



UNIPROTECT NG FOR KEEPING LABORATORY ANIMALS UNDER CLIMATE-CONTROLLED CONDITIONS

AIR FLOW CABINET WITH PRESSURE AND HUMIDITY
REGULATION AND INTUITIVE OPERATING MENU

YOUR BENEFITS AT A GLANCE

- Active pressure regulation to maintain the hygiene barrier and protect both rodents and the laboratory environment
- Fully integrated humidifier module to create ideal climate conditions
- LED lighting system with red acrylic glass doors and daily / weekly timer, including automated sunrise and sunset for the natural biorhythms of the lab animals
- Barrier-free access to the holding space for comfortable handling
- Configurable alarms and notifications with forwarding to the building control system
- Conformant with Directive 2010/63/EU¹⁾ and the recommendations of the German Society for Laboratory Animal Science (GV Solas) for keeping test animals

¹⁾ Directive 2010/63/EU of the European Parliament and of the Council of 22. September 2010 on the protection of animals used for scientific purposes



STANDARD PRODUCT FEATURES

- 7" TFT colour touch panel with integrated controls **NEW**
- Intuitive menu navigation **NEW**
- Operating hours counter and setpoint and actual value display integrated into the Human Machine Interface (HMI)
- Disinfection program (integrated in the HMI) **NEW**
- Operating parameter trend display (integrated in the HMI) **NEW**
- Monitoring and alarm system (integrated in the HMI)
- Separate usage time monitoring for supply and exhaust air filters **NEW**
- USB interface for connecting storage media **NEW**
- Barrier-free access to cage room **NEW**
- Two doors with red acrylic panes
- H 14 HEPA filter system tested for DIN EN 1822 and DEHS conformity
- Supply and exhaust air with filter monitoring and DEHS measurement device
- Contamination-free filter changing
- Automated control of chamber pressure with setpoint configuration
- Overpressure and low-pressure operation; change operating mode by entering the desired differential pressure (input in Pascal/Pa)
- Lighting in white and red with lighting change control via daily or weekly timer (integrated in the HMI)
- Exhaust ports connect direct to the building exhaust air system
- Heating with automated chamber temperature control
- Homogeneous air distribution on all cabinet levels
- Outer housing of stainless steel / 1.4301, powder-coated
- Utility space of stainless steel / 1.4301, easy to clean and disinfect
- Four steering rollers for moving, with locking front rollers
- Extra adjustable stands for greater stability
- Four utility areas: Floor area and three shelves of stainless steel / 1.4301, height-adjustable and removable

OPTIONAL COMPONENTS AND FUNCTIONS

- Network-integratable, controllable via LAN
- GLP-/GMP-compliant recorder for tamper-proof data gathering
- Humidity control for ideal climatic conditions
- Activated carbon filter replaceable with no tools required
- Under-cabinet area in raised design
- Additional fourth insertable shelf and ESG glass panes
- Maintenance and service contract



MODERN, USER-FRIENDLY INTERFACE

- High-resolution 7.0" colour touch panel with integrated microprocessor
- Sensitive user touch surface and intuitive menu guidance for quick and easy operation
- Well-organised reporting of operating hours and other indicators
- USB interface for documenting recorded operating parameters
- New security feature: Password-protected settings for flexible user administration



Animal keeping cabinets are frequently utilised by laboratories that conduct animal testing. These cabinets complement established animal housing systems in an SPF (specific pathogen-free) environment that is hygienically strictly controlled, for breeding lines and rare species that have to be kept under special climatic conditions or deviating lighting cycles. Air flow cabinets are thus particularly suitable for use in experimental, laboratory and quarantine applications. The new UniProtect NG represents the next generation of air flow cabinets, developed by ZOONLAB precisely for these needs.

UNIPROTECT NG: FOR THE PROTECTION AND WELL-BEING OF LABORATORY ANIMALS

Animal housing systems conformant with guidelines and animal protection laws have to fulfil stringent requirements, and that is what UniProtect NG does: A fully integrated humidity module (optional) in combination with precise temperature control affords optimal climatic conditions for keeping rodents and small test animals. The air flow cabinet is equipped with an innovative lighting system based on modern LED technology for maintaining natural biorhythms. The system allows continuous adjustment of light intensity and programming of day-night cycles with fade-in/fade-out function. Enhanced soundproofing reduces the sound level in the interior to less than 55 dB(A).

