

Fisher 500 series Isotemp® Incubators are compact and economically priced units. Designed to handle most of the basic heating applications in the laboratory. The two models (0.6 ft³ and 1.6 ft³) are controlled by an electronic temperature controller over a temperature range of ambient + 5° to 60°C. A Safety Sentinel temperature monitoring system is built in to protect valuable specimens from damage. The safety assumes control of the incubator, should the main temperature control fail. Double wall construction with fiberglass insulation between the steel outer cabinet and the aluminum inner chamber, reduces heat loss and contributes to uniformity and consistency of chamber temperature. All units are shipped with a full-width chrome-plated shelf and are equipped with a door that opens 180° for easy access to the chamber

Specifications

Temperature Range:	ambient + 5° to 60°C
Control Sensitivity:	±0.5°C.
Electrical Requirements:	
Model 506D:	120V, 50/60Hz, 1.8 Amps 230V 50-60Hz, 0.9 Amps
Model 516D:	120V, 50/60Hz, 2.2 Amps 230V 50Hz, 1.0 Amps
Heater Wattage:	
Model 506D:	200W
Model 516D:	225W
Chamber Volume:	
Model 506D:	0.6 ft ³
Model 516D:	1.6 ft ³
Chamber Size (Inches):	
Model 506D:	11 W x 10 D x 10 H
Model 516D:	14 W x 14 D x 14 H
Area per Shelf:	
Model 506D:	104.5 in ²
Model 516D:	188.6 in ²
Overall Size:	
Model 506D:	13.4 W x 12.2 D x 17.6 H
Model 516D:	16.4 W x 16.2 D x 21.6 H

UNPACKING

The 500 Series Isotemp® Gravity-Convected Incubator is shipped fully assembled in a single carton containing the items listed below. Should a shortage exist, notify your Fisher branch or representative, supplying the description and part number of the missing item; part numbers are listed in accessories and replacement parts sections.

Note: In the event shipping damage has occurred, retain the carton and packing material intact with the Incubator, and immediately file a claim with the final carrier, Usually the carrier will send an inspector to ascertain liability.

Qty	Item
1	500 Series Incubator
1	Thermometer Bracket
1	Shelf
1	Instructions

Safety Precautions

Before operation, always observe the following Safety precautions: This unit is not explosion proof. Do not use in the presence of flammable or combustible materials; fire or explosion may result. Unit contains components that may ignite such materials. Do not place volatile items on the heater cover. Fumes and spillage from acidic/basic solutions cause corrosion of the aluminum chamber. Care should be taken to maintain neutral pH at all times. The heater is located at the bottom of the chamber under the heater cover. The heater cover is not intended

to be a shelf. Do not set items directly on heater cover. The temperature of this surface is greater than set temperature.

INSTALLATION

After unpacking perform the following installation procedures.

1. Position the Incubator in a suitable location near an electrical outlet.

Note: To ensure proper air circulation, a minimum clearance of two inches should be provided around all sides of the incubator. Also, allow clearance above the incubator for a thermometer.

1. Drop the supplied thermometer bracket in the exhaust port atop the incubator. The bracket should be suspended in the port by its two tabs.
2. Check that the POWER switch is set to the OFF position, and then connect the line cord to an appropriate AC outlet.

Note: See data plate (located near the line cord) for voltage, current, and line frequency specifications. Make sure that the power requirements will not overload the AC circuit to which it will be connected.

4. The Incubator requires no preliminary adjustments and is now ready for operation. Depending on the customer application and customer laboratory procedures an initial calibration may be done at this point.

CONTROLS AND INDICATORS

All controls and indicators are located on the front panel, below the chamber door. An electronic temperature controller controls the 500 Series Incubator with a built in automatic Safety Sentinel to prevent temperature run away.

Power Switch: Controls all incubator power.

Temperature Controller: Controls temperature from ambient +5° to 60°C

Power Indicator: Illuminates when the power switch is on

Heat Indicator: Illuminates when power is applied to the heaters.

Safety Sentinel: Illuminates when an over temperature condition exists. This controller will activate automatically and take over control of the incubator within 5°C of the original set temperature.

OPERATION

The 500 Series Isotemp® Incubator are electronically controlled for operation at any temperature between ambient +5° and 60°C as follows:

1. Depress the upper section of the power switch - power indicator should light.
2. Set TEMPERATURE control to a dial position relative to the desired temperature. The HEAT indicator light should light and remain lit until the chamber temperature approaches the controllers set-point, then cycle on and off with heater operation.
3. Measure the Incubator temperature and adjust temperature control until chamber stabilizes and the desired set point is obtained.

Notes: After controlling at a given temperature, if the temperature control is rotated CCW, the Safety Sentinel indicator will come on; this is normal operation.

External surfaces do get hot during normal operation at higher temperatures.

Upon initial installation and subsequent heat-up this Incubator may produce an odor and trace evolution of non-toxic vapor that results from the bake-out of the insulation binder. This is a normal condition and is to be expected.