DNA/RNA UV-cleaner boxes

Medical–Biological Research & Technologies

DNA/RNA UV-cleaner boxes (**UVC/T-AR, UVC/T-M-AR, UVT-B-AR** and **UVT-S-AR**) are designed for clean operations with DNA samples. They provide protection against contamination.

All models are bench-top type, made of metal framework, glass (or plexiglas) walls and working surface painted with powder enamel or made of stainless steel (See the specifications table on the page 92).

UV-cleaner boxes are equipped with an open UV lamp installed in the upper hood. UV-radiation from the open lamps disinfects the working area inactivating DNA/RNA fragments during 15–30 min of exposure. A digital timer controls duration of the direct UV irradiation. A daylight lamp provides proper illumination of the working surface.

UV-cleaner boxes are equipped with a flow-type bactericidal **UV cleaner–recirculator AR**, which provides constant decontamination inside the box during operation. They are recommended for operations with DNA/RNA amplicons.

UV cleaner–recirculator AR consists of a UV lamp, a fan and dust filters organized in a special body so that a user working with a UV-cleaner box is protected against UV light. Recirculator increases the maximum density of UV light making it sufficiently effective for DNA/RNA inactivation. The UV–recirculator processes 100 UV-cleaner box volumes per hour, creating permanent aseptic conditions of operation inside the UV-cleaner box.

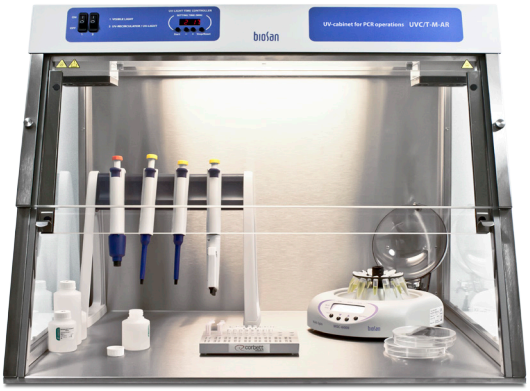
Specially assigned moving tables (with wheel locks) with a drawer are available on request. Two versions:

- **A** **T-4,** for single size UV–Cabinets
- **B** **T-4L,** for double size UV–Cabinets

Other optional furniture is featured on page 94.

Advantages of Biosan UV-cleaner boxes:
Ozone free high density UV decontamination
Long living UV lamps (8,000 hours average)
Automatic switch off of UV-lamps when the protective screen is opened
Bactericidal flow-type recirculator providing permanent decontamination inside UV-cleaner box during operation
Shockproof glass walls
Low noise, low energy consumption
Tables for installation of UV-cleaner boxes
UV-cleaner boxes with the bactericidal **UV cleaner–recirculator AR** is the patented Biosan solution

UVC/T-M-AR



UVC/T-AR

A *UVT-B-AR on the table T-4*

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UVT-S-AR on the double size table T-4L

LF-1, laboratory chest of drawers

New!

UVT-S-AR

Product video is available on the website

Development and evaluation of DNA amplicon quantification video is available on the website

See the UV Air Recirculators, DNA/RNA UV-cleaner box, Laboratory Furniture, Thermostated Laminar Flow Cabinet on page 87

Catalogue number:	
UVC/T-AR with inlet	BS-040102-AAA
UVT-B-AR with internal socket	BS-040109-AAA
UVT-B-AR with inlet	BS-040109-A05
UVC/T-M-AR with inlet	BS-040104-AAA
UVC/T-M-AR with internal socket	BS-040104-A06