The protection of humans and of the environment, in addition to the well-being of the animal, are additional development focuses for this product. Active pressure control reduces the risk of contamination in case of overpressure or low-pressure operation through constant adjustment of differential pressure. The filter system installed in the in-duct and out-duct with pre- and main filter (HEPA filter H14) ensures efficient reduction of pathogenic and allergenic particles in room air. Pressure control, filter system and continuous monitoring of basic parameters guarantee a high level of operational safety, rounded out by individually configurable error reporting technology that can be integrated into building control systems.

INNOVATIONS FOR A PROVEN TECHNOLOGY

Sometimes many little upgrades add up to a substantial improvement of routine daily operations. In the new NG series for example, the middle door stop was replaced with mutually closing doors. In addition to the improved visibility, accessing the cabinet interior has been made easier and usability of the utility space has been increased. All operating parameters can be quickly and easily entered via a modern, 7" colour touch panel. Additionally, users can access the UniProtect NG controls from outside the animal room. After integration into the in-house network, the included software can be used to perform the full range of functions for external monitoring and convenient air flow cabinet control. Tool-free, low-contamination filter changing is possible without stopping operation. The stainless steel interior surfaces are easy to clean and disinfect. These and other adaptations make for easier handling in day-to-day laboratory practice.

AIR FLOW CABINETS COMPARED: ZOONLAB VS. COMPETITORS

STANDARD AND UNIQUE FEATURES

Manufacturer	ZOONLAB	Competitors
Product name	UniProtect NG (Size M)	Air flow cabinet
Overpressure & low-pressure operation	✓	✓
Two energy-saving fans for air supply and exhaust	✓	Ø ¹
HMI touch panel with detailed operational display	✓	Ø ²
Humidity control	✓	Ø ²
Active pressure regulation	✓	–
Barrier-free access to the interior	✓	–
Function monitoring with alarm notifications	✓	–
Low-contamination filter changing (bag-in-bag system)	✓	–

¹⁾ Featured in some competitor products; ²⁾ Only possible via external humidity modules

CONCLUSION

Decades of experience and "Made in Germany" product quality are why ZOONLAB is a leading manufacturer of complete systems for scientific lab animal housing.

UniProtect NG is a 100% operationally reliable, user-friendly and hygienic solution for proper housing of lab animals for biomedical research in keeping with the 3R-principle.



NOW AVAILABLE IN SIZES S, M AND L

UniProtect NG (S)	Capacity (n)	Interior dimensions (W x D x H / volume) (mm) / (l)	Exterior dimensions (W x D x H) (mm)	Order no.
3 levels, height-adjustable (32-mm adjustment grid); removable plus bottom space	32 Type 2	947 x 670 x 1.250 mm 850 l	1.050 x 798 x 1.808 mm	5144430
	16 Type 2 L			
	12 Type 3			
	8 Type 4			
	4 GPBC¹			
Options				
Humidifier module	–	–	1.243 x 798 x 1.808 mm	3144071
Activated carbon filter	–	–	1.050 x 798 x 2.110 mm	3144070

UniProtect NG (M)	Capacity (n)	Interior dimensions (W x D x H / volume) (mm) / (l)	Exterior dimensions (W x D x H) (mm)	Order no.
3 levels, height-adjustable (32-mm adjustment grid); removable plus bottom space	48 Type 2	1.450 x 675 x 1.250 mm 1.210 l	1.550 x 798 x 1.808 mm	5144440
	24 Type 2 L			
	20 Type 3			
	12 Type 4			
	4 GPBC¹			
Options				
Humidifier module	–	–	1.743 x 798 x 1.808 mm	3144071
Activated carbon filter	–	–	1.550 x 798 x 2.112 mm	3144070

UniProtect NG (L)	Capacity (n)	Interior dimensions (W x D x H / volume) (mm) / (l)	Exterior dimensions (W x D x H) (mm)	Order no.
3 levels, height-adjustable (32-mm adjustment grid); removable plus bottom space	64 Type 2	1.860 x 670 x 1.250 mm 1.570 l	1.960 x 798 x 1.808 mm	5144450
	32 Type 2 L			
	24 Type 3			
	16 Type 4			
	8 GPBC¹			
Options				
Humidifier module	–	–	2.150 x 798 x 1.808 mm	3144071
Activated carbon filter	–	–	1.960 x 798 x 2.110 mm	3144070

¹ GPBC: Guinea pig breeding cage (dimensions: 810 x 260 x 610 mm) | technical changes reserved.