

## Microplate Spectrophotometers - $\mu$ Quant™ Microplate Spectrophotometer



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### ● Overview

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$\mu$ Quant™ merges the throughput, speed and convenience of microplate formats with the performance of a spectrophotometer. Your laboratory can now perform conventional EIAs at virtually any wavelength, quantitate nucleic acids in the low UV range, or automatically run spectral scans for peak absorbance measurements without using filters. With the patented Bio-Cell™ accessory, conventional 1 cm measurements can be accomplished.

$\mu$ Quant is an innovative microplate reader with a high-powered xenon flash lamp, tunable monochromator and low UV capability.  $\mu$ Quant reads 6-, 12-, 24-, 48-, 96-, and 384-well microplates or 1 cm Bio-Cells. Pre-programmed software addresses a wide variety of applications including nucleic acid quantitation,  $A_{260}/A_{280}$  ratios, pathlength correction, protein analysis, basic ELISAs, and much more. The  $\mu$ Quant truly provides a high-value solution for unlimited applications.

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### Features

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- Monochromator optical design with full optical range
- 200-999 nm, tunable in 1 nm increments
- 2.4 nm bandpass and  $\pm 2$  nm wavelength accuracy
- Spectral scanning to find peak absorbance in any microwell
- Optional Bio-Cell to read a standard 1 cm pathlength
- Routine ELISAs and cellular assays in 6-, 12-, 24-, 48-, 96-, and 384-well plates
- Specialized applications in 72- and 96-well Terasaki formats
- Xenon flash lamp with excellent reproducibility in low UV applications; 1 billion flashes for a lifetime of reliability

- Automated pathlength correction for direct quantitation of samples without standard curves
- Multiple read methods: endpoint, kinetics, spectral scans and well area scanning

### PRE-PROGRAMMED ASSAY LIST

Spectral Scan assay	A320 Scattering assay	HRP TMB-S assay
Raw_OD assay	Lowry Protein assay	HRP-TMB assay
Raw_OD w/blk assay	Bradford Protein assay	Alk Phosphatase assay
DNA Quant assay	BCA Protein assay	B-galact ONPG assay
260/280 Ratio assay	B-galactosidase assay	Urease assay
RNA Quant assay	NADH assay	MTT assay
Oligo Quant assay	HRP 5AS assay	XTT assay
Protein Quant assay	HRP ABTS assay	WST-1 assay
Phenol assay	HRP OPD-S assay	Methylene Blue assay
EDTA test assay	HRP OPD assay	

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### Specifications

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<b>Detection method</b>	Absorbance
<b>Read method</b>	Endpoint and spectral scanning. Kinetic and well area scanning via computer control.
<b>Microplate types</b>	6-, 12-, 24-, 48-, 96-, 384-well microplates and 60-/72-/96-well Terasaki plates. Also reads up to 8 Bio-Cells (patented quartz miniature cuvettes) for 1 cm absorbance measurement.
<b>Reading speed</b>	96=45 sec
<b>Wavelength range</b>	200 to 999 nm
<b>Wavelength selection</b>	Monochromator, selectable 1 nm or greater increments
<b>Monochromator wavelength accuracy</b>	+ 2 nm
<b>Monochromator wavelength repeatability</b>	+ 0.2 nm
<b>Bandpass</b>	2.4 nm
<b>Dynamic range</b>	0 to 4.0 OD typical
<b>OD accuracy</b>	<1% ± 0.01 OD typical

<b>OD linearity</b>	±1% typical
<b>OD repeatability</b>	0.5% ± 0.005 OD typical
<b>Light source</b>	Xenon flash lamp
<b>Stray light</b>	0.03% at 230 nm typical
<b>Onboard software</b>	Multiple pre-programmed assays including DNA quantitation and 260/280 ratio
<b>Dimensions</b>	16" D x 15" W x 7" H (41 x 38 x 18 cm)
<b>Weight</b>	25 lbs (11.34 kg)
<b>Regulatory</b>	For in-vitro diagnostic use (Except in the European Union). All Bio-Tek microplate instrumentation is CE and ETL marked. For details on approvals and standards compliance, please contact Bio-Tek.

***Specifications subject to change.***

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### **Accessories Included**

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- Operator's manual
- Assay Reference Guide
- Printer cable
- Serial cable: null modem, 9-pin female to 25-pin female

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### **●Optional Accessories**

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- Patented Bio-Cell, p/n 7272051
- Bio-Cell Adapter plate assembly (see photo below), p/n 7270512
- Terasaki Plate Adapter for 60-, 72-, and 96-well Terasaki plates, p/n 7330531
- [Absorbance Test Plate](#), p/n 7260522
- Deskjet printer (110V only)
- [KC4™ Software](#)
- [KCjunior™ Software](#)
- [Product Qualification Package](#)

*Automated pathlength correction to 1 cm with patented Bio-Cell technology*