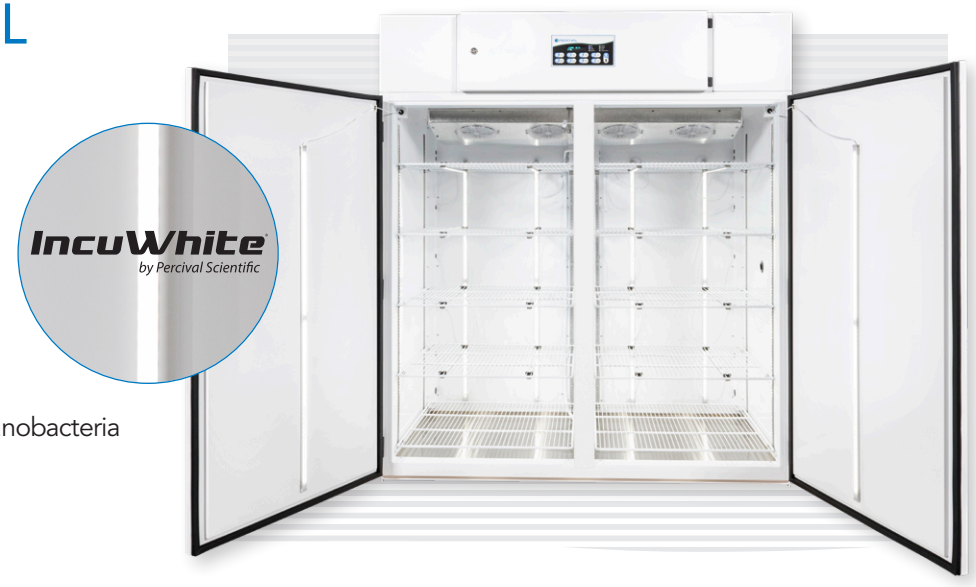
Incubators

Percival® model I-66LLVL

Standard IncuWhite® lighting



Applications

- This chamber is frequently used for Algae, Cyanobacteria and other low light photosynthesis studies
- Many other applications exist for this product

Please compare your own requirements to the specifications listed below.

Percival's IntellusUltra Controller

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

Please refer to www.percival-scientific.com for additional information regarding the control system.

IncuWhite LED Lighting System

- Linear LEDs vertically mounted and linear LEDs horizontally mounted in pairs above each shelf
- Intensity programmable up to 230 µmoles/m^2/s of light irradiance measured @ 6" from LEDs
- Programming and control of the lighting is done via IntellusUltra real time controller
- Dimmable between 5-100% output

Cabinet Construction

- Interior constructed of 22-gauge electro-zinc plated steel
- Exterior constructed of 18-gauge exterior electro-zinc plated steel
- Welded seams and joints on outer and inner shells
- Inner shell supported by non-compressing/non-thermal conducting material locking inner liner in place without a metal-to-metal bond to outer case

Cabinet Construction (continued)

- Chamber is completely self-contained
- Overall wall thickness is 2" (5.1 cm)
- One 1¼" diameter access port on R.H. wall
- Chamber floor equipped with floor drain and hose assembly
- Contains caster assembly and adjustable leveling legs to compensate for floor uneveness in the lab

Insulation

- Woodless construction using CFC free insulation (overall wall thickness is 2" [5.1 cm], ample insulation for maintenance of stated temperature range)

Doors

- Two door openings 29.1" x 57.5" (73.9 cm x 146.1 cm) provide full access to the chamber interior (magnetic gasket provides a tight seal to door frame)

Interior Space

- 62.4 ft^3 (1.8 m^3) with work area of 43.1 ft^2 (4 m^2) provided on four tiers

I-66LLVL specifications (subject to change without notice)

Temp Range with all lights on	Interior Space volume		Total Shelving Floor Area		Maximum Growing Height		Exterior Dimensions width		depth		height		Light Intensity 6" from lamps unless otherwise noted	Tiers
°C	ft^3	m^3	ft^2	m^2	in	cm	in	cm	in	cm	in	cm	µmoles/m^2/s	
4-44±0.5	62.4	1.8	43.1	4	11.25	28.6	66	167.6	33.6	85.4	77.2	196.1	230	4

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Shelving

- Four tiers (eight shelves) of white epoxy coated steel wire shelving (each shelf is 27"D x 28.8"W [68.6 cm x 73 cm])
- Shelves are supported by shelf clips allowing ½" vertical adjustments
- Maximum clearance between shelves is 11.25" (28.6 cm) per tier with all shelving installed

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 coil; this also prolongs life of compressor, and eliminates risk of ice build up in coil)
- Top mounted refrigeration system allows easy access for maintenance (e.g. cleaning)
- As heat is rejected, it rises and is dissipated into room without having any effect on inside temperature of cabinet
- Solenoid valves have extended stem for quiet and long life operation
- Ceiling mounted evaporator coil incorporates three air circulation fans in aluminum housing (heat rejection to ambient [standard chamber] = 4341 BTU/hr.)

Temperature Range

- 4°-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 the chamber, activating alarms (when the temperature returns to the normal range the system will automatically reset)

Humidity Control (optional)

This section outlines the H1 option

- Additive humidity control of higher than ambient to 85% (±10%) lights on for set temperatures between 15° to 30°C
- Extended humidity ranges available

See other specification sheets or consult factory for additional information. If humidity system is selected as an option, a de-mineralized water supply is required which terminates to a ½" MPT connector.

Options (most popular)

- Phenolic Coated Coils (required for drosophila research) (Q9)
- IntellusUltra Connect (C9)
- IntellusUltra Connect and Android-based Touchscreen (C9T)
- IntellusUltra (standard) and Android-based Touchscreen (C8T)
- Pan-type humidifier with Electronic RH Sensor (H1)
- Pan-type humidifier and dehumidifier with Electronic RH sensor (H3)
- Ultrasonic Humidifier with advanced RH Sensor (H11)
- Ultrasonic Humidifier with Electronic RH sensor (H14)
- Ultrasonic Humidifier and dehumidifier with Electronic RH Sensor (H15)
- CO_2 enrichment package
- Door with observation window and cover (Q2)
- Door with fresh air ports (Q1)
- Self-contained water-cooled condensing unit
- Dry alarm contacts
- Dimmable lighting (closed loop with PAR light sensor) (Q22)
- Extended temperature ranges available
- Convenience receptacles

See other catalog sheets or consult factory for additional accessories.

Electrical Service Requirements

- 120/1/60 - two grounded cords each with NEMA 5-15P plug provided for standard chamber
- Cord #1 RLA=9.5 & cord #2 RLA=9.6 (combined MCA=23.9)

Helping You Create Better Science

Percival Scientific controlled environment systems are the culmination of over 60 years of design and manufacturing experience. Our high quality products have been developed through direct partnerships with the scientific community and offer platforms that are highly customizable and provide superior performance. We understand that scientific innovation is bred through creativity, passion, technical expertise and attention to detail, and we are proud to help you create better science.

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