



Microplate Reader LD-LMPR-B21

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Microplate Reader LD-LMPR-B21

Overview

Multi-mode Microplate Reader LD-LMPR-B21 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 to 1000 nm and offers 0 to 4.0 OD measurement range along with Fluorescence, Luminescence and can be upgraded as per customer requirement to ultra-micro plate and flash detection by adding injector. 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:

Weight	33 kgs
Display	10 inch touch screen
Accuracy	±1% + 0.003 Abs @(0 – 2 Abs) ±2% @(2 – 3 Abs)

Detector	PD										
Functions	Absorbance, Fluorescence, Luminescence										
Linearity	$R^2 > 0.999$ @ (0 – 3 Abs)										
Resolution	0.0001 OD										
Stray Light	0.1% @220 nm										
Data Storage	Up to 10 GB										
Fluorescence	<table> <tr> <td>Reading Mode</td><td>Top reading</td></tr> <tr> <td>Excitation Light Source</td><td>Xenon lamp</td></tr> <tr> <td>Detector</td><td>PMT</td></tr> <tr> <td>Wavelength Range</td><td>EX: 200 – 1000 nm EM: 270 – 850 nm</td></tr> <tr> <td>Filter EX/EM</td><td>3 groups: EX470 EM525, EX523 EM564, EX624 EM692 (Other wavelengths can freely be replaced)</td></tr> </table>	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)
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Light Source	Xenon Flash Lamp										
Luminescence	<table> <tr> <td>Detector</td><td>PMT</td></tr> <tr> <td>Detection Limit</td><td>100 amole/well</td></tr> <tr> <td>Linear Dynamic Range</td><td>6 logs</td></tr> <tr> <td>Crosstalk</td><td>? 0.005%</td></tr> </table>	Detector	PMT	Detection Limit	100 amole/well	Linear Dynamic Range	6 logs	Crosstalk	? 0.005%		
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Power Supply	AC 100 to 240 V, 50/60 Hz										
Reading Time	15 seconds with 96-well plate (fast mode)										
Plate Shaking	Orbital, double orbital and linear shaking										
Repeatability	CV < 1.0% or SD < 0.003 fast (0 – 3 Abs) CV < 0.5% or SD < 0.003 fast (0 – 3 Abs)										
Measuring Range	0 – 4 OD										
Wavelength Range	200 nm to 1000 nm with 1 nm steps										
Wavelength Accuracy	2 nm										
Dimension (W x D x H)	420 x 550 x 386 mm										
Incubation Temperature	+5? to 45?										
Temperature Uniformity	±0.5 ? @37 ?										
Half Bandwidth of Filter	< 2.5 nm										

Wavelength Repeatability	0.2 nm
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