

SureTemp™ Dual-Convection Incubators Model H2505-40, H2505-70 and H2505-135 Instruction Manual

Benchmark's **SureTemp** Incubators are micro-processor controlled and utilize both forced air and gravity convection technology to provide accurate and uniform temperature control. With a stainless steel incubation chamber, removable shelves, and a built in data logger, the the SureTemp incubators are useful for a wide variety of laboratory applications requiring temperatures of ambient +5° and 75°C.

I. Product Specifications:

Capacity: 40L 70L 130L

Temperature Range: Ambient (Room Temperature) +5° to 75°C

Temperature Accuracy: +/-0.25°C*

Temperature Uniformity: +/-0.25°C*

Temperature Stability: +/-0.1°C*

Temperature Increment: 0.1°C

*Specifications provided at a set temperature of 37°C and the fan speed set to the "High" setting.

Dimensions (Internal):

(WxDxH) H2505-40 (E)	13.7 x 13.7 x 13.7 inch / 35 x 35 x 35 cm
H2505-70 (E)	17.7 x 13.7 x 17.7 inch / 45 x 35 x 45 cm
H2505-130 (E)	21.7 x 17.7 x 21.7 inch / 55 x 45 x 55 cm

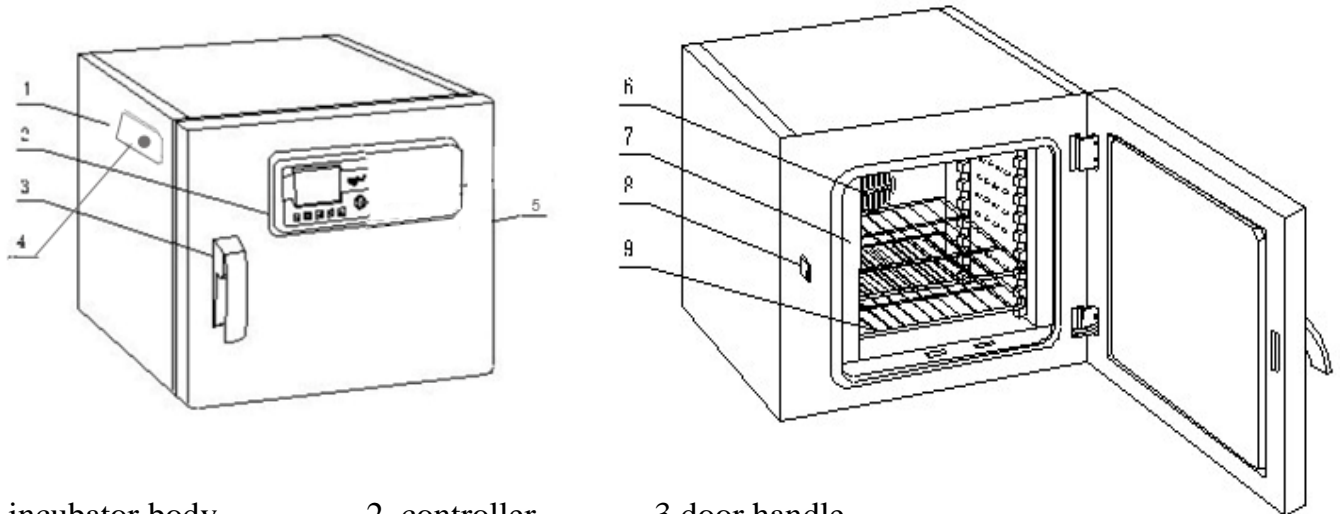
Dimensions (External):

(WxDxH) H2505-40 (E)	22.7 x 23.3 x 22.8 inch / 57 x 59.2 x 58 cm	42kg
H2505-70 (E)	26.4 x 23.3 x 26.6 inch / 67 x 59.2 x 68 cm	62kg
H2505-130 (E)	30.3 x 27.2 x 30.7 inch / 77 x 69.2 x 78 cm	70kg

Chamber: Stainless Steel **Warranty:** 2 years

Electrical: 120V or 230VAC, 50/60Hz **Consumption:** 40L: 420W / 70L: 520 / 130L: 670W

II. Structure:



1. incubator body

2. controller

3. door handle

4. power supply

5. outer door

6. fan cover

7. inner chamber

8 door button

9 Chamber shelves

Product Set-Up:

The incubator is designed to be installed on the bench-top. Before installing, always ensure that the surface is clean, level and capable of withstanding the weight of the incubator. Once in place, plug the electrical cord into a properly grounded outlet of the correct voltage. Once plugged in, press the power button on the left side of the instrument.

