# incubators

# Percival model I-30NL

# applications

- Designed for applications such as B.O.D. determinations, culturing, rearing and holding of test organisms as well as bioassays, and product stability testing
- Many other applications exist for this product Please compare your own requirements to the specifications listed below.

# percival's intellus ultra controller

- Controls temperature, lighting, humidity (optional) and CO<sub>2</sub> (optional)
- Single-board electronic solid-state design includes 10 key membrane keypad with LED indicators and vacuum fluorescent display
- Programs can be configured to run in real time or elapsed time
- Ramping and non-ramping program methods available for each programming mode
- Multiple programs can be linked creating complex environmental profiles
- Optional Intellus Web Server allows monitoring and controlling of chamber via web browser (requires Internet Explorer 6.0+) (this option allows for remote monitoring and programming of chamber including alerts and current condition updates for up to five e-mail addresses)

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

## lighting system

 No lights are contained inside the chamber (please see models I-30BLL, I-30VL or E-30B if lighting is desired)



#### 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
- Chamber is completely self-contained, suitable for stacking one above the other
- Overall wall thickness is 2" (5.1 cm)

#### insulation

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

#### door

 One door opening 26.8" x 29.6" (67.9 cm x 75.2 cm) provides full access to the chamber interior (magnetic gasket provides a tight seal to door frame)

# I-30NL specifications (subject to change without notice)

Temp Range with all lights on	Interior Space		Total Shelving Floor Area		Maximum Growing Height		Exterior Dimensions					ight	Light Intensity 6" from lamps unless otherwise noted	Tiers
°C	ft³	m³	ft²	m²	in	cm	in	cm	in	cm	in	cm	µmoles/m²/s	
2-44±0.5	9.7	0.3	9.1	0.8	8.5	21.6	31	78.7	23.8	60.3	46.1	117.2	No Light	3

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#### interior space

 9.7 ft³ (0.3 m³) with work area of 9.1 ft² (.08 m²) provided on three tiers

# shelving

- Three tiers of white epoxy coated steel wire shelving (each shelf is 16.4"D x 26.5"W [41.6 cm x 67.3 cm])
- Shelves are supported by shelf clips allowing ½" vertical adjustments
- Maximum clearance between shelves is 8.7" (22.1 cm) per tier with all three shelves installed

#### finish

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

# refrigeration

- ¼ h.p. 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)
- Solenoid valves have extended stem for quiet and long life operation
- Rear chamber wall mounted evaporator coil incorporates an air circulation fan (heat rejection to ambient [standard chamber] = 3000 BTU/hr.)

## temperature range

• 2°-44°C (±0.5°C)

# 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 90% (±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)
- Access Port with cover (Q10)
- Glass door (Q12)
- Intellus Ultra Web Server (C9)
- Communications Software (C9+)
- Intellus Ultra with Touchscreen and Internet capabilities (C10)
- 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)
- Dehumidification via independent dehumidifying coil with reheat heaters and Ultrasonic Humidifier (H12)
- Ultrasonic Humidifier with Electronic RH sensor (H14)
- CO<sub>2</sub> 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)
- Dimmable lighting (open loop control) (Q23)
- Extended temperature ranges available
   See other catalog sheets or consult factory for additional accessories.

# convenience receptacles

 One 115/1/60 convenience receptacle provided inside chamber

# electrical service requirements

• 115/1/60 - 8 amps (total) for standard chamber (power cord and grounded plug provided)