Catalogue number:	
UVT-S-AR with internal sockets	BS-040107-AAA

DNA/RNA UV-cleaner boxes Specifications

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Specifications:				
Model	**UVC/T-AR (compact)**	**UVC/T-M-AR (compact)**	**UVT-B-AR (compact)**	**UVT-S-AR (double size)**
Walls material	Plexiglas: Polymethyl methacrylate (ALTUGLAS EX)	Rear: stainless steel Sides and front: glass (EUROGLASS, Germany)	Rear: stainless steel, Sides: steel with chemical resistant powder coating Front: glass (EUROGLASS, Germany)	Rear: stainless steel Sides and front: glass (EUROGLASS, Germany)
Working surface material	Steel with chemicals resistant powder coating	Stainless steel		
Open UV-lamp	1×25W built-in bactericidal (Philips), TUV25WG13 UV-C			2×30W built-in bactericidal lamps (Philips), TUV30WG13 UV-C
UV radiation level	15 mW / cm^2 / sec			
Radiation type	UV (λ = 253.7 nm), ozone-free			
Digital time setting of direct UV exposure	1 min–24 hrs / non–stop (increment 1 min)			
UV–recirculator	1×25 W (efficiency >99% per 1 hour)			1×30 W (efficiency >99% per 1 hour)
Daylight lamp (for working area illumination)	1×TLD-15W			1×TLD-30W
Thickness of side panels	4 mm	4 mm	2 mm	4 mm
Thickness of upper front panel	8 mm			
Thickness of the front protective screen	8 mm	4 mm	4 mm	5 mm
Optical transmission	92%	95%		
UV protection	>99.90% Polymethyl methacrylate ALTUGLAS EX	>96% UV-protection film, type 4 MIL CLEAR		
Working area dimensions	650×475 mm			1200×520 mm
Safety features	Automatic open UV-lamp switch off when screen is open			
Power outlets inside the unit	Inlet for power cords	Inlet for power cords or 1 Built-in socket, max. 1,000 W (pls, order respectively)		3 Built-in sockets max. 1,000 W
Nominal operating voltage	100–240 V, 50/60 Hz			230 V, 50 Hz or 120 V, 60 Hz
Power consumption (230 / 120 V)	67 W			315 VA (1.4 A) / 530 VA (4.5 A)
Overall dimensions (W×D×H)	690×535×555 mm		690×585×555 mm	1245×585×585 mm
Weight (net / gross)	23 / 33 kg	31 / 39 kg	32 / 42 kg	58 / 68.5 kg
Optional table	**T-4** (W×D×H : 800×600×750 mm)			**T-4L** (W×D×H : 1290×600×770 mm

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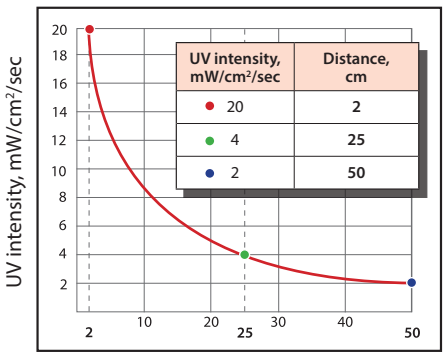
DNA/RNA UV-cleaner boxes

Germicidal, shortwave (254 nm) ultraviolet energy is used for complete destruction of various biological agents



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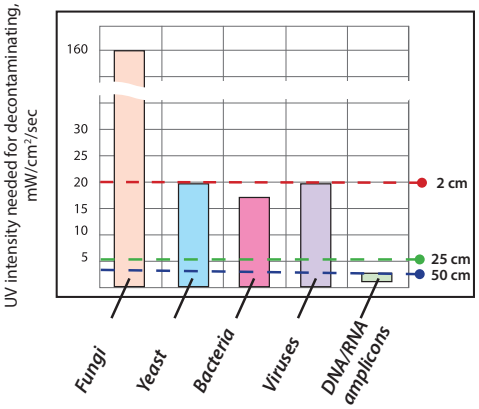


per 15-30 minutes

Yeast

Saccharomyces cerevisiae
Brewer's yeast

Bacteria

Clostridium tetani
Mycobacterium tuberculosis
Salmonella
Dysentery bacilli
Staphylococcus aureus
Streptococcus hemolyticus

Viruses

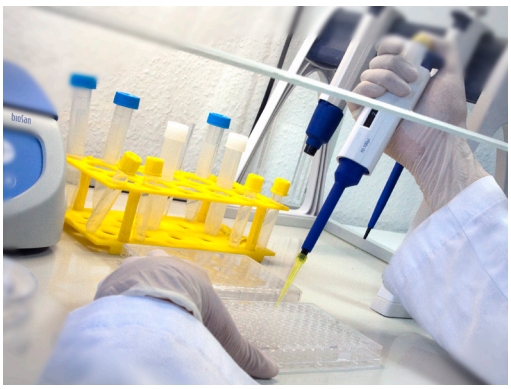
Bacteriophage (E. coli)
Influenza

Average dosage for different surfaces

Surface	Dosage after 15 min	Dosage after 30 min
Working surface (40-60 cm)	1,800-2,700 mW/cm²	3,600-5,400 mW/cm²
Side walls (10-60 cm)	1,800-5,400 mW/cm²	3,600-9,000 mW/cm²
Front window (10-60 cm)	1,800-5,400 mW/cm²	3,600-9,000 mW/cm²

See the article on page 9 for full information

UVC/T-AR



UVC/T-M-AR

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