



# Microplate Spectrophotometer MSA & MSAL



EPCC / PRODUCTS / APPLICATION / SOFTWARE / ACCESSORIES / CONSUMABLES / SERVICES

## Analytical Technologies Limited

An ISO 9001 Certified Company

www.analyticalgroup.net



## **Microplate Spectrophotometers**

#### • Absorbance (MSA) & Absorbance + Luminescence (MSAL)

The microplate spectrophotometer is a 21st century new generation instrument for all the researches that deals with the absorbance and luminescence. Absorbance & Absorbance + Luminescence are based with monochromatic measuring technology which allows your research to higher level. The software for Absorbance & Absorbance + Luminescence has powerful functions with high accuracy of result data. One of the most convenient part of Softwear is that the end users can download.

Allowing variety of endpoint, kinetic, spectral scanning, and area scanning assays. Results are provided quickly and presented conveniently on Microsoft excel which allows you to be able to save and manage the result data securely.

## Microplate Spectrophotometers come in two different variation

### Absorbance & Absorbance + Luminescence

- Microplate Spectrophotometer Absorbance.
  - $\cdot$  200 ~ 1000nm detectable wavelength range with 1nm increment.
  - · Wavelength selection monochromator.
  - · Xenon flash lamp for semi-permanent life time.
- Microplate Spectrophotometer Absorbance & Luminescence.
  - $\cdot$  200 ~ 1000nm detectable wavelength range with 1nm increment.
  - · Wavelength selection monochromator.
  - · Xenon flash lamp for semi-permanent life time.

#### **>>** Software and the performance

#### Able to read 200 ~ 1000nm without filters

Unlike other basic reader instruments out there, Microplate Spectrophotometer use monochromator system instead of filters with a proven optical design that helps ensure excellent sensitivity and unparalleled results. Brining wide range of wavelengths from 200 to 1000nm with just 1 nm increment.

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Quantitative and Qualitative measuring protocol option screen









#### Quantitative and Qualitative assay kit test

Various types of Quantitative and Qualitative assay tests are available. In each protocol there are 7 different regressions that can be used for the analyzing data.

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	0.627	1.073	2,131			
4	8.427	1.019	3.138			
•	0.627	1.073	2.132			

7 different regressions to view the result data in Assay and Calibration.

#### Freely utilizable data on PC

Save the protocol for convenient use every time. Access to the well organized and high-quality User interface to obtain new generation result data.



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#### Multiple options to maximize measurement performance.

With End Point / Kinetic settings, up to 6 wavelengths are possible to be set. In Spectral scanning from 200 to 1000nm can be read with 1nm increment. Area scanning function read up to 338 points

## per well.

#### 6 ~ 384well plate read

Variety types of plates (6 ~ 384 well plates) can be read.

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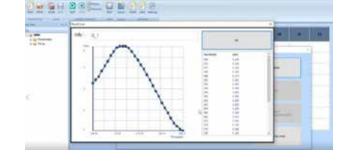


#### 24well DNA/RNA Quantitative measurement

Using 2ul DNA / RNA samples Quantitative values are measurable. Unknown quantitative values of DNA / RNA samples can be read from 240 ~ 320nm to check the quantitative values.

With 24 wells supporting function, variety samples (DsDNA, RNA, ssDNA, 1Abs at 1cm = 1mg/ml BSA, IgG and Lysozyme) concentration value can be measured.

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## >> Key features of the Microplate Spectrophotometer

- Monochromator-based optical system for free selection of wavelengths from 200nm to 1000nm.
- · No filter is needed for these readings.
- · MSA is able to read microplate with 6 ~ 384 wells
- MSA can perform endpoint, Kinetics reading, and spectral scanning. Both photometric acuity and linearity of MSAL, it should be 0-2,000 OD +/- 1%.
- MSA is able to be used in all studies such as routine biology tests, protein analysis, nucleic acidity.
- Nano-V can analyze DNA/RNA quantities. (Micro volume plate / 24well supported)

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- · Plate capable of quantitative analysis with 2ul.
- · The light source of MSA is the Xenon lamp.









