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 µL 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 μ 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 Take 3^{TM} 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.



BioTek Instruments, Inc. Highland Park, P.O. Box 998 Winooski, Vermont 05404-0998, USA

Phone: 802-655-4040 • Toll-Free: 888-451-5171 Outside the USA: 802-655-4740 www.biotek.com

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)
BioStack and 3rd party automation compatible
BioSpa™ 8 Automated Incubator compatible
Agilent BenchCel Microplate Handler compatible

Absorbance

Automation:

Light source: Xenon flash lamp
Detector: Photodiode
Wavelength selection: Monochromator

Wavelength range: 200 nm to 999 nm, in 1 nm increments

Monochromator:

 $\begin{array}{ll} \mbox{Bandwidth} & 2.9 \ \mbox{nm} \\ \mbox{Wavelength accuracy} & \pm 2 \ \mbox{nm} \end{array}$

Wavelength precision ± 2 nm (standard deviation)

Dynamic range 0 to 4.0 OE

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 <1% from 0 to 2.5 OD

Linearity <1% from 0 to 2.5 C
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.