

## UV-cabinets for PCR operations

UV-cabinets for PCR operations (**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 63).

UV-cabinets 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-cabinets are equipped with a flow-type bactericidal **UV cleaner-recirculator AR**, which provides constant decontamination inside the cabinet during operation. They are recommended for operations with dangerous infectious and viral materials, 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-cabinet 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 360 UV-cabinet volumes per hour, creating permanent aseptic conditions of operation inside the UV-cabinet.

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 (on page 63).

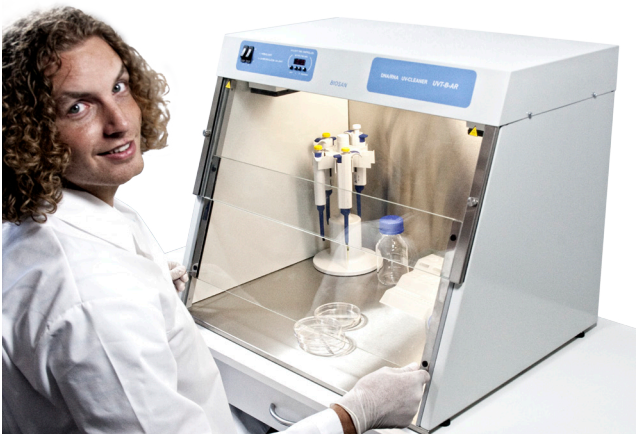
*UVC/T-AR*



*UVC/T-M-AR on the table T-4*



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



### Advantages of Biosan UV-cabinets::

Ozone free high density UV decontamination

Long living UV lamps (8000 hours average)

Automatic switch off of UV-lamps when the protective screen is opened

Bactericidal flow-type recirculator providing permanent decontamination inside UV –cabinet during operation

Shockproof glass walls

Low noise, low energy consumption

Tables for installation of UV-cabinets

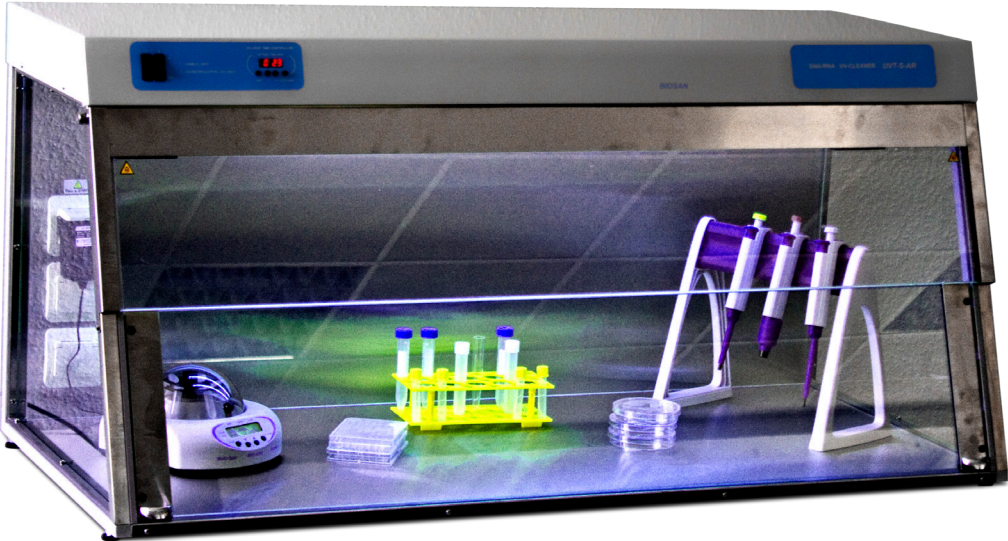
UV-cabinets with the bactericidal **UV cleaner-recirculator AR** is the patented Biosan solution

# UV-cabinets for PCR operations

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



*UVT-S-AR with turned on UV*



<b>Catalogue number:</b>		<b>Catalogue number:</b>	
<b>UVC/T-AR</b>	BS-040102-AAA	<b>UVT-S-AR</b>	BS-040107-AAA
<b>UVT-B-AR</b>	BS-040109-AAA	<b>T-4</b>	BS-040101-BK
<b>UVC/T-M-AR</b>	BS-040104-AAA	<b>T-4L</b>	BS-040107-BK

