



GENEVA SCIENTIFIC

LAB EQUIPMENT SOLUTIONS

ARABIDOPSIS CHAMBER - AR-36L3



Model	AR-36L3
Exterior Dimensions (WxDxH)	33.5" x 33.6" x 77.2"
Temp. Range (w/ lights on)	12-44C +/- 0.7C
Interior Space	29.7 cu.ft.
Total Shelving Floor Area	16.2 sq.ft.
Maximum Growing Height	11.5"
Light Intensity (6" from lamps)	250 micromoles/m2/sec
Number of Tiers	3

Applications

- *This chamber is frequently used for Arabidopsis thaliana, tobacco and other low light plant growth
- *It also features special air flow for plant tissue culture on plates/dishes or in flasks to allow for dual use
- *Many other applications exist for this product

Percival's IntellusUltra Controller

*Percival Scientific has built a reputation of providing flexible, customized options for research scientists around the world. We have taken the philosophy to the next level with our improved IntellusUltra controller. Now choose from the levels of functionality that meet your research needs.

Lighting System

- *Each tier of shelves is lighted by cool white fluorescent lamps and incandescent lamps properly spaced for uniform light intensity over entire shelf
- *Intensity programmable up to 250 micromoles/m2/sec of light irradiance measured at 6" from lamps on 3 on/off light events

Lighting System cont.

- *Two levels of programming of fluorescent lighting and one level of programming of incandescent lighting
- *Programming and control of the lighting is done via IntellusUltra real time controller

Airflow/Circulation

- *Conditioned air circulates through a rear wall duct and is picked up by a specially designed fixed air diffuser located at the bottom of each tier (air is then delivered vertically upward at a slow speed through each shelf)
- *Air diffuser insulates shelf level experiments from heat generated by underlying light fixture

Cabinet Construction

- *26-gauge smooth galvanized white side walls and top reinforced with 24-gauge backer plates
- *Interior floor constructed of 24-gauge #304-4 stainless steel
- *NSF compliant seam design
- *Overall wall thickness 2"
- *Foamed-in-place non-CFC insulation
- *One 1 1/4 diameter access port on right hand wall
- *Chamber floor equipped with floor drain and hose assembly

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Cabinet Construction cont.

*Contains caster assembly and adjustable leveling legs to compensate for floor unevenness in the lab

Insulation

*Woodless construction using 2" thick foamed-in-place non-CFC Urethane with 93% closed cell, R-value of 12.5, K-value of 0.16 and density of 2.2 lbs/cu.ft.

Doors

*One door opening of 29.2" x 57.5" providing full access to chamber interior (magnetic gasket provides a tight seal to door frame)

Interior Space

*29.7 cu.ft. with work area of 16.2 sq.ft. provided on three shelves

Shelving

*Three tiers of white epoxy coated steel wire shelving (each shelf is 27"D x 28.8"W)

*Shelves side in and out easily on stainless steel rail assemblies (at lower elevation only)

*When shelves are not mounted on rail assemblies, they are vertically adjustable in 1/2" increments

*Maximum growing height is 11.5" per tier

Finish

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

Temperature Range

*12-44C (+/- 0.7C) with lights on and 4-44C (+/- 0.5C) with lights off

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 alternating cycling refrigerant and hot gas to coil; this also prolongs life of compressor, and eliminates risk of ice build up in coil)

*Solenoid valves have extended stem for quiet and long life operation

*Ceiling mounted evaporator coils incorporate twin air circulation fans in aluminum housing (heat rejection to ambient with standard chamber: 5200 BTU/hr)

Temperature Safety Limit Controls

*Experiment Protection: Adjustable high and low temperature controls, audible alarms, and visual indicators provided

*Controls shut down all power to chamber, activating alarms (when the temperature returns to the normal range the system will automatically reset)

Convenience Receptacles

*Two 115/1/60 convenience receptacles provided inside chamber

Electrical Requirements

*Consult Geneva Scientific for electrical requirements and amperage draw.

Options

*Additive Humidity Control with Sensor

*Dehumidifier with Sensor

*IntellusUltra Connect

*Android-Based Touch Screen

*CO2 Enrichment Package

*Self-Contained Water-Cooled Condensing Unit

*Dry Alarm Contacts

*Dimmable Lighting

*LED Lighting in Lieu of Fluorescent Lamps



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