

Synergy™ LX

Multi-Mode Reader

GENERAL	
Detection modes	UV-Vis absorbance Fluorescence intensity Luminescence
Read methods	End point (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
Shaking	Linear, orbital, double-orbital
Software	End point protocols (onboard) Full data analysis and reporting (under Gen5 control)
ABSORBANCE	
Light source	Xenon flash lamp
Detector	Photodiode
Wavelength selection	Monochromator
Wavelength range	200 nm to 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 4.000 OD
Resolution	0.001 OD (onboard software) 0.0001 OD (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
Path length correction	Yes (under Gen5 control)
Reading speed (kinetic)	96 wells: 12 seconds 384 wells: 23 seconds

FLUORESCENCE INTENSITY	
Light source	Halogen lamp
Detector	PMT
Wavelength selection	Bandpass filters
Wavelength range	200-700 nm (low noise PMT) 200-850 nm (red-shifted PMT)
Dynamic range	7 decades
Sensitivity	Fluorescein 2 pM
Reading speed (kinetic)	96 wells: 24 secs 384 wells: 76 secs
LUMINESCENCE	
Wavelength range	200 nm to 700 nm (850 nm option)
Dynamic range	7 decades
Sensitivity	10 amol ATP
PHYSICAL CHARACTERISTICS	
Connectivity	(1) USB 2.0 port for computer control (2) USB 2.0 ports for printer connection and USB thumb 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	
Regulatory	CE and TUV marked. RoHS compliant. IVD configurations are available.

Preliminary specifications, subject to change.