

# Epoch™ 2 Microplate Spectrophotometer

Epoch™ 2 Microplate Spectrophotometer offers excellent performance for UV-Vis measurements in 6- to 384-well microplates, cuvettes and in micro-volume samples with the available Take3™ Micro-Volume Plate. The optional touchscreen interface makes it easy to choose from pre-defined protocols or to define custom programs. End point, kinetic, spectral scanning and well area scanning modes, plus incubation and shaking enable wide-ranging applications.

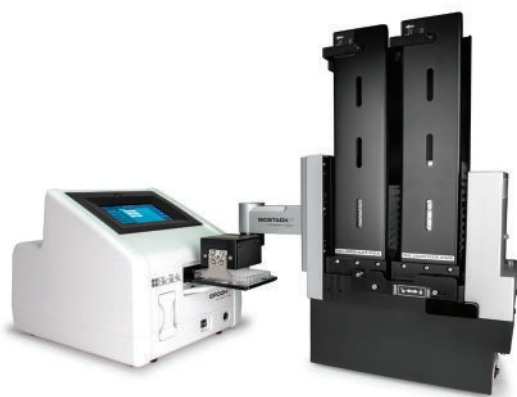


*Use the Take3 Micro-Volume Plate with Epoch 2 for direct nucleic acid and protein quantification in multiple 2  $\mu$ L samples.*



## Features:

- Filter-free UV-Vis wavelength selection from 200 – 999 nm for an extensive range of applications, from nucleic acid and protein quantification to ELISA and microbial growth assays
- End point, kinetic and spectral scanning modes enable a variety of workflows
- Compatible with 6- to 384-well plates and cuvettes for assay versatility
- Micro-volume (2  $\mu$ L) measurements with the Take3 Plate allow dilution-free nucleic acid quantification
- 4-Zone™ incubation to 65 °C and Condensation Control™ facilitate temperature-sensitive assays
- Available touchscreen interface with convenient predefined common protocols enables standalone use; no computer required
- Advanced shaking profiles including linear, orbital and double orbital enable gentle or vigorous mixing
- Optional cuvette port for easy 1 cm measurements
- Compatible with Agilent BenchCel™ Microplate Handler, BioSpa™ 8 Automated Incubator, and BioStack™ Microplate Stacker for workflow automation



Epoch™ 2 with BioStack™ Microplate Stacker.

## Applications:

- Nucleic acid and protein direct quantification
- Micro-volume assays with Take3™ plates
- Microbial growth assays
- Cytotoxicity assay
- Cell proliferation assay
- End point or kinetic ELISA
- Spectral scanning

## Configurations:

Part Number	Description
EPOCH2NS	200-999 nm, incubation to 65 °C, linear, orbital and double orbital shaking.
EPOCH2NSC	200-999 nm, incubation to 65 °C, linear, orbital and double orbital shaking, plus cuvette port.
EPOCH2TS	200-999 nm, incubation to 65 °C, linear, orbital and double orbital shaking, touchscreen and onboard software.
EPOCH2TSC	200-999 nm, incubation to 65 °C, linear, orbital and double orbital shaking, plus cuvette port, touchscreen and onboard software.

## Optional Accessories:

- Take3 Micro-Volume Plates
- Gen5™ Secure for 21 CFR Part 11 compliance
- Product Qualification Package
- Absorbance Test Plate
- BioStack Microplate Stacker
- BioSpa 8 Automated Incubator
- Qualitative Assay Apps: Bradford, Lowry and BCA protein assays
- Agilent BenchCel™ Microplate Handler



Epoch™ 2 with optional cuvette port.

## Technical Details:

### General

Detection mode:	Absorbance
Read methods:	End point, kinetic, spectral scanning (onboard software) End point, kinetic, area scanning, absorbance spectral scanning (under Gen5 control)
Microplate types:	6- to 384-well microplates
Other labware supported:	Take3 Micro-Volume Plates Standard cuvettes
Temperature control:	to 65 °C
Shaking:	Linear, orbital, double-orbital
Software:	Gen5 Software included Onboard software (touchscreen configurations)
Automation:	BioStack and 3 <sup>rd</sup> party automation compatible BioSpa™ 8 Automated Incubator compatible Agilent BenchCel Microplate Handler compatible

### Absorbance

Light source:	Xenon flash lamp
Detector:	Photodiode
Wavelength selection:	Monochromator
Wavelength range:	200 nm to 999 nm, in 1 nm increments
Monochromator:	
Bandwidth	2.9 nm
Wavelength accuracy	±2 nm
Wavelength precision	±2 nm (standard deviation)
Dynamic range	0 to 4.0 OD
Resolution:	0.001 OD (onboard software) 0.0001 OD (under Gen5 control)
Pathlength correction:	Yes (under Gen5 Control)
Optical Density:	
Accuracy	<1% at 2.0 OD <3% at 2.5 OD
Linearity	<1% from 0 to 2.5 OD
Repeatability	<0.5% at 2.0 OD
Stray light:	0.03% at 230 nm
Reading speed (kinetic*):	96 wells: 8 seconds 384 wells: 14 seconds (*under Gen5 control)

### Physical Characteristics

Connectivity:	(1) USB 2.0 ports for computer control (2) USB 2.0 ports for printer connection and USB thumb drive (touchscreen configurations only)
Dimensions:	Touch screen models: 12.5" H x 12.75" W x 15.5" D (31.8 x 32.4 x 39.4 cm) Non-touch screen models approximately 8.5" H x 12.75" W x 15.5" D (21.6 x 31.8 x 39.4 cm)
Weight:	25 lbs (11.34 kg)
Power:	External 24 VDC power supply compatible with 100-240 volts AC at 50-60Hz. 60 W max.

### Regulatory

CE and TUV marked. RoHS compliant. IVD configurations are available.

Technical details are subject to change.



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