

Synergy™ HTX

Multi-Mode Microplate Reader

General	
Detection mode	UV-Vis absorbance, fluorescence, luminescence, time-resolved fluorescence (secondary mode)
Microplate type	6-, 12-, 24-, 48-, 96-, and 384-well microplates
Other labware	Take3™ and Take3 Trio Micro-Volume Plate (optional) PCR plates
Read method	Endpoint, kinetic, spectral scanning and well area scanning
Shaking	Linear, orbital
Temperature control	Ambient +4 °C to 50 °C with condensation control ±0.2 °C variation across the plate at 37 °C
Software	Gen5™ Data Analysis Software included
Automation	BioStack™ and 3 rd party automation compatible
AlphaScreen®/AlphaLISA®	
Light source	Tungsten halogen lamp
Sensitivity	300 amol of biotinylated-LCK-P peptide, 25 µL/well in 384-well plate
Dynamic range	>6 decades
Reading speed	2 minutes for 96-well plate
Detection system	Low noise PMT
Absorbance	
Light source	Xenon flash
Wavelength selection	Monochromator
Wavelength range	200 - 999 nm, 1 nm increment
Bandpass	2.4 nm

Dynamic range	0 - 4.0 OD
Resolution	0.0001 OD
Path length correction	Yes
Monochromator wavelength accuracy	± 2 nm
Monochromator wavelength repeatability	± 0.2 nm
OD accuracy	<1% at 2.0 OD <3% at 3.0 OD
OD linearity	<1% from 0 to 3.0 OD
OD repeatability	<0.5% at 2.0 OD
Stray light	0.03% at 230 nm

Fluorescence Intensity

Sensitivity	Fluorescein 5 pM (1 fmol/well 96-well plate) (Top and Bottom)
Light source	Tungsten halogen Xenon flash
Wavelength selection	Deep blocking filters
Wavelength range	300 - 700 nm (200 - 850 nm option)
Dynamic range	>6 decades
Bandpass	Filter dependent
Detection system	Low noise PMT
Reading speed	96 wells: 31 seconds 384 wells: 80 seconds

Luminescence

Sensitivity	30 amol ATP (flash) - Multi-mode configurations 10 amol ATP (flash) - Luminescence-only configurations
Wavelength range	300 - 700 nm
Dynamic range	>6 decades
Detection system	Low noise PMT

Time-Resolved Fluorescence (secondary mode)	
Light source	Xenon flash (optional)
Wavelength selection	Monochromator
Reagent Dispensers	
Number	2 syringe pumps
Supported plate types	6-, 12-, 24-, 48-, 96-, and 384-well microplates
Supported detection modes	All modes
Dispense volume	5-1000 μ L in 1 μ L increments
Dead volume	1.1 mL, 100 μ L with backflush
Physical Characteristics	
Connectivity	1 USB, 1 RS232 for external PC control
Power	100 - 240 Volts AC 50/60 Hz
Dimensions	16"W x 15"D x 10"H (40.6 x 38 x 25.4 cm)
Weight	40 lbs (18 kg)
Regulatory	
Regulatory	CE and TUV marked. Configurations for In Vitro Diagnostic use are available.

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

Hybrid Technology™ is protected under US Patent 8,128,141.

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