



GENEVA SCIENTIFIC

LAB EQUIPMENT SOLUTIONS

ARABIDOPSIS CHAMBER - AR-22L



Specifications shown are per compartment

Model	AR-22L
Exterior Dimensions (WxDxH)	33.5" x 36.6" x 77.9"
Temp. Range (w/ lights on)	10-44±0.5
Interior Space	14.6 cu.ft.
Total Shelving Floor Area	10.8 sq.ft.
Maximum Growing Height	8.8"
Light Intensity (6" from lamps)	350 micromoles/m2/sec
Number of Tiers	1

Applications

- *Designed for growth of the Arabidopsis plant
- *Provides adequate space for growing the plant to maturity under controlled temperature, humidity and light conditions
- *Incorporates two individually controlled environments in one compact footprint

Percival's IntellusUltra Controller

- *The IntellusUltra control system (C8) was purpose-built for controlled environments and is standard on all Percival chambers.
- *Robust and reliable, industrial-grade integrated hardware design
- *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 Percival Scientific plant growth chambers and allows users to interact with their controlled environment in new and intuitive ways.
- *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

SciWhite LED Lighting System

- *Two tiers of lighted shelving, lit by SciWhite LEDs
- *Intensity programmable up to 350 micromoles./m2/sec of light irradiance measured at 6" from lamps on 3 on/off light events
- *Programming and control of the lighting is done via IntellusUltra real time controller
- *Dimmable between 10-100% output

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Airflow/Circulation

*Conditioned air circulates through a rear wall plenum, and travels horizontally across each shelf (air then flows vertically upward through the space between the door and shelves back to the unit cooler)

Cabinet Construction

- *Interior constructed of 22-gauge galvanized steel
- *Interior floor constructed of 22-gauge polished stainless steel
- *Exterior constructed of 18-gauge Galvannealed extra-smooth steel
- *NSF-compliant seam design
- *Overall wall thickness is 2" (5.1 cm)
- *Integrated floor drain in each compartment
- *Contains casters assembly and adjustable leveling legs
- *One 1.25" access port with air-tight plug per compartment
- *Highly durable and reflective coating

Insulation

*Woodless construction using CFC free insulation (overall wall thickness is 2", ample insulation for maintenance of stated temperature range)

Doors

*Two doors each with an opening of 29.2" x 27.7" providing full access to chamber interior (magnetic gasket provides a tight seal to door frame)

Interior Space

*29.1 cu.ft. with work area of 10.8 sq.ft. provided on two shelves

Shelving

- *One tier per compartment of white epoxy coated steel wire shelving (each shelf is 27"D x 28.8"W)
- *Shelves are supported by shelf clips allowing 1/2" vertical adjustments (maximum growing height is 20")

Refrigeration

- *Twin condensing unit (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 buildup in coil)
- *Solenoid valves have extended stem for quiet and long life operation
- *Ceiling mounted evaporator coils incorporate dual air circulation fans in aluminum housing (heat rejection to ambient in standard chamber = 2201 BTU/hr)

Temperature Range

10°-44°C (±0.5°C) lights on and 2°-44°C (±0.5°C) 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.

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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