

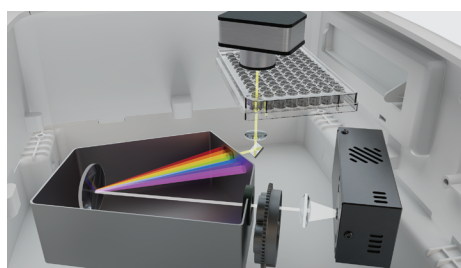
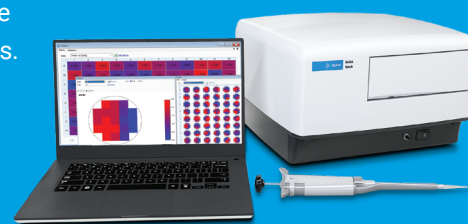
Agilent BioTek Epoch Microplate Spectrophotometer

Excellence in a compact, efficient, and durable design



Epoch microplate spectrophotometer

The Agilent BioTek Epoch microplate spectrophotometer bridges the gap between high-cost, high-performance, monochromator-based absorbance readers and lower-cost, lower-performing, filter-based absorbance readers. It delivers excellent, full-spectral UV-Vis measurements in a compact, efficient, and durable design.



Filter-free 200 to 999 nm wavelength selection

The Epoch microplate spectrophotometer has a monochromator-based absorbance detection system that provides continuous wavelength selection for UV-Vis measurements from 200 to 999 nm, in 1 nm increments. The low-UV capability enables DNA, RNA, and protein quantification in microplates, or in microvolumes with the Agilent BioTek Take3 microvolume plate.



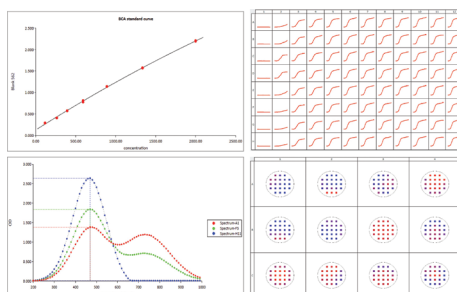
Labware compatibility

Epoch is compatible with 6- to 384-well microplates and the Take3 microvolume plate to support applications with samples in microvolumes to large volumes.



Gen5 data analysis software

Agilent BioTek Gen5 data analysis software provides microplate reader control and extensive data analysis. The efficient user interface is ideal for both new and experienced users—just select one of the prebuilt experiment templates or easily create a new custom protocol using the step-by-step process. Gen5 enables quantitative and qualitative data analysis, along with automated path length correction for microplate-based nucleic acid and protein quantification.



Multiple read methods

Epoch is designed for versatility, including the ability to measure absorbance in end-point, kinetic, spectral scan, and well-area scan methods. These methods enable a range of life science applications, including ELISA and nucleic acid quantification.



Microvolume analysis

Take3 microvolume plates, used with the Epoch, enable multisample nucleic acid and protein quantification with sample volumes as low as 2 µL. Measure up to 16 or 48 microvolume samples for high-throughput, direct quantification.



Automation ready

Epoch is available in a configuration that is compatible with the Agilent BioTek BioStack microplate stacker and third-party systems for complete workflow automation.

Applications

The Epoch microplate spectrophotometer is integral to many workflows, including:

- DNA and RNA quantification
- BCA, Bradford, and Lowry protein assay
- A_{260}/A_{280} and A_{260}/A_{230} purity assessment
- ELISA
- Enzyme kinetics
- Cytotoxicity
- Cell proliferation
- Labeling efficiency

Technical details

General	
Detection Modes	UV-Vis absorbance
Read Methods	End-point, kinetic, absorbance spectral scanning, well-area scanning (under Gen5 control)
Microplate Types	6- to 384-well plates
Other Labware Supported	Agilent BioTek Take3 and Take3 Trio microvolume plates
Software	Agilent BioTek Gen5 data analysis software Agilent BioTek Gen5 Secure software enables 21 CFR Part 11 compliance (option)
Automation	"R" configurations are compatible with: – Agilent BioTek BioStack microplate stacker – Third-party automated systems
Absorbance	
Light Source	Xenon flash
Detector	Photodiode
Wavelength Selection	Monochromator
Wavelength Range	200–999 nm, in 1 nm increments
Monochromator Bandwidth	5 nm
Dynamic Range	0–4.0 OD
Resolution	0.0001 OD
Path Length Correction	Yes
Monochromator Wavelength Accuracy	± 2 nm
Monochromator Wavelength Repeatability	± 0.2 nm
OD Accuracy	0–2 OD: ± 1% ± 0.010 OD 2–2.5 OD: ± 3% ± 0.010 OD
OD Linearity	0–2 OD: ± 1% ± 0.010 OD 2–2.5 OD: ± 3% ± 0.010 OD
OD Repeatability	0–2 OD: ± 1% ± 0.005 OD 2–2.5 OD: ± 3% ± 0.005 OD
Physical Characteristics	
Power	100–240 Volts AC at 50–60 Hz
Dimensions	12" W x 12.5" D x 7.7" H (30.5 x 31.8 x 19.6 cm)
Weight	< 15 lb (6.8 kg)

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