D E T E C T I O N

Epoch™ Multi-Volume Spectrophotometer System

BioTek's Epoch™ Multi-Volume Spectrophotometer System is designed for a wide range of applications, from nucleic acid and protein quantification on a micro scale to cell-based assays in microplates, BioCells or standard cuvettes.

The Epoch Microplate Reader bridges the gap between high performance, monochromator-based absorbance readers and the lower cost, lower performing filter-based absorbance readers by providing excellent UV/Vis measurements in a compact, efficient and robust design. Add the Take3™ Multi-Volume Plate to the equation and the result is multi-volume system, capable of performing all the assays common to the biomolecular research laboratory.

Epoch's high quality optical system incorporates a precision monochromator for wavelength selection without using interference filters. Microplate assays in 6- to 384-well plates are quickly and efficiently run via Gen5™ Software. When sample volumes are critical, the Take3 Multi-Volume Plate allows up to sixteen 2 µL samples to be measured quickly and easily.

For the budget conscious laboratory focused on important nucleic acid and protein quantification as well as standard ELISA and other colorimetric assays, the Epoch Multi-Volume Spectrophotometer System offers unsurpassed versatility.

Features:

- Take3™ Multi-Volume Plate for low (2 µL) volume, BioCell™ or cuvette measurements
- Monochromator wavelength selection from 200 nm to 999 nm in 1 nm increments
- 6- to 384-well plate reading capability
- Automated pathlength correction for direct quantification
- Spectral scanning, endpoint, kinetic, and well area scanning measurements
- Gen5™ Microplate Data Analysis software included
- Integrated detector and electronics for low-noise measurements
- Xenon flash lamp to last the instrument's lifetime
- Robust housing design for longevity even under heavy usage

BioTek®
Get a Better Reaction.

Take3™ plate for multi-volume measurements.

Applications:

- Low-volume nucleic acid and protein quantification in Take3 plate
- Nucleic acid and protein direct quantification in microplates
- Endpoint or kinetic ELISA
- Spectral scanning
- Cell based assays

Models:

Epoch Multi-Volume Spectrophotometer System includes:
Epoch: Microplate Spectrophotometer
Take3: Multi-Volume Plate

Optional Accessories:

- Gen5™ Secure for 21 CFR Part 11 compliance
- Product Qualification Package
- Patented BioCell™
- Absorbance Test Plate

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Specifications:

Epoch™ Microplate Spectrophotometer

Microplates:	6-, 12-, 24-, 48-, 96- and 384-well plates
Wavelength Range:	200 nm - 999 nm, selectable in 1 nm increments
Wavelength Accuracy:	±2 nm
Wavelength Repeatability:	±0.2 nm
Absorbance Range:	0 to 4.0 OD
Absorbance Resolution:	0.0001
Bandpass:	5 nm
Read Modes:	Endpoint, kinetic, spectral scanning, well area scanning
Accuracy:	0.0 to 2.0 OD: ±1% ±0.010 OD 2.0 to 2.5 OD: ±3% ±0.010 OD
Repeatability:	0.0 to 2.0 OD: ±1% ±0.005 OD 2.0 to 2.5 OD: ±3% ±0.005 OD
Linearity:	0.0 to 2.0 OD: ±1% ±0.010 OD 2.0 to 2.5 OD: ±3% ±0.010 OD
Read Speed:	
96-well Normal:	49 seconds
96-well Rapid:	38 seconds
96-well Sweep:	15 seconds
Dimensions:	12"W x 12.5"D x 7.7"H (30.5 x 31.7 x 19.5 cm)
Weight:	14 lbs (6.35 kg)

Take3™ Multi-Volume Plate

Sample Types:	
Microspots:	Up to sixteen 2 µL samples can be run at one time for direct nucleic acid and protein quantification
BioCells	BioCell™ locations available for quick 1 cm pathlength measurements
Cuvette	A standard stoppered cuvette can be measured
Compatible Readers:	Epoch™, PowerWave™ XS2 and all Synergy™ readers equipped with absorbance detection
Sample Volume:	Minimum 2 µL in microspot locations
Optical Pathlength:	0.5 mm
Detection Limit:	2 ng/µL (dsDNA) typical
Gen5™ Software Interface:	Comes with Take3 utility module, compatible with Gen5 and Gen5 Secure
Predefined Applications:	dsDNA, ssDNA, RNA quantification; Protein quantification

*Specifications subject to change