

ST and ST-Plus Series:



Adjustable shelf height

An included stainless steel shelf can be raised/ lowered to the appropriate height for fitting a variety of vessel types. In the 45L models, 2 shelves are included and a maximum of 7 can be installed. In the 180L models, 3 shelves are included and a maximum of 18 can be installed.

Sealed inner glass door

The inner glass door is transparent, allowing visualization of samples without fully exposing the chamber to the ambient environment, improving performance and reducing energy waste.



Optional orbital shaker

An optional, orbital shaker can be purchased for suspension cell culture applications. The shaker fits conveniently in the bottom of the chamber and includes a remote controller for adjusting the settings without opening the chamber door.

Heated door and frame

The six-sided, direct heating design provides the highest level of temperature uniformity (± 0.4). In addition, the heated door and door frame prevent the forming of condensation on the inner glass door, for improved sample visualization.



ST-Plus Series:



Digital humidity control

For delicate cells prone to desiccation, the PLUS series of CO₂ incubators allows for control over the relative humidity. Humidity can be controlled up to 95 percent utilizing a reservoir to vaporize and inject moisture into the chamber.

Split inner door (45L)

Each time that the door of a CO₂ incubator is opened, sample contamination is at risk. With the unique design of the Benchmark PLUS models, access to samples can be achieved by opening a small window within the glass door, reducing this risk by up to 80%. Two windows are included in the 45L model.



High heat decontamination

Contamination of samples can result in a large loss of both time and money. To prevent contamination the PLUS models include a convenient high heat decontamination cycle that exposes the chamber to 125°C for 8 hours.

Split inner door (180L)

Similar to the above, the 180L PLUS model features a split inner door, but with 6 compartments. When opening just the small window compartment as opposed to the entire door, not only is there reduced risk of contamination, but this minimizes wasted heat and CO₂ from exiting the chamber.



Technical Data:

Model:	ST-45 (Item: H3550-45)	ST-180 (Item: H3550-180)	ST-45 PLUS (Item: H3551-45P)	ST-180 PLUS (Item: H3551-180P)
Temperature Range:	Ambient +5 to 60°C			
Temperature Accuracy:	$\pm 0.1^\circ\text{C}^*$			
Temperature Uniformity:	$\pm 0.4^\circ\text{C}^*$			
Temperature Increment:	0.1°C			
Temperature Stability:	0.1°C*			
CO ₂ Range:	0 to 20%			
CO ₂ Increment:	0.1°C			
CO ₂ Accuracy:	$\pm 0.1^\circ\text{C}^*$			
CO ₂ Sensor:	Dual Beam IR CO ₂ Sensor			
High Heat Decontamination	No		Yes	
Programmable Humidity Range:	N/A		Up to 95%	
Chamber Dimensions (W x D x H):	13.2 x 14.2 x 15.4 in. 33.5 x 36.1 x 39.2 cm	18.7 x 20.8 x 28 in. 47.3 x 52.8 x 71 cm	13.2 x 14.2 x 15.4 in. 33.5 x 36.1 x 39.2 cm	18.7 x 20.8 x 28 in. 47.3 x 52.8 x 71 cm
Chamber Volume:	45L		180L	
Split Inner Door:	N/A		2 Compartments	6 Compartments
Chamber Material:	Stainless Steel			
Exterior Dimensions (W x D x H):	16.5 x 18.3 x 21.8 in. 42 x 46.5 x 55.3 cm	22 x 26.2 x 37.2 in. 56 x 66.5 x 94.5 cm	16.5 x 18.3 x 21.8 in. 42 x 46.5 x 55.3 cm	22 x 26.2 x 37.2 in. 56 x 66.5 x 94.5 cm
Weight:	77 lbs / 35 kg	172lbs/78kg	77 lbs / 35 kg	172lbs/78kg
Electrical:	120V or 230V, 50-60Hz (350W)			

* At a set temperature of 37.0°C