

Specifications

Characteristics	Description
Dimensions: Instrument only (not including stacks)	BIOSTACK2WR: Length 18.5" (46.9 cm), width 7" (17.8 cm), height 14" (35.6 cm)
	BIOSTACK3WR: Length 21" (54 cm), width 8" (21 cm), height 15" (38 cm)
	BIOSTACK4: Length 21" (54 cm), width 8" (21 cm), height 16" (40 cm)
Weight:	BIOSTACK2WR: 24 lbs (10.9 kg)
	BIOSTACK3WR: <26 lbs (11.8 kg)
	BIOSTACK4: <30 lbs (13.6 kg)
Power Supply:	Compatible with 100 to 240 V~ ± 10% @50-60 Hz
Power Consumption:	40 watts maximum
Operating Temperature:	18°C to 40°C (64.4°F to 104°F)
Humidity:	Operate in a noncondensing humid environment having a maximum relative humidity of 80% at temperatures up to 31° C decreasing linearly to 50% relative humidity at 40° C.

Microplates

	Running without Lids	Running with Lids (BioStack 4 Only)
Width:	85.48 mm (3.365") ± 0.25 mm (0.009") at the corners	85.48 mm (3.365") ± 0.25 mm (0.009") at the corners
		Width above flange: Min 81.0 mm; Max 83.2 mm
Length:	127.76 mm (5.030") ± 0.25 mm (0.015") at the corners	127.76 mm (5.030") ± 0.25 mm (0.015") at the corners
Max Height:	14.60 mm (0.575") 22.0 mm (0.866") using BioStack 4 Lidded Plate Stacks.	Typical 96-, 384-, 1536-well plates: 16.9 mm (0.665") plate + lid combined: plate max is 14.60 mm, except in Stay-on Lid Mode .
Min	approximately 10.16 mm (0.400")	7.60 mm (0.299")

	Running without Lids	Running with Lids (BioStack 4 Only)
Height:		
	Note: The minimum plate height is a function of the stacked height, the plate skirt height, the plate height dip switch setting, and the control method. See Control Method Limitations: on page 89.	See Microplate and Lid Dimensions on page 53.
Warp:	The warp for all models complies with SLAS standards: When resting on a flat surface, the top surface of the plate must be parallel to the resting surface within 0.76 mm (0.0299"); except BioStack 4 supports low-profile plates with a warp value within 2.2 mm. Important: Less-rigid polypropylene, low-profile PCR plates must have sealing tape applied over the entire top surface.	
Max Weight:	12.0 lbs (5.5 kg)	7.0 lbs (3.2 kg)
	Maximum weight for all plates with fluid in a single stack.	
	The BioStack is not compatible with removable-strip-type microplates.	

Lids	BioStack 4 Only
Width:	85.48 mm (3.365") ± 0.50 mm (0.019") along entire edge
Length:	127.76 mm (5.030") ± 0.50 mm (0.019") along entire edge
Minimum Height:	3.5 mm (0.138")
Other requirements:	
Minimum Gap:	1.25 mm (0.049") Plate short-side flange to lid
Lid on Plate:	16.9 mm (0.665") Max overall height
Plate on Lid:	23.2 mm (0.913") Max overall height

Stay-On Lid Mode (BioStack 4 Only)

When these conditions are met the BioStack 4 handles certain low-density plates with lids. This mode offers the ability to keep the lid on the plate for the duration of the protocol.