

# Epoch™ 2 Microplate Spectrophotometer



Epoch™ 2 is a compact microplate spectrophotometer that combines modern touchscreen technology with excellent performance for UV-Vis measurements in 6- to 384-well microplates, cuvettes and in micro-volume samples with the available Take3™ plate. No need to worry about limited onboard software, since Epoch 2 comes with full function Gen5™ software, ready to read and analyze data at the touch of a few buttons! For maximum versatility, Epoch 2 can read from 200 nm to 999 nm in 1 nm increments for single, dual and multi-wavelength measurements in end point and kinetic read methods.

Spectral scanning and well area scanning add to the system's wide-ranging application capabilities. For cell-based and other temperature sensitive assays, Epoch 2's 4-Zone™ incubation to 65 °C reaches an even broader range of applications. A variety of data output options are available, including WiFi, Bluetooth and a USB flash drive, making Epoch 2 a fully contained microplate spectrophotometer workstation.



## Features:

- UV-Vis wavelength selection in 2  $\mu$ L micro-volume samples, 6- to 384-well plates and standard cuvettes
- Large color touchscreen with available WiFi, Bluetooth and flash drive connectivity
- Full Gen5™ data analysis onboard, with Windows® 8 OS
- Advanced incubator design to 65 °C and new anti-condensation mode
- Advanced shaking profiles including linear, orbital and double orbital
- Compatible with BioStack and 3<sup>rd</sup> party automation



Scan with your smart phone to watch the video.



Epoch™ 2 with optional cuvette port

## Applications:

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

## Configurations:

- EPOCH2: Monochromator-based microplate spectrophotometer
- EPOCH2T: Monochromator-based microplate spectrophotometer with touchscreen.
- EPOCH2C: Monochromator-based microplate spectrophotometer with cuvette port.
- EPOCH2TC: Monochromator-based microplate spectrophotometer with cuvette port and touchscreen.

## Optional Accessories:

- Take3™ Micro-Volume Plates
- Gen5™ Secure for 21 CFR Part 11 compliance
- Product Qualification Package
- Patented BioCell™ and BioCell adapter
- Absorbance Test Plate



Epoch™ 2 is compatible with BioStack™ Microplate Stacker.



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## Specifications:

### General

Microplate types:	6-, 12-, 24-, 48-, 96-, and 384-well microplates
Other labware:	Take3™ and Take 3 Trio Micro-Volume Plates (optional) BioCell™ (optional) Standard cuvette (with "C" configuration)
Read modes:	End point, kinetic, spectral scanning, well area scanning
Wavelength selection:	Monochromator
Wavelength range:	200 - 999 nm, selectable in 1 nm increments
Light source:	Xenon flash lamp
Dynamic range:	0.0 - 4.0 OD
Band pass:	5 nm
Shaking:	Orbital, double orbital and linear
Temperature control:	Ambient +4 °C to 65 °C with condensation control
Software:	<u>Onboard touchscreen configurations:</u> Gen5™ TS Data Analysis Software  <u>Non-touchscreen configurations:</u> Gen5™ Data Analysis Software
Automation:	BioStack 2WR, 3WR and 4; 3 <sup>rd</sup> party automation compatible

### Performance

*Performance noted below is for 96-well microplates and cuvette measurements.*

Monochromator wavelength accuracy:	±2 nm
Monochromator wavelength repeatability:	±0.2 nm
OD linearity:	0 to 2.0 OD ±1% ±0.010 OD 2.0 to 2.5 OD ±3% ±0.010 OD
OD accuracy:	0 to 2.0 OD ±1% ±0.010 OD 2.0 to 2.5 OD ±3% ±0.010 OD
OD repeatability:	0 to 2.0 OD ±1% ±0.005 OD 2.0 to 2.5 OD ±3% ±0.005 OD
Stray light:	0.03% at 230 nm
Read speed:	96 wells sweep read: 8 seconds 384 wells sweep read: 14 seconds

### Physical Characteristics

Connectivity:	1 USB for external PC control 1 USB for peripheral devices
Power:	100 - 240 Volts AC 50/60 Hz
Dimensions:	<u>Touchscreen configuration:</u> 15.5" D x 12.5" W x 13" H (39.3 x 32 x 33 cm)  <u>Non-touchscreen configuration:</u> 15.5" D x 12.5" W x 8" H (39.3 x 32 x 20.3 cm)
Weight:	Touchscreen configuration: 25 lbs (11.3 kg) Non-touchscreen configuration: 20 lbs (9.1 kg)

### Regulatory

CE and TUV marked. Models for In Vitro Diagnostic use are available.

*Performance values represent the average observed factory test values.*

*\*Specifications subject to change.*