

Typical Applications:

- ELISA
- Fluorescence ELISA
- Nucleic Acid Quantification (A_{260} and fluorescence-based)
- Nucleic Acid Purity Assessment (A_{260}/A_{280})
- Gene expression (luminescence and fluorescence)
- Cell Viability Assays (absorbance MTT, luminescence ATP, various fluorescence-based)
- Protein Quantification

Configurations:

SLXA	Synergy LX with monochromator-based absorbance from 200 nm to 999 nm.
SLXF	Synergy LX with filter-based top fluorescence and luminescence.
SLXFA	Synergy LX with monochromator-based absorbance from 200 nm to 999 nm, filter-based top fluorescence and luminescence.
SLXATS	Synergy LX with monochromator-absorbance from 200 nm to 999 nm and touchscreen interface.
SLXFTS	Synergy LX with filter-based top fluorescence and luminescence, and touchscreen interface.
SLXFATS	Synergy LX with monochromator-based absorbance from 200 nm to 999 nm, filter-based top fluorescence and luminescence, and touchscreen interface.

Note: All Synergy LX configurations include linear, orbital and double-orbital shaking.

Optional Accessories:

- Take3 Micro-Volume Plates
- Gen5™ Secure (for 21 CFR Part 11 compliance)
- Fluorescence Test Plate
- Absorbance Test Plate
- Luminescence Test Plate
- Product Qualification Package
- Printer



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Technical Details:

General

Detection mode:	UV-Vis absorbance, fluorescence intensity, luminescence
Read method:	End point (onboard software) End point, kinetic, area scanning, absorbance spectral scanning (under Gen5 control)
Microplate types:	UV-Vis absorbance: 6- to 384-well (onboard software) Fluorescence intensity and luminescence: 96- and 384-well (onboard software) All modes: 6- to 384-well (under Gen5 control)
Other labware:	Take3 Micro-Volume Plates (onboard software) Take3 and Take3 Trio Micro-Volumes Plates (under Gen5 control)
Shaking:	Linear, orbital, double-orbital
Software:	End point protocols (onboard software) Full data analysis and reporting (under Gen5 control)

Absorbance

Light source:	Xenon flash lamp
Detector:	Photodiode
Wavelength selection:	Monochromator
Wavelength range:	200 – 999 nm, in 1 nm increments
Monochromator:	
Bandwidth:	≤5 nm
Wavelength accuracy:	±2 nm
Wavelength precision:	±0.2 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: 12 seconds 384 wells: 23 seconds

Fluorescence Intensity

Light source:	Halogen
Detector:	PMT
Wavelength selection:	Bandpass filters
Wavelength range:	320 – 700 nm (low noise PMT) 320 – 850 nm (red-shifted PMT)
Dynamic range:	>6 decades
Sensitivity:	Fluorescein 2 pM
Reading speed (kinetic):	96 wells: 24 seconds 384 wells: 76 seconds

Luminescence

Dynamic range:	>6 decades
Sensitivity:	10 amol ATP

Physical Characteristics

Connectivity:	One USB 2.0 ports for computer control Two USB 2.0 ports for printer connection and USB flash drive (touchscreen configurations only)
Dimensions:	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)
Power:	External 24VDC power supply compatible with 100-240 volts AC. 50-60Hz. 60W maximum consumption.

Regulatory

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

Technical details are subject to change.