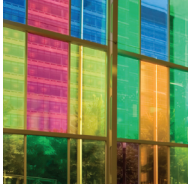

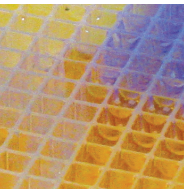

xMark™ **Microplate Absorbance** Spectrophotometer

Extending the Limits of Microplate Reading With Remarkable Flexibility

With its unique imaging capabilities, monochromator design, and spectral scanning feature, the xMark microplate absorbance spectrophotometer finds the best wavelength for any photometric application, and supports assay development in a wide variety of formats.

Feature	Benefit
Unique monochromator design with wide spectral range of 200–1,000 nm and 1 nm step size	▪ Detection, analysis, and quantitation of substances with absorbance spectra in the UV range (DNA) to the infrared range (water)
Capability to scan standard 6- to 1,536-well microplates and custom plates	▪ High throughput with sample volumes below 5 µl ▪ No restrictions on sample type, volume, or throughput ▪ Wide range of applications, from determining HLA antigens serologically to testing wine quality
Unique well and plate imaging	▪ Intensity maps for analysis of absorbance variations in a single well or entire plate ▪ Enhanced detection sensitivity
Built-in incubator* with continuous temperature display using Microplate Manager® software	▪ Thermal regulation of assay reactions ▪ Improved sensitivity and activity of assays ▪ Incubation of plates prior to detection
Built-in shaker* with variable mixing speed and linear or orbital mixing mode	▪ Accurate absorbance readout for entire well volume ▪ Minimum variability of assays for different sample types and liquid- or solid-state reactions ▪ Assay preparation and repeated mixing
Single and dual wavelength detection	▪ Detection of reaction products with high specificity while eliminating background and noise
Motorized tray for plate loading and retrieval	▪ Minimized environmental exposure
Fast plate reading — 9 sec at single wavelength detection for a 96-well plate	▪ Precision in kinetic assays and rapidly developing colorimetric reactions
Microplate Manager software controlled (PC or Mac) via USB2 port	▪ Protocol customization and data reduction options ▪ Comprehensive data analysis
Reports with Checkmark™ reader performance validation kit	▪ Accommodation of various validation protocols, including installation qualification and operational qualification (IQ/OQ)

* Incubator and shaker can be used independently from other instrument functions.

BIO-RAD

Specifications

Optical	
Wavelength	
Range	200–1,000 nm
Accuracy, minimum	±2.0 nm
Repeatability	±2.0 nm
Photometric methods	Single and dual wavelength
Monochromator step size	1 nm
Bandwidth	5 nm
Imaging resolution	0.5, 0.75, 1.0 mm
Performance	
Indication range	0–4.0 OD
Resolution	0.001 OD
Linearity	≤2.0%, 0–3.0 OD at 405 nm
Accuracy	±1.0% or 0.015, 0–3.0 OD at 405 nm
Reproducibility	96-well plate; ≤1.0% or 0.005, 0–3.0 OD at 405 nm
Stability and drift	≤0.010 at OD = 1 at 490 nm
Read time	8 sec/96-well/single wavelength; 15 sec/384-well/single wavelength; 35 sec/1,536-well/single wavelength
Physical	
Compatible plates	6- to 1,536-well and custom microplates; maximum plate height: 21 mm
Incubator set point	Temperature range: 25–45ºC; accuracy: ±0.5ºC; uniformity: 0.5ºC
Well-to-well uniformity	≤2.0% or 0.005, 0 to 3.0 OD at 405 nm
Plate shaking	Linear or orbital plate-shaking capability
Computer interface	USB2
Dimensions (W x D x H)	54.4 x 44.0 x 21.9 cm (21.4 x 17.3 x 8.6")
Weight	27.5 kg (61 lb)

Ordering Information

Catalog #	Description
168-1150	**xMark Microplate Absorbance Spectrophotometer**, PC or Mac, includes incubator, Microplate Manager software, USB2 and power cables

Mac is a trademark of Apple Inc.

BIO-RAD

Bio-Rad Laboratories, Inc.

Life Science Group

Web site *www.bio-rad.com* ***USA*** *800 4BIORAD* ***Australia*** *61 02 9914 2800* ***Austria*** *01 877 89 01* ***Belgium*** *09 385 55 11* ***Brazil*** *55 21 3237 9400* ***Canada*** *905 364 3435* ***China*** *86 21 6426 0808* ***Czech Republic*** *420 241 430 532* ***Denmark*** *44 52 10 00* ***Finland*** *09 804 22 00* ***France*** *01 47 95 69 65* ***Germany*** *089 318 84 0* ***Greece*** *30 210 777 4396* ***Hong Kong*** *852 2789 3300* ***Hungary*** *36 1 455 8800* ***India*** *91 124 4029300* ***Israel*** *03 963 6050* ***Italy*** *39 02 216091* ***Japan*** *03 6361 7000* ***Korea*** *82 2 3473 4460* ***Mexico*** *52 555 488 7670* ***The Netherlands*** *0318 540666* ***New Zealand*** *0508 805 500* ***Norway*** *23 38 41 30* ***Poland*** *48 22 331 99 99* ***Portugal*** *351 21 472 7700* ***Russia*** *7 495 721 14 04* ***Singapore*** *65 6415 3188* ***South Africa*** *27 861 246 723* ***Spain*** *34 91 590 5200* ***Sweden*** *08 555 12700* ***Switzerland*** *061 717 95 55* ***Taiwan*** *886 2 2578 7189* ***United Kingdom*** *020 8328 2000*

Bulletin 5671 Rev B US/EG *08-0410 0408 Sig 0308*