



Incubator FIDELS/30-FS

Applications

This chamber is widely used for maintaining *C. elegans*, nematodes, yeast/fungi, insects, bacteria, and for BOD studies.

It is also suitable for various other biological and environmental experiments.

Users are encouraged to compare their research requirements with the specifications listed below.

Controller

The system incorporates the advanced Controller, designed to offer flexible and customizable control for research applications.

Its enhanced programming capability allows selection of the appropriate functionality to suit experimental needs

Lighting System

This model is supplied without an internal lighting system.

(For chambers requiring integrated lighting, refer to models equipped with SciWhite or FsWhite LED systems

Interior Space

The chamber provides an internal volume of **9.6 ft³ (0.3 m³)** and a usable work surface of **9.1 ft² (0.8 m²)** distributed across **three tiers**.

Humidity Control (H1 Option)

Supports **extended humidity ranges** depending on configuration.

Provides additive humidity control **from above ambient up to 90% RH (±10%)** with lights ON, for set temperatures between **15°C to 30°C**.

Requires a **de-mineralized water supply** terminating in a **½" MPT connector**.

Additional humidity ranges or configurations are available upon request.

Shelving

Equipped with three white epoxy-coated wire shelves, each 16.5" D × 26.5" W (41.9 × 67.3 cm). Shelves feature ½-inch vertical adjustment through clip support.

With all shelves installed, each tier offers 8.5" (21.6 cm) of clearance.

Finish

Both the interior and exterior surfaces are coated with a high-temperature baked white powder coating, providing a reflective, durable, and environmentally safe finish.

Refrigeration System

Self-contained, air-cooled condensing unit with hot-gas bypass system for continuous compressor operation and long service life.

Prevents ice build-up by cycling refrigerant and hot gas through the coil.

Solenoid valves with extended stems ensure quiet, reliable operation.

A rear-mounted evaporator coil with circulation fan ensures uniform cooling; heat rejection to ambient is 1,221 BTU/hr.

Temp Range with all lights on	Interior Space volume		Total Shelving FloorArea		Maximum Growing Height		width		Exterior Dimensions depth		height		Light Intensity 6" from lamps unless otherwise noted	Tiers
	ft ³	m ³	ft ²	m ²	in	cm	in	c m	in	cm	in	cm		
°C													µmoles/m ² /s	
2-44±0.5	9.6	0.3	9.1	0.8	9	21.6	31	78.7	23.8	60.3	46.2	117.3	NoLight	3

Temperature Range

Operational temperature range: 2°C to 44°C, maintained with a precision of $\pm 0.5^\circ\text{C}$.

Temperature Safety Limit Controls

Adjustable high and low temperature safety limits with audible and visual alarms protect experiments. In case of deviation, the system disconnects chamber power and restores operation automatically once normal conditions return.

11. Cabinet Construction

Fully self-contained chamber design suitable for stacking. Exterior constructed from 18-gauge electro-zinc-plated steel.

Interior made from 22-gauge electro-zinc-plated steel. All seams are fully welded for structural integrity. The inner liner is supported by non-compressing, non-thermal-conductive blocks to eliminate metal-to-metal contact. Overall wall thickness: 2 inches (5.1 cm).

12. Insulation

Woodless construction using CFC-free insulation. Wall thickness of 2 inches (5.1 cm) ensures stable thermal performance and temperature uniformity.



13. Door

Single large access door measuring 26.8" × 29.8" (67.9 × 75.6 cm).

Equipped with a magnetic gasket for an airtight seal.

14. Options / Accessories

- (Only meaningful & tender-relevant options retained, duplicates removed)
- Door with fresh air ports
- Door with observation window
- CO₂ enrichment package
- Humidifier with Electronic RH sensor
- Humidifier and dehumidifier system
- Pan-type humidifier
- Phenolic-coated coils (for Drosophila research)
- Self-contained water-cooled condensing unit
- Android-based touchscreen controller
- Convenience receptacles
- LED working light
- Extended temperature ranges
- Access port with cover
- Additional accessories available on request

15. Electrical Requirements

120/1/60 with NEMA 5-15P plug included.

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