III. Product Operation:

To select the desired temperature, press the “SET” key, “SP” is displayed the temperature can be set using the Up, Down and Shift keys. Once the desired temperature value has been set, press the “SET” key again to select the time value, “ST” is displayed. (**When set to “0000” the time function is disabled and the incubator will run continuously.**) Once the desired time value has been programmed, press the “SET” key again to store the values and begin the incubation. The incubator will begin to heat to the desired temperature. Once the temperature has been reached, the timer begins and the incubator will continue heating until the time has expired. Upon completion, the incubator will beep to alert the user that the time is completed and will display end. (To disable the beep press the down key. To clear the “End” message, press and hold the down key for 3 seconds.)

When the time has been set to continuous, the display shows both the current chamber temperature and the set chamber temperature. When a time other than continuous is chosen, the incubator displays the measured chamber temperature as well as the remaining run time.

In addition to control over the temperature and run time, the fan speed can also be set to “High”, “Low” or “Off”. With **Dual Convection Technology**, the SureTemp incubators provide accurate and uniform results with the fan speed set to either of these three settings



WARNING: When loading samples, always avoid placing samples directly in front of fan vents. This will minimize airflow and diminish temperature performance.

An internal outlet is included and provides the same electrical voltage as the outlet that the incubator has been plugged into. In the event of condensation, always wipe the outlet down with a dry towel prior to plugging in an electrical plug.

V. Care and Maintenance:

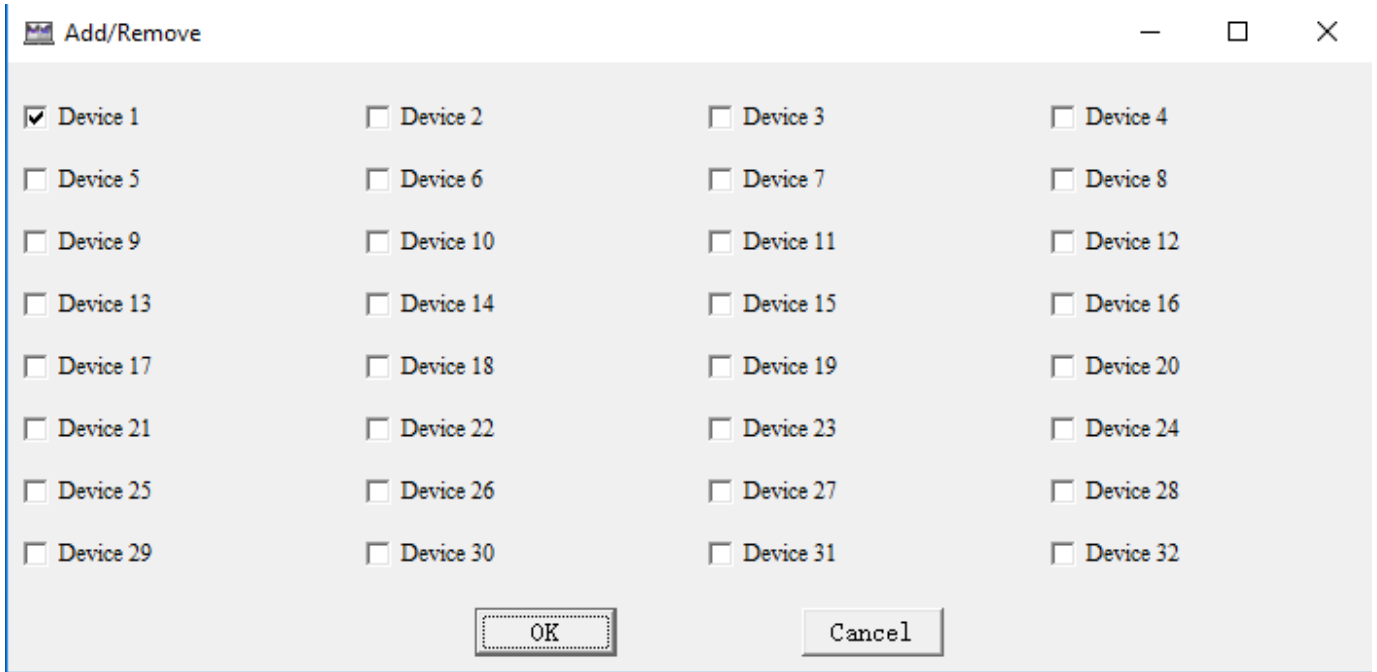
No routine maintenance is required other than to keep the instrument clean. When cleaning, use a damp cloth to wipe down the internal or external parts of the incubator. Avoid the use of solvents as they may attack the product housing. In addition, always ensure that the fan vents are clear of dirt or any other obstructions.

