



Emergence Chamber

BF-36VL



Applications

These chambers have been specifically designed for research and display applications in butterfly emergence. Please compare your requirements to the specifications.

Controller

The Intellus Ultra controller is capable of controlling temperature, humidity, CO₂ and lighting events. The controller is a single-board electronic solid-state design with vacuum fluorescent display and ten-key membrane touch pad. Programs can be created in four modes: manual, diurnal, 24-hour, and non circadian.

Lighting System

Door and Observation window Full size glass door with thermal pane temper glass for access to the chamber. The door opening is 29 3/16" x 57 1/2" (74 cm x 146 cm) providing full access to the chamber interior. A magnetic gasket provides a tight seal to door frame. The observation window is located on the opposite side from the glass door. It is also a full size opening thermal pane temper glass which allows viewing of specimens.

Cabinet Construction

22-gauge interior and 18-gauge exterior electro-zinc plated steel construction. All seams and joints on the outer and inner shells are welded. Inner shell is supported by a non-compressing and non-thermal conducting material to lock the inner liner in place without a metal-to-metal bond to the outer case. The chamber is completely self-contained, suitable for stacking one above the other. Overall wall thickness is 2" (5.1 cm).

Airflow

The cooling coil and fans are in a housing area located at the interior top of the chamber. Air is pulled in from the front of the chamber and discharged along the rear. A portion of the airflow is drawn across each shelf and humidifier. Located on the unit cooler housing is a dial adjustment for fan-speed control. Chamber ventilation (fresh) air exchange Two 1 1/4" I.D. ports provides fresh air to the chamber. Each port has a #60 mesh filter assembly to prevent parasites from entering the chamber.

Insulation

Woodless construction using CFC free insulation. Overall wall thickness is 2" (5.1 cm), ample insulation for maintenance of stated temperature range.

Temp Range	Interior Space (volume)		Work Area		Maximum Growing Height		Exterior Dimension in (cm)			Light Intensity 6" from lamp μmoles/m ² /s	# of Tiers
	°C	ft ³	m ³	ft ²	m ²	in	cm	(W)	(D)		
4-44 +/-0.5	32	0.9	20.1	1.9	NA	NA	33.5 (85.1)	35.3 (89.6)	89.5 (227.3)	80	4

BF-36L

Emergence Chambers

Door

Full size glass door with thermal pane temper glass for access to the chamber. The door opening is 26.8" x 29.6" (67.9 cm x 75.2 cm) providing full access to the chamber interior. A magnetic gasket provides a tight seal to door frame. The observation window is located on the opposite side from the glass door. It is also a full size opening thermal pane temper glass which allows viewing of specimens..

Interior Space

32 ft3 (0.90 m3) with a shelving area 20.1 ft2 (1.87 m2) provided on four tiers.

Shelving

Each of the four shelves has a solid top and replaceable 1/4" plast-azote foam on the underside. This dense foam is specifically made for use with pins. The shelves are mounted on slides and easily removed from the chamber. The slides can be moved up and down on pilasters as well as rotated at different angles for display purposes. Each shelf measures 24" (W) x 24" (D).

Finish

Interior and exterior painted with highly reflective, environmentally friendly, high temperature baked white powder coating.

Refrigeration

Self-contained air-cooled condensing unit with hot gas bypass system for continuous compressor operation, extended life and close temperature control. This continuous running condensing unit ensures precise temperature control by alternately cycling refrigerant and hot gas to the coil; this also prolongs the life of the compressor, and eliminates the risk of ice build up in the coil. Solenoid valves have an extended stem for quiet and long life operation. Heat rejection to ambient (standard chamber) is 3900 BTU/hr.

Temperature Range

7° to 44° Degrees C with lights ON ($\pm 0.5^\circ$ C), 2° to 44° Degrees C with lights OFF ($\pm 0.5^\circ$ C).

Temperature Safety Limit Controls

(Experiment Protection) Adjustable high and low temperature controls, audible alarms and visual indicators are provided. The controls shutdown all the power to the chamber, and activates alarms. When the temperature returns to the normal range the system will automatically reset.

Humidity Control (Included)

Additive humidity control of higher than ambient to 80% (lights off) for temperatures between 15° to 30° C. A Humidifier requires distilled or demineralized water. Optional dehumidification via independent dehumidifying coil and reheat heaters will maintain humidity levels down to 40% between 15° to 30° C. Humidity control $\pm 10\%$ with Humichip Electric Sensor. Additional humidity ranges and Advance Sensor available.

Options (most popular)

Access Port with cover (Q10), Intellus Web Server with Gateway Device (C9), Communications Software (C9+), Intellus Ultra with Touchscreen and Internet capabilities (C10), Pan-type humidifier and dehumidifier with Electronic RH sensor (H3), Ultrasonic Humidifier with advanced RH Sensor (H11), Dehumidification via independent dehumidifying coil with reheat heaters and Ultrasonic Humidifier (H12), Ultrasonic Humidifier with Electronic RH sensor (H14), CO2 enrichment package, door with observation window and cover (Q2), door with fresh air ports (Q1), self-contained water-cooled condensing unit, dry alarm contacts (S2), dimmable lighting (closed loop with PAR light sensor)(Q22), dimmable lighting (open loop control)(Q23), extended temperature ranges available. Contact Geneva Scientific for additional options available.

Convenience Receptacles

One 115/1/60 convenience receptacle provided inside chamber.

Electrical Service Requirements

115/1/60 - 12 amps (total) for standard chamber. Power cord and grounded plug provided.



GENEVA SCIENTIFIC
LAB EQUIPMENT SOLUTIONS

PO Box 408 262-245-1500
Fontana, WI 53125 Fax 262-245-6678

Sales@Geneva-Scientific.com