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 BioStack™ Microplate Stacker, BioSpa™ 8
 Automated Incubator and 3rd party systems for complete 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



Epoch™ 2 with optional cuvette port.



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Specifications:

General

Detection mode:

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

to 65 °C Temperature control:

Uniformity +/- 0.2 °C at 37 °C Shaking: Linear, orbital, double-orbital

Gen5 Software included Software:

Onboard software (touchscreen configurations) BioStack and 3rd party automation compatible Automation: BioSpa™ 8 Automated Incubator compatible

Absorbance

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

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

Monochromator:

Bandwidth ≤5 nm Wavelength accuracy ±2 nm

Wavelength precision ±2 nm (standard deviation)

Dynamic range

0.001 OD (onboard software) Resolution: 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 <0.5% at 2.0 OD Repeatability 0.03% at 230 nm Stray light: 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) 15" H x 15" W x 15" D (with touchscreen)

(38.1 cm H x 38.1 cm W x 38.1 cm D)

12" H x 15" W x 15" D

(30.5 cm H x 38.1 cm W x 38.1 cm D)

Weight: ≤27 lbs (12.3 Kg)

External 24 VDC power supply compatible with 100-240 Power:

volts AC at 50-60Hz.

60 W max.

Regulatory

Dimensions:

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

Performance values represent the average observed factory test values. Specifications subject to change.