VI. Data Logger Operation:

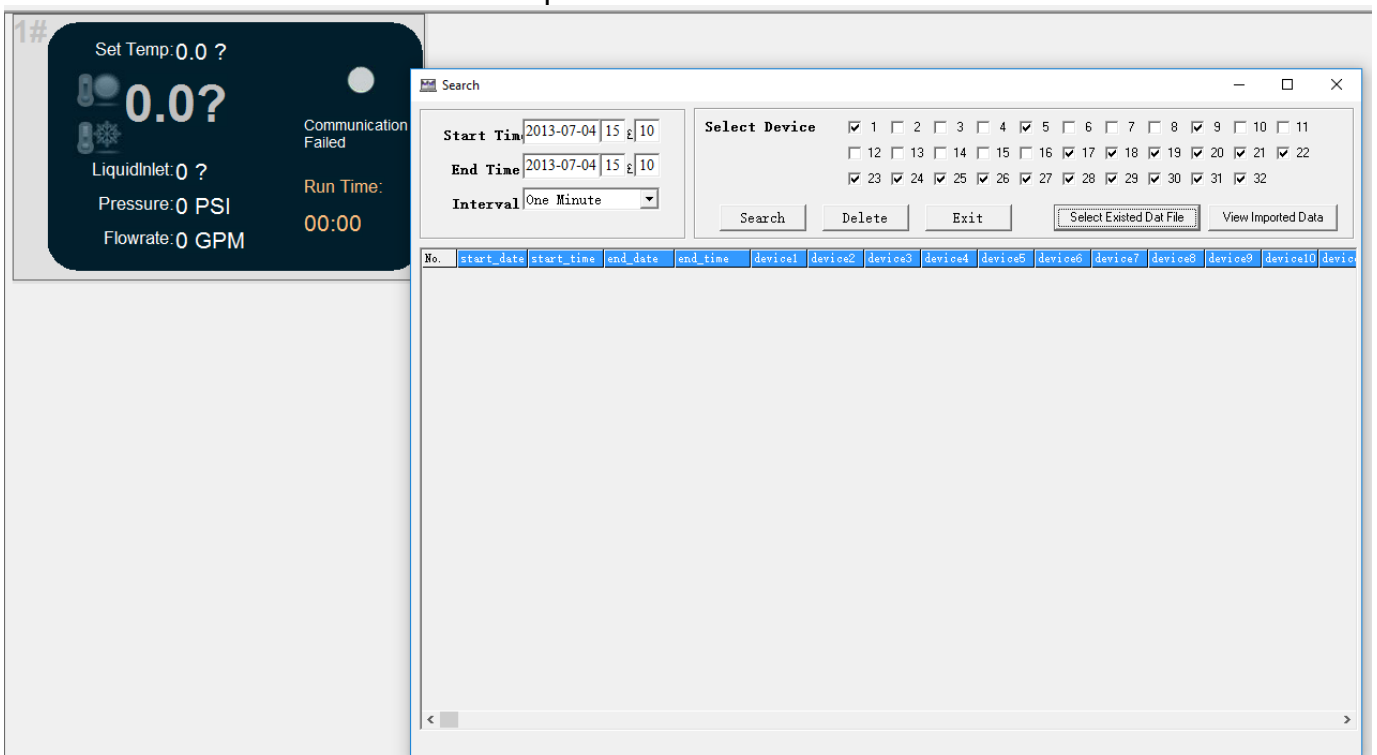
To use the USB data logging function, insert a USB memory stick (flash drive) into the port on the right side of the incubator. Use the Up/Down keys to choose the desired time interval (in minutes) for the settings to save.

To read the data, remove the flash drive and insert into a computer that has the LabTech Software installed using the CD-Rom included with the incubator. Open the saved .DAT file with the installed software.

Choose “Device 1” and press “OK”.



Select the “Select Existed Data File” option and browse for the .DAT file on the USB drive



The data should now be displayed as shown below and can be exported to Microsoft Excel for further analysis.

