

PC-controlled, monochromator-based absorbance reader ideal for multi-user labs running a variety of assays including those that need spectral scanning

# Biochrom<sup>®</sup> Asys UVM340

## Microplate Reader



## Key Features

- No need for filters! Monochromator optics for measurements from 340 nm to 800 nm enables a wide range of assays to be performed
- Single or dual wavelength measurements plus kinetic measurements
- Single channel optical system with self-check and automatic calibration for precision measurements
- Shaking, ensures complete mixing of solutions, cells to stay in suspension and colored solutions to be homogenized
- Wavescan for contamination detection, peak absorbance detection and product formation studies
- Automatic performance verification ensures accuracy of data
- Plate formats from 12-96 well with standard ANSI SBS footprints can be used for flexible applications
- Real-time reference measurement for increased accuracy

## Optional

- QC Plate - checks the mechanical alignment of both the plate transport and the optical path and tests reader accuracy and precision.
- Analysis software: KIM and MikroWin<sup>™</sup>

## Software

The UVM 340 is supplied (free of charge) with:

- **DigiRead**  
Controls the plate reader and collects the data to the Windows<sup>®</sup> clipboard for transfer to a spreadsheet.
- **ScanPlus**  
Scanning software for wavescans of single wells

Optional additional software packages include:

- **KIM**  
Easy to learn, yet powerful data reduction package covering all end-point assay requirements for 96 well plates.  
Complete flexibility for advanced users  
Report generator gives complete freedom to design customized reports
- **MikroWin 2000**  
Advanced modular software for quantitative, qualitative and kinetic assay analysis.  
Up to 12 different tests (or standard curves) may be defined on one microplate. Test controls or (standards and concentrations) may be assigned in any position, each individual control / standard is color coded to aid the user.

## Applications

- Absorbance measurements: ELISA, protein quantitation, cell proliferation and cell survival assays
- Enzyme kinetic measurements requiring automatic readings at timed intervals
- Wavescan to determine sample purity
- Cell-based assays requiring shaking where cells need to stay in solution
- Assays measuring the changes of absorbance of NADH at 340nm
- Contamination detection, peak absorbance detection and product formation using spectral scanning

## Technical Details\*

Biochrom Asys UVM340 Microplate Reader	
<b>Measurement range</b>	0.000 to 3.200 OD
<b>Wavelength range</b>	340 to 800 nm
<b>Wavelength selection</b>	Monochromator; all wavelengths selectable in 1 nm intervals
<b>Bandwidth</b>	< 3nm
<b>Accuracy</b>	± 0.5% and 0.005 OD from 0.100-1.000 OD at 450 nm ± 1.0% and 0.010 OD from 1.000-2.000 OD at 450 nm
<b>Reproducibility</b>	± 0.8% and 0.005 OD 0.100- 2.000 OD at 450 nm
<b>Linearity</b>	± 0.5% and 0.005 OD from 0.100-1.000 OD at 492 nm ± 1.0% and 0.010 OD from 1.000-2.000 OD at 492 nm
<b>Plate formats</b>	12, 24, 48 and 96-well plates with standard ANSI SBS footprint
<b>Reading speed</b>	35 seconds for a 96 well plate
<b>Light source</b>	30 watt Tungsten halogen lamp
<b>Detection system</b>	2 silicon diodes, one for measurement and one for reference
<b>Measurement system</b>	Single channel optical system with self-check and automatic calibration
<b>Computer interface</b>	RS-232C bidirectional and USB
<b>Software</b>	DigiRead, ScanPlus, KIM (optional), MikroWin 2000 (optional)
<b>Validation</b>	QC plate for checking alignment, absorbance accuracy & precision (optional)
<b>Dimensions (WxDxH)</b>	27 x 43 x 24cm (10.6"x 16.9"x 9.4")
<b>Weight</b>	10kg (22lbs)
<b>Power Requirements</b>	90 to 250V, 50/60 Hz, 65VA

## ORDERING INFORMATION

G019065090	<b>Biochrom Asys UVM340 Microplate Reader</b>
G019065010	<b>Biochrom Asys UVM340 Microplate Reader with KIM s/w</b>
G019065060	<b>Biochrom Asys UVM340 Microplate Reader with MikroWin s/w (screening and curve fit)</b>
G019065070	<b>Biochrom Asys UVM340 Microplate Reader with MikroWin s/w (screening, curve fit &amp; kinetics)</b>
SG010160	<b>Asys check plate with WINQC software</b>

\*Technical Details are subject to change

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