22	16
<i>Eberthella typhosa</i>	2,140	13	14	12	6	7	5
<i>Escherichia coli</i> (E. coli)	3,000	19	20	17	8	10	7
<i>Micrococcus candidus</i>	6,050	37	40	33	16	19	13
<i>Proteus vulgaris</i>	2,640	16	18	15	7	8	6
<i>Pseudomonas aeruginosa</i>	5,500	34	37	30	14	17	12
<i>Pseudomonas aeruginosa</i>	3,500	22	23	19	9	11	8
<i>S. typhimurium</i>	8,000	49	53	44	21	25	18
<i>Shigella paradyserteriae</i>	1,680	101	11	10	4	6	4
<i>Spirillum rubrum</i>	4,400	27	29	24	11	14	10
<i>Staphylococcus albus</i>	1,840	12	12	10	5	6	4

* Permissible environmental conditions: temperature (20 to 25°C) and relative humidity (up to 60%).

* Above listed applications are for general purpose use.

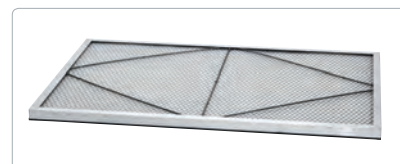
for PCR Workstations

Cat. No.	Description	Suitable for
EDA9219	HEPA Filter	PW-01
EDA9220		PW-11
EDA9221		PW-21
CHE4436	Fluorescent Lamp	PW-01
CHE4410		PW-11
CHE4409		PW-21
CHE4431	UV Lamp	PW-01
CHE4427		PW-11
CHE4423		PW-21

Filters (PW Models)



HEPA Filter



Pre Filter

for UV Sterilization Cabinets

Cat. No.	Description	Suitable for
CHE4435	Fluorescent Lamp	UVC-01
CHE4436		UVC-11
CHE4410		UVC-21
CHE4434	UV Lamp	UVC-01
CHE4431		UVC-11
CHE4427		UVC-21

Lamps (PW and UVC Models)



UV Lamp



Fluorescent Lamp