



**Telstar** BioULTRA

*Microbiological Safety Cabinet  
Class II*



# Telstar BioULTRA *Class II Microbiological Safety Cabinet*

**BioULTRA** is a top range class II cabinet aimed to provide protection to the operator, product/materials and environment.

**BioULTRA** is certified according to European Standard EN 12469 and also meets NSF 49 (class II type A2 /B3) and BS 5726:2005 main requirements.

It is suitable for handling pathogenic agents of levels 1, 2 and 3 in the fields of pharmaceutical, academic research centers, biotechnology, hospital and medical labs, QA control labs ...

- Self-compensation for the clogging of filters optimizes filter use and minimizes service.
- Comfortable stress free work for several hours is possible thanks to the sound level of the cabinet being below 58 dBA, several times lower than the limit requested by the standard (65 dBA).
- Single piece work chamber with round corners allows easy cleaning.
- Ergonomically sloped window improves body position and reduces operator fatigue.
  - Motorized front window with predefined working, open and close position.
  - Fully open position facilitates chamber cleaning and introduction of large items.
- Side window optional to improve chamber illumination.
- Stable and ergonomic support stand designed with a large working space to accommodate a wide variation of operating positions.

Adjustable feet to compensate for ground unevenness.

Choice of three stand models including one motorized stand that allows the operator to adjust the height to the most ergonomic working position.



A wide ergonomically curved armrest provides forearm comfort in all working positions. The Air barrier located above the bench level surrounds the operator's arms maintaining operator protection.



# Pneumatic gasket and turbo exhaust function provide safer operation

Inner cleaning is made easier by a fully opening counter balanced front window panel, lift assisted by gas springs

- Large graphic LCD screen with comprehensive display of parameters.  
Unique Turbo exhaust function automatically provides extra operator protection when the window is above the working position or on user's request.  
Power cut detection with battery back up and automatic closing and sealing of front aperture.



- Certified by authorized European entities TÜV, EN 12469-2000 covering a wide range of tests:
  - Full check of the BioULTRA features, including type testing, factory testing and routine maintenance testing.
  - Full check of the production installations and procedures to ensure a constant quality, including a yearly factory inspection.
  - Strict compliance with European Electromagnetic Compatibility and Electrical Safety directives.
- Keyboard for remote window positioning located on body frame for easy operator access.
- First cabinet with patented pneumatic window gasket which automatically seals the front window.
- The motorized sliding window, allows rapid sealing of the chamber: Keeping the chamber clean after each use and also providing fast isolation in the event of contamination.

Decontamination is improved, it is safer and faster to prepare and the need to envelop the whole unit in a plastic bag has been eliminated.



*Window not sealed*



*Window sealed*

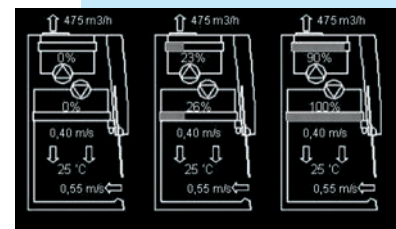
## Total control of menu functions

- Large graphic LCD screen with comprehensive display of parameters.
- Status LED for: fan, light, UV light, gas valve and socket.
- Key for turbo exhaust function and menus.
- Four “function” keys allow choosing the options in the different menus.
- Two level password protection (operator and technical service) replaces keyswitch to prevent non authorised use or service.
- Half speed downflow function (interlocked with the light).
- Multilingual menu: English, Spanish, German, French.
- Maintenance menu: UV light timer, decontamination process, alarm report, maintenance history, components run time...
- Setup menu: to change or deactivate the password, lock the controls and get the emergency code.
- Audible and visual alarms with display of alarm conditions:
  - High or low laminar downflow.
  - Low inflow velocity / exhaust flow rate.
  - Front window out of working position.
  - UV light on (interlocked with close window position).
  - Standby downflow.
  - Failure on main control system.
  - Dry contact to be used for remote alarm monitoring or connection to BMS.
  - PC connection for UltraLogger software to remote control and monitoring (as an accessory).



### Simultaneous display of working parameters:

- Downflow velocity
- Inflow velocity
- Exhaust flow
- Chamber temperature
- % clogging of lam./exh. filter



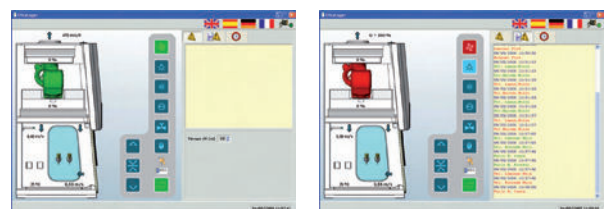
Filter clogging monitoring minimizes filter replacement expenses.

## UltraLogger remote control

UltraLogger software is an easy and fast installation tool that enables remote PC control and monitoring, (ideal for restricted access labs) saving time and money by minimizing the need to have a direct access to the lab for maintenance and pre-heating run.

The full range of commands is displayed on the PC. All parameters are accessible in real time.

UltraLogger generates an automatic daily report within the PC listing the main events at the cabinet; this provides a historical file and greater control over the developed process.



