Specifications

Bio-Stack™

Electrical	
External Power Supply:	Compatible with 100 to 240 V \sim ± 10% @ 50-60 Hz
Power Consumption:	40 watts maximum
Physical	
Display:	None
Dimensions:	Length: 18.5" (46.9 cm) Width: 7" (17.8 cm)
	Height when aligned with the following instruments:
	PowerWave™, PowerWave™ XS, Synergy™ HT, Synergy™ 2*, Synergy™ 4*
	25" (63.5 cm) with stacks and long aligning posts 16" (40.6 cm) without stacks
	* The Bio-Stack is taller with the Synergy 2/Synergy 4 than with the other readers: .28" (.71 cm) higher with/without the stacks.
	Precision™ XS, Precision™ Microplate Pipetting System
	24" (61.1 cm) with stacks and medium aligning posts 15" (37.0 cm) without stacks
	µFill™, ELx405™, NanoQuot™, MicroFlo™ Select
	23" (58.4 cm) with stacks and short aligning posts 14" (35.6 cm) without stacks
Weight:	24 lbs (10.9 kg)
Environmental	
Operating Temperature:	15°C to 35°C (59°F to 95°F)
Humidity:	Maximum relative humidity of 80% at temperatures up to 31°C (87.8°F) decreasing linearly to 50% relative humidity at 40°C (104°F)

Microplates

Dimensions:

Society for Biomolecular Screening (SBS) compliant standard-height 96- and 384-well microplates

Other laboratory microplates, which conform to the following standardized dimensions:

Width: 3.365'' (85.48 mm) \pm 0.020'' (0.5 mm)

Length: 5.030'' (127.76 mm) \pm 0.020'' (0.5 mm)

Height: 0.565'' (14.35 mm) $\pm 0.030''$ (0.76 mm)

Shorter profile plates: 1536-well and low volume 384-well microplates are shorter than standard-height plates, and can be processed in the Bio-Stack™. These plates have a minimum height of 0.400" (10.16 mm).

The maximum rim height for plates with an overall height that is less than 0.450" (11.43 mm) is 0.100" (2.54 mm).

To run plates shorter than 0.565" (14.35 mm), you will need Bio-Stack basecode software version 1.25.1 or greater installed in the Bio-Stack. Some half-height plates may require Bio-Stack basecode version 1.27.1 or greater, as well as reconfiguration of the Bio-Stack. See Appendix C, Reconfiguration of the Bio-Stack and Appendix D. Required Software Versions.

Standards:

With the exception of 1536-well and low volume 384-well microplates, BioTek recommends that you use microplates that comply with the following American National Standards Institute (ANSI)/Society for Biomolecular Screening (SBS) dimensional standards:

ANSI/SBS 1-2004 "for Microplates - Footprint Dimensions"

ANSI/SBS 2-2004 "for Microplates - Height Dimensions"

ANSI/SBS 3-2004 "for Microplates - Bottom Outside Flange Dimensions"

ANSI/SBS 4-2004 "for Microplates – Well Positions"

Note: Microplates that do not meet these requirements may cause functional problems. Plastic "flash" (burrs and extra plastic) on the edges of plates, and strip plates that are not as rigid or flat, may also cause problems.