



MULTI-MODE MICROPLATE READER
LD-LMPR-B20

Multi-mode Microplate Reader LD-LMPR-B20 is a bench top unit, used in ultraviolet-visible spectrophotometer measurement of 96 well microplate in 10 seconds and 384 well microplate in 30 seconds, it offers linear plate shaking motion. Designed with flashing xenon lamp source, long life and stable illumination, the wavelength ranges from 200 nm to 1000 nm and offers 0 to 4.0 OD measurement range along with Fluorescence, Luminescence and Time-resolved Fluorescence (TRF). It offers free wavelength selection, so being an ideal tool for virtually any photometric research application, such as DNA, RNA, protein analysis and more it offers exceptional usability through its intuitive, powerful PC Reader It-II Software. It has been designed to deliver high performance and high quality results.

Features:

- Designed with temperature control incubation system
- Microplate ultraviolet-visible spectrophotometer
- It measures 96 - 384 well microplates
- Built-in grating monochromator
- Wavelength ranges from 200 to 1000 nm
- Microplate oscillating mixing function
- Designed with flashing xenon lamp source, long life and stable illumination
- Instrument parameter setting and instrument self-test function is highly automated
- It offers quantitative or qualitative detection, standard curve, basic calculation, kinetics, and spectrometry and so on
- For high quality detection and performance, PMT is used as a detector
- Identification of filter information is possible due to detachable modular fluorescence filter just by scanning the code
- Convenient filter replacement reduces the operational time
- Orbital, double orbital and linear shaking
- Powerful PC software (Reader It -II), to offer analysis review, validation of data
- It is easy access to data via USB interface and WIFI

Applications:

Microplate Reader is used in life science research work, especially DNA/RNA analysis, cell proliferation and cytotoxicity test, bacterial concentration analysis, pharmaceutical plant analysis, protease and kinase, phospholipase, NADH, GST activity test and used in end point method ELISA / EIA, with a variety of fitting curves for analysis.

Specifications:

Model No.	LD-LMPR-B20	
Wavelength Range	200 nm to 1000 nm with 1 nm steps	
Wavelength Accuracy	2 nm	
Wavelength Repeatability	0.2 nm	
Functions	Absorbance, Fluorescence, Luminescence, TRF	
Light Source	Xenon Flash Lamp	
Detector	PD	
Half Bandwidth of Filter	< 2.5 nm	
Measuring Range	0 – 4 OD	
Resolution	0.0001 OD	
Accuracy	±1% + 0.003 Abs @(0 – 2 Abs) ±2% @(2 – 3 Abs)	
Repeatability	CV < 1.0% or SD < 0.003 fast (0 – 3 Abs) CV < 0.5% or SD < 0.003 fast (0 – 3 Abs)	
Stray Light	0.1% @220 nm	
Linearity	R ² > 0.999 @(0 – 3 Abs)	
Reading Time	15 seconds with 96-well plate (fast mode)	
Fluorescence	Reading Mode	Top reading
	Excitation Light Source	Xenon lamp
	Detector	PMT
	Wavelength Range	EX: 200 – 1000 nm EM: 270 – 850 nm
	Filter EX/EM	3 groups: EX470 EM525, EX523 EM564, EX624 EM692 (Other wavelengths can freely be replaced)
	Detection Limit	≤ 1pM
	Linear Dynamic Range	6 logs
Luminescence	Detector	PMT
	Detection Limit	100 amole/well
	Linear Dynamic Range	6 logs
	Crosstalk	≤ 0.005%

Plate Shaking	Orbital, double orbital and linear shaking
Incubation Temperature	+5°C to 45°C
Temperature Uniformity	±0.5 °C @37 °C
Display	10 inch touch screen
Data Storage	Up to 10 GB
Dimension (W x D x H)	420 x 550 x 386 mm
Weight	33 kgs
Power Supply	AC 100 to 240 V, 50/60 Hz