CS 120

Class II Microbiological Safety Cabinet

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Offering maximum protection for the user, the environment and the product, the CS 120 Microbiological Safety Cabinet is specifically designed for all work involving harmful or potentially harmful microorganisms whose risk level is uncertain. It can be used safely in microbiology, biotechnology, medicine, food, hospital and academic laboratories.

Developed in accordance with the European standard EN 12469, CS 120 meets internationally accepted safety criterias. It takes laboratory work to the next level with its advanced safety systems, ergonomic design and user-friendly digital panel.

CAREFULLY DESIGNED BODY

• Outer body made of epoxy-polyester powder coated steel

• Stainless steel working tray as three pieces for easy

cleaning and decontamination

• Laminated double layer tempered front window resisting UV lights

• Partially recirculated HEPA filtered air to prolong the lifetime of

HEPA filters

• Grilles used in air entry to prevent paper or light materials from being drawn into the filter area during operation.


SAFETY

• Reliable microprocessor control system for safe operations

• Continuously controlled airflow speed which is always kept at 0,36±20% m/sec

• Energy-saving "stand-by" operating position

• Automatic speed compensation system against clogged HEPA filters

• 5" color touch LCD to easily monitor air flow rate

• Advanced microprocessor supported audible and visible alarm system for :

- Low or high airflow speed

- Power failure

- Warning of improper window height

- Fan motor failure

- Main PCB failure

- Speed sensor failure

- Low air intake airflow

• Seal system that provides air tightness on the window

• Key operated power switch to prevent against unauthorized use

• Battery-supported window lowering mechanism that safely separates the contaminated area from the laboratory in case of power failure
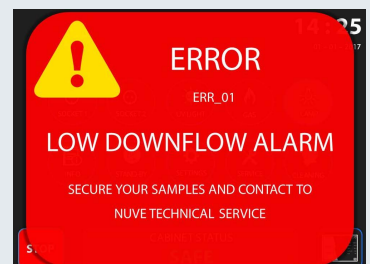
ERGONOMIC WINDOW DESIGN

• Motorized window featuring silent and precise control, designed for user comfort and safety
• Button control for easy opening and closing
• Alarm system when used outside the operating range
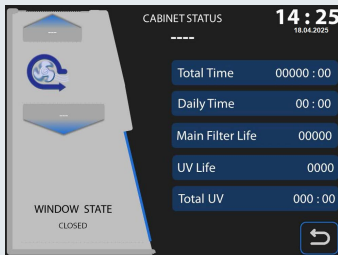
SMART CONTROL SYSTEM

Instant air flow monitoring
• Current date/time
• Gas and socket on/off control
• Total / daily operating time
• HEPA filter life monitoring

• Stand-by mode
• 5 language options
• Authorization for 1 administrator and 5 users
• Error code descriptions and guidance screen
• Software update and calibration menu
• Error history record

EASE OF USE

• Easy and fast use thanks to N-Smart™ control system
• Optimum performance ensured without user intervention, thanks to the advanced automatic control algorithm
• Angled screen design that provides an ideal viewing angle, making control and monitoring easier for the user
• 10° inclined front panel for enhanced ergonomics and user comfort during long working periods
• Smart sensor system that instantly monitors air speeds and protects a safe working environment with visual and audible warnings in case of deviation
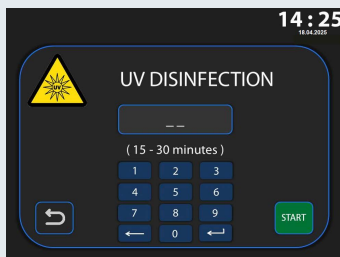
UV TECHNOLOGY FOR PERFECT DECONTAMINATION

• UV lamp that does not disrupt laminar air flow during operation and provides effective decontamination against microorganisms on the cabin interior surface
• UV lamp that provides flexibility in the disinfection process and can be adjusted between 1–60 minutes
• Sensor system that automatically deactivates the UV lamp when the front window is opened during UV lamp operation and prevents the user from being exposed to UV rays

EASE OF OPERATION

• Optimized fan and plenum system for silent operation
• High-performance LED lighting positioned outside the work area to prevent disruption of laminar airflow, minimize eye strain, and eliminate reflections
• Easy to clean stainless steel interior surface resistant to chemicals

EASE OF MAINTENANCE

• Stainless steel interior surface resistant to decontamination reagents and UV light
• Fully opening front window and wing structure facilitating cleaning and decontamination by providing effortless access to the cabin interior
• Design that allows easy replacement of the main HEPA filter from the front
• Microprocessor control system positioned outside the contaminated area and easily accessible

TECHNICAL SPECIFICATIONS

	CS 120
HEPA Filters	99.995% efficiency for particles ≥ 0.3 μm (class H 14 according to EN 1822)
External Surface Structure	Electrostatic powder coated steel sheet
Internal Surface Structure	AISI 304 stainless steel
Working Tray	Three-piece AISI 304 stainless steel
Control System	N-Smart™ control system with programmable microprocessor
Indicator	5" color, touch LCD display
Air Flow Rate Control	Automatic flow rate adjustment system against increasing filter resistance
Fan	GreenTech lubrication-free, double suction centrifugal type
Fan Motor Flow Rate	1805 m³/h
Air Flow Rate (downflow)	0.37 m/s ± 20%
Air Flow Rate (inflow)	0.50 m/s ± 20%
Lighting	High intensity lighting of over 800 lux with LED lamp
Noise Level	< 60dB
External Socket Connection	2 electrical sockets with covers and fuse protection 5A (2.5A for each socket)
Installed Power	2000W
Working Voltage	230V - 50Hz
Internal Dimensions (WxDxH) mm	1192x571x650
External Dimensions (WxDxH) mm	1423x800x1440
Net Weight, kg	230

ACCESSORIES

S 17 015   Suppord stand
M 08 020   Vacum valve
M 08 024   Gas valve with solenoid valve