



# GENEVA SCIENTIFIC

LAB EQUIPMENT SOLUTIONS

## ALGAE CHAMBER - AL-41L4



Model	AL-41L4
Exterior Dimensions (WxDxH)	41" x 33.6" x 77.2"
Temp. Range (w/ lights on)	7-44C +/- 0.5C
Interior Space	37.2 cu.ft.
Total Shelving Floor Area	27.2 sq.ft.
Maximum Growing Height	10.6"
Light Intensity (6" from lamps)	405 micromoles/m2/sec
Number of Tiers	4

### Applications

- \*This chamber is specifically designed for algae with higher light intensity requirements
- \*Frequently used for short plants with moderate light intensity requirements
- \*Many other applications exist for this product

### Percival's IntellusUltra Controller

- \*The IntellusUltra control system was purpose-built for controlled environments.
- \*Robust, reliable, industrial-grade integrated hardware
- \*Highly flexible architecture facilitates configuration, expansion and customization
- \*Precise, simultaneous control of up to 7 environmental parameters
- \*Industry-leading experiment protection and system diagnostics

### IntellusUltra Control Graphical User Interface

- \*A touchscreen user interface is provided as standard on all plant growth chambers and allows users to interact with their controlled environment in new and intuitive ways

### IntellusUltra Control Graphical User Interface cont.

- \*10.1" IPS, high resolution display with 10-point multi-touch sensitivity
- \*Tabular and graphical presentation of chamber programs and parameters
- \*Highly visible process values and alarm notifications
- \*Enhanced user feedback menus

### Lighting System

- \*Four tiers of lighted shelving lit by SciWhite LEDs
- \*Intensity programmable up to 405 micromoles/m2/sec of light irradiance measured at 6" from LEDs
- \*Programming and control of the lighting is done via IntellusUltra real time controller
- \*Dimmable between 10-100% output

### Airflow/Circulation

- \*Air circulation inside chamber is from a specifically designed adjustable air diffuser (conditioned air travels along the entire back wall, over the shelves and returns to the ceiling fans through an opening between the light fixtures and the doors)

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### Cabinet Construction

- \*Interior constructed of 26-gauge galvanized steel
- \*Interior floor constructed of 24-gauge polished stainless steel
- \*Exterior constructed of 24-gauge galvanized extra-smooth steel
- \*NSF compliant seam design
- \*Overall wall thickness 2"
- \*Integrated floor drain
- \*Contains casters assembly and adjustable leveling legs
- \*One 1 1/4" diameter access port with air-tight plug
- \*Highly durable and reflective coating

### Insulation

- \*Woodless construction using 2" thick foamed-in-place non-CFC Urethane insulation with 97% closed cell-structure density of 2.2 lbs/cu.ft.

### Interior Space

- \*37.2 cu.ft. with work area 27.2 sq.ft. provided on four shelves.

### Door

- \*One door opening 36.8" x 57.5" provides full access to chamber interior (magnetic gasket provides a tight seal to door frame)
- \*Lift-off hinge design allows for simple removal of door

### Shelving

- \*Four tiers of white epoxy coated steel wire shelving (each shelf is 27"D x 36.3"W)
- \*Shelves are vertically adjustable in 1/2" increments
- \*Maximum growing height is 10.6"

### Refrigeration

- \*Top mounted air-cooled condensing unit with hot gas bypass system for continuous compressor operation, extended life and tight temperature control (this continuous running condensing unit ensures precise temperature control by alternately 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 in standard chamber = 3,837 BTU/hr)

### Temperature Range

- \*7-44C (+/- 0.5C) with lights on and 2-44C (+/- 0.5C) with lights off

### 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)

### Electrical Requirements

- \*Consult Geneva Scientific for electrical requirements and amperage draw.

### Regulatory Standards

- \*Electrical Safety: UL-508A, certified and labelled by Percival Scientific under UL file number E340161
- \*Quality System: ISO 9001:2015, certified under DQS, Inc. under certification number 10017261

### Options

- \*Additive Humidity Control with Sensor
- \*Dehumidifier with Sensor
- \*IntellusUltra Connect
- \*CO2 Enrichment Package
- \*Self-Contained Water-Cooled Condensing Unit
- \*Dry Alarm Contacts
- \*Extended Temperature Ranges
- \*Convenience Receptacles



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Specifications are subject to change without notice.  
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