# CytoULTRA *3 Filter Microbiological Safety Cabinet - Class II*

With extra Hepa H14 V shaped prefiltering stage filters in the basement, easily accessible from the chamber, the CytoULTRA double filters both the exhaust air and the chamber air for safer bio protection. This means the main and exhaust filters no longer need to be replaced and changing the V shaped filters is easy, fast and also safer, because the change is carried out while the unit is running, thus under a sterile air condition and without the need of chemical decontamination. The unit is Certified by TÜV according the EN-12469-2000 (class II cabinet) and DIN 12980-2005 (specific for cytotoxic cabinets). Ask for the CytoULTRA brochure for additional information.

## Technical data

- The cabinet is only 795 mm deep (compatible with all lab door width).
- Slope front improves body position.
- Stainless steel 304L single piece chamber with rounded corners (side windows as an option).
- Whole maintenance from the front.
- Independent fans and airspeed control for exhaust flow and downflow.
- Motorized sliding window with inflatable gasket (100% leaktight).
- Anti-glare safety glass window without any visual obstacle at the edge.
- The hinged front panel is gas spring counter balanced to aid servicing and for cleaning the inner side of the window.
- Light intensity higher than 1000 lux.
- Visible command/control panel with large LCD.
- Close loop active control with thermoanemometric sensor.
- Turbo exhaust function.
- UV timer.
- 4 languages predefined (English, Spanish, French and German).
- Power fails detection and automatic window closing and sealing (thanks to a battery).

TECHNICAL SPECIFICATIONS	UNIT	BioULTRA 3	BioULTRA 4	BioULTRA 5	BioULTRA 6
External dimensions (uncrated) DxWxH	mm	795x942x1450	795x1400x1450	795x1705x1450	795x2010x1450
Chamber dimensions (DxWxH)	mm	560x732x650	560x1190x650	560x1495x650	560x1800x650
External dimensions (crated) DxWxH	mm	890x1030x1640	890x1480x1640	890x1790x1640	890x2090x1640
Weight (crated / uncrated)	kg	200 / 180	274 / 240	309 / 270	369 / 310
Power	kW/A	1,8 / 7,8	2,1 / 9,1	2,1 / 9,1	2,1 / 9,1
Electrical supply	V/Hz	230 / 50 single ph (other supplies available)			
Laminar downflow velocity	m/s	0.40	0.40	0.40	0.40
Downflow	m <sup>3</sup> /h	610	995	1250	1500
Exhaust flow (Ø 200 mm)	m <sup>3</sup> /h	350	540	670	815
Inflow velocity	m/s	0.60	0.60	0.60	0.60
Light intensity	lux	> 1000	> 1000	> 1100	> 1100
Noise level	dBA	< 56	< 56	< 58	< 60
Filters HEPA/ULPA H14	%	Efficiency > 99.999% (DOP)/>99.995 (MPPS EN 1822)			

## Ordering information

STANDARD (2 outlets, 1 gas valve, 1 vacuum valve, UV light)	BioULTRA 3	BioULTRA 4	BioULTRA 5	BioULTRA 6
BioUltra Serie, 230V / 50Hz with SS sides	46265	45361	36996	---
BioUltra Serie, 230V / 50Hz with side windows	46264	45362	41510	41511

ACCESSORIES (related to unit size)	BioULTRA 3	BioULTRA 4	BioULTRA 5	BioULTRA 6
Plain stainless steel working tray	41512	41513	41514	41515
Stainless steel AISI 316 working trays	45752	44661	45753	45754
Support stand, height 720±22 mm (790±22 mm*)	500000	500001	500002	500003
Support stand, height 850±22 mm (920±22 mm*)	500004	500005	500006	500007
Automatic support stand, height 700-1000 mm	38902	38901	41516	37584
Canopy "thimble" exhaust transition <small>* working surface height</small>	41522	41173	41173	41173

OPTIONS	BioULTRA 3	BioULTRA 4	BioULTRA 5	BioULTRA 6
Double exhaust filtration (Hepa / Ulpa H14)	41523	41362	41362	41362

ACCESSORIES	Cat. No.
Anti blow-back exhaust valve	20529
UltraLogger software	41518
Activated charcoal exhaust filter box	41517
Formalin vaporiser	1041
Formalin vaporiser with neutralization	30318
Connection to VHP decontamination (SS side)	45067
Connection to VHP decontamination (side window)	45068
Gas burner with IR sensor switch	39576 + 46377
Adjustable footrest (95-170 mm)	45569

OPTIONS	
Additional service valve	500009
Two additional electrical outlets	41524
Magnehelic gauge (inside the chamber)	41525
Output relay for external fan activation	34873
Quality certification at Telstar (IQ, OQ)	500028

## Options and accessories

A complete range of options and accessories enables the BioULTRA to meet all needs:

- Side windows to improve the illumination.
- Automatic support stand allows adjustment of working bench height. (1)
- Plain tray to prevent risk of spillage. (6)
- Canopy connection enables safe coupling to a duct. (4)
- Anti blow-back valve. (2)
- Double exhaust HEPA filter provides extra safety when the unit is exhausting to the lab environment (according to BS 5726).
- Additional charcoal exhaust filter to trap bad smell or chemicals. (3)
- Formalin vaporizer for decontamination. (5)
- Formalin vaporizer with neutralization for decontamination. (7)



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