- The software to be supplied with MSAL; Abs, UV-Abs, and modes, Endpoint, Kinetic and Spectral scanning.
- · MSAL is able to report result graphics in excel file format.
- MSAL software supports Linear, Quadratic regression, Cubic regression, Log regression, Exponential regression, Linear logarithmic regression, point-to-point, and 4PL regression graphic options.

#### Luminescence

- · Detection method is Photomultiplier (PMT)
- · Measuring Wavelength range is between 300nm to 700nm.
- · Limit of Detection 3x10<sup>-21</sup> moles.

## **>>** Specification for MSA (Microplate Spectrophotometer Absorbance)

## & MSAL(Microplate Spectrophotometer Absorbance Luminescence)

	Absorbance		
Wavelength Accuracy	±2 nm		
Electrical Requirements	INPUT 100 to 240V 50/60Hz / (65W Adaptor)		
Microplate type	6 ~ 384 well plate		
Detector	Photodiode		
Light source	Xenon flash		
Wavelength Range	200 to 999 nm		
Wavelength selection	Monochromator		
Application	Wavelength scanning, end point, Kinetic, Area scan		
Dynamic range	0 ~ 4.0 OD		
OD accuracy	0 ~ 2 OD ±1%		
OD linearity	0 ~ 2 OD ±1%		
OD repeatability	0 ~ 2 OD ±1%		
Shaking	Two step speed		
Software	Windows Software		
DNA/RNA Micro Volume plate	24well / 2ul Sample (Option)		

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Luminenscence				
Detector	Photomultiplier (PMT)			
Wavelength range	300 – 700nm			
Peak Wavelength	420nm			
Limit of Detection (moles)	3x10 <sup>-21</sup> moles			
Currented asthuan regression	Linear, Quadratic, Cubic, Log, Exponential, Linear logarithmic, point-			
Supported software regression	to-point, 4PL			
Weight	8kg			
Size	333x303x245			



## HPLC Servicing, Validation, Trainings and Preventive Maintenance :

HPLC Servicing :HPLC Servicing : We have team of service engineers who can attend to any make of HPLC promptly @the most affordable cost.

- Trainings :We also take up preventive Maintenace to reduce downtime of HPLC's Trainings.
- AMC's/CMC : We offer user training both in-House and at customer sites on HPLC principles, operations, troubleshooting.
- Validations : We have protocols for carrying out periodic Validations as per GLP/GMP/USFDA norms.
- Instruments : We offer instruments/Renting Services Modules like pumps, detector etc. on Rent.



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Analytical Technologies is synonymous for offering technologies for doing analysis and is the Fastest Growing Global Brand having presence in at least 96 countries across the global. Analytical Technologies Limited is an ISO:9001 Certified Company engaged in Designing, Manufaturing, Marketing & providing Services for the Analytical, Chromatography, Spectroscopy, Bio Technology, Bio Medical, Clinical Diagnostics, Material Science & General Laboratory Instrumentation. Analytical Technologies, India has across the Country operations with at least 4 Regional Offices, 6 Branch Offices & Service Centers. Distributors & Channel partners worldwide.

## **Our Products & Technologies**



## **Regulatory compliances**



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Analytical Foundation is a nonprofit organization (NGO) found for the purpose of:



1.Research & Innovation Scientist's awards/QC Professional Award : Quality life is possible by innovation only and the innovation is possible by research only, hence ANALYTICAL FOUNDATION is committed to identify such personallities for their contributions across various field of Science and Technology and awarding them yearly. To participate for award, send us your details of research / testing / publication at Info@analyticalfoundation.org

2. Improving quality of life by offering YOGA Training courses, Work shops/Seminars etc.

3. ANALYTICAL FOUNDATION aims to DETOXIFY human minds, souls and body by means of yoga, Meditation, Ayurveda, Health Care, Awards, Media, Events, Camps etc.





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