

## PowerWave™ Microplate Spectrophotometers



### Features

- Monochromator optical design with powerful xenon flash lamp
- 200 - 999 nm or 340 - 999 nm wavelength selection in 1 nm increments
- 6- to 384-, 96- only or 96-/384-well microplate capability, depending on model
- Superior optical design incorporates staggered optics to eliminate channel-to-channel cross-talk
- Reads up to 8 patented Bio-Cells for 1 cm measurements
- 4-Zone™ Temperature Control provides proven superior temperature stability for temperature-sensitive assays such as endotoxin analysis

### Applications

- Nucleic acid quantitation
- DNA purity
- Protein analysis
- Spectral analysis
- Colorimetric assays
- Enzyme kinetics
- Kinetic turbidimetric methods
- Agglutination assays
- EIAs/ELISAs

BioTek has a complete range of microplate spectrophotometers, each with a unique set of features designed to meet a variety of requirements. The PowerWave™ line provides ultimate application flexibility while the  $\mu$ Quant™ provides affordable UV/Vis capability for the benchtop. With rugged hardware, proven optical performance, a small footprint and flexible software, PowerWave readers break barriers in traditional spectrophotometry to obtain results quickly, accurately and reliably. For fast kinetic assays, PowerWave™ HT reads an entire 384-well plate in 11 seconds. For flexible assay options, PowerWave™ XS reads 6-well to 384-well plates. Both readers have a wavelength range of 200 nm to 999 nm to accommodate all absorbance applications. Gen5™ Data Analysis Software controls the reader and provides superior analysis and output options.

In addition to their microplate reading capabilities, PowerWaves also read the Bio-Cell™, a patented 1 cm vessel for standard spectrophotometric applications. Used alone or in an automated system, choose from one of the PowerWave readers for many applications, including endpoint, kinetic, spectral scanning and well area scanning.

### Optional Accessories

Gen5™ Secure (for 21 CFR Part 11 Compliance)  
Product Qualification Package  
Absorbance Test Plate  
Patented Bio-Cell™ 1 cm Quartz Vessel  
Bio-Cell™ Adapter  
Adapter for 1 cm cuvettes

### Models

**PowerWave HT:** 96- and 384-well microplates, 200 - 999 nm  
**PowerWave HT 340:** 96- and 384-well microplates, 340 - 999 nm  
**PowerWave:** 96-well microplates, 200 - 999 nm  
**PowerWave 340:** 96-well microplates, 340 - 999 nm  
**PowerWave XS:** 6- to 384-well microplates, 200 - 999 nm

See price list or Web site for complete model listings and descriptions.

# Detection



Specifications*	PowerWave HT	PowerWave HT 340	PowerWave	PowerWave 340	PowerWave XS
<b>Microplate Type</b>					
96- and 384-well	•	•			
96-well			•	•	
6- to 384-well and Terasaki plates					•
Bio-Cell™	•	•	•	•	•
<b>Monochromator Wavelength Selection</b>					
Wavelength Range:					
200 - 999 nm	•		•		•
340 - 999 nm		•		•	
Dynamic Range: 0 to 4.0 OD	•	•	•	•	•
Wavelength Accuracy: ± 2 nm	•	•	•	•	•
Wavelength Repeatability: ± 0.2	•	•	•	•	•
Bandpass (nm)	5	5	5	5	2.4
<b>Read Channels/Reference</b>					
	8/1	8/1	8/1	8/1	1/1
<b>Reading Speeds (secs):</b>					
Normal: 96	20	20	20	20	49
Normal: 384	66	66			150
Rapid: 96	11	11	11	11	40
Rapid: 384	23	23			112
Sweep: 96	5	5	5	5	14
Sweep: 384	11	11			26
<b>Optical Performance (typical)</b>					
Xenon Flash Lamp	•	•	•	•	•
OD Accuracy: < 1% ± 0.01 OD	•	•	•	•	•
OD Linearity: ±1%	•	•	•	•	•
OD Repeatability: 0.5% ± 0.005 OD	•	•	•	•	•
Resolution: 0.5% ± 0.005 OD	•	•	•	•	•
Stray Light: 0.03% @ 230 nm	•	•	•	•	•
<b>System Features</b>					
Temperature Control					
From ambient + 4°C to 50°C	•	•	•	•	•
Temperature Uniformity ± 0.5°C	•	•	•	•	•
Shaking	•	•	•	•	•
<b>Software Features</b>					
Gen5™ included	•	•	•	•	•
<b>Hardware Features</b>					
Bio-Stack™ Compatible (Automation Ready)	•	•	•	•	•

\* Specifications subject to change



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