## UV-cabinets for PCR operations

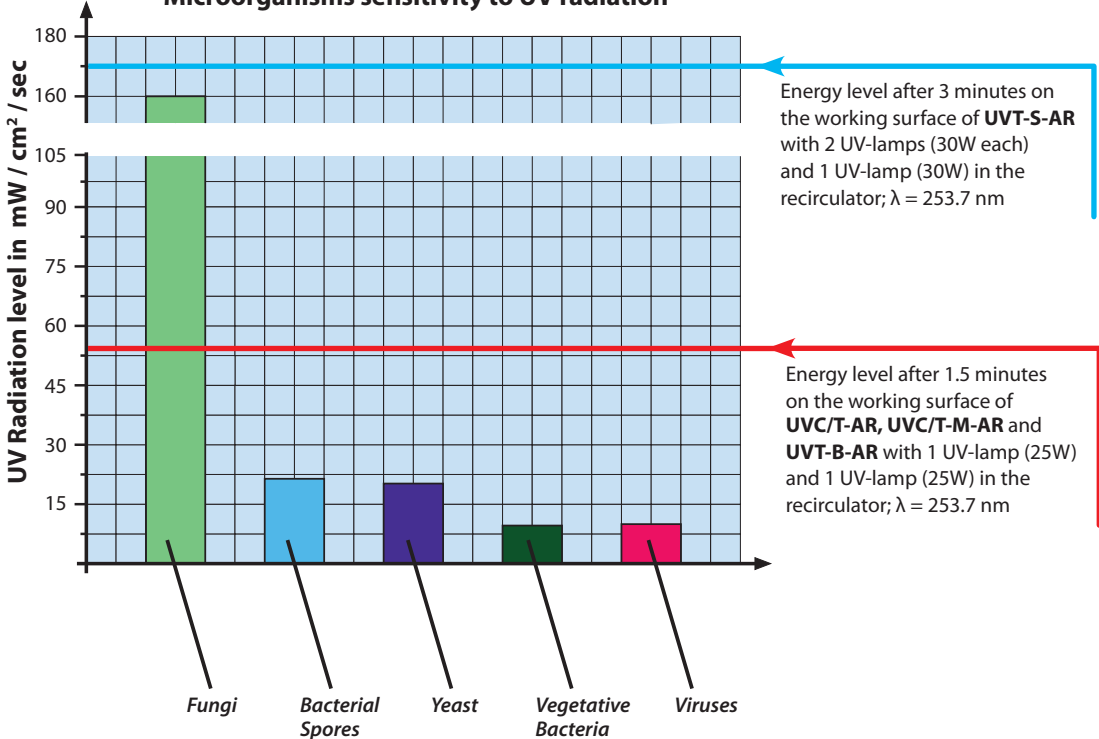
### Specifications:



Model	UVC/T-AR (compact)	UVC/T-M-AR (compact)	UVT-B-AR (compact)	UVT-S-AR (double size)
Walls material	Plexiglas: Polymethyl methacrylate <i>ALTUGLAS EX</i>	Steel, chemical resistant powder coating and glass: <i>EUROGLASS</i> , Germany	Steel, chemical resistant powder coating and glass: <i>EUROGLASS</i> , Germany	Glass: <i>EUROGLASS</i> , Germany
Working surface material	Steel, chemicals resistant powder coating	Stainless steel		
Open UV-lamp	1 x 25W built-in bactericidal (Philips), TUV25WG13 UV-C			2 x 30W built-in bactericidal lamps (Philips), TUV30WG13 UV-C
Radiation type	Ultraviolet (253.7 nm), ozone-free			
Digital timer	0–24 hrs / non-stop			
UV-Recirculator	1 x 25 W (efficiency >99% per 1 hour)			1 x 30W (efficiency >99% per 1 hour)
Daylight lamp (for work- ing area illumination)	1 x TLD-15W			1 x TLD-30W
Thickness of sides	4 mm	4 mm	2 mm	4 mm
Thickness of upper front side	8 mm			
Thickness of the screen	8 mm	4 mm	4 mm	5 mm
Optical transmission	99,99%	95%		
UV-protection film type	Polymethyl methacrylate <i>ALTUGLAS EX</i>	4 MIL CLEAR		
UV protection	>99,90 %	>96%		
Working area dimensions	480 x 645 mm	480 x 645 mm	480 x 645 mm	1200 x 520 mm
Safety features	Automatic open UV-lamp switch off when screen is open			
Power outlets inside the unit	Inlet for power cords		1 Built-in socket, max. 1000 W	3 Built-in sockets max. 1000 W
Power supply/ Useful power	230 V, 50 Hz / 250 VA (115 V, 60 Hz on request)			230 V, 50 Hz / 300 VA
Overall dimensions	690 x 535 x 555 mm	690 x 555 x 555 mm	690 x 585 x 555 mm	1245 x 585 x 585 mm
Optional table	<b>T-4</b> (W x D x H : 800 x 600 x 750 mm)			<b>T-4L</b> (W x D x H : 1350 x 600 x 750 mm)
Weight (net / gross)	26 / 33 kg	32 / 39 kg	35 / 42 kg	58 / 68.5 kg

# UV-cabinets for PCR operations

## Microorganisms sensitivity to UV radiation



### Yeast

Saccharomyces cerevisiae  
Brewer's yeast

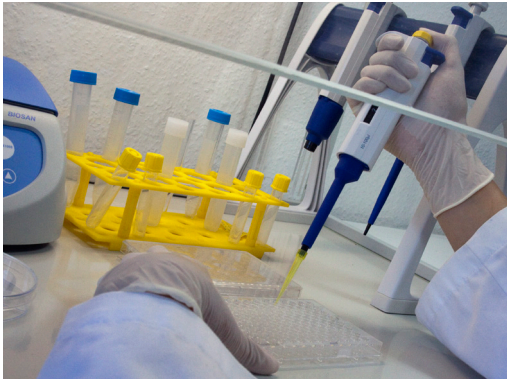
### Vegetative Bacteria

Clostridium tetani  
Mycobacterium tuberculosis  
Salmonella  
Dysentery bacilli  
Staphylococcus aureus  
Streptococcus hemolyticus

### Viruses

Bacteriophage (E. coli)  
Influenza

UVC/T-AR



UVC/T-M-AR

