

MS - 3310

Microspectrophotometer



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

Analytical Technologies Limited

An ISO 9001 Certified Company

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►► Feature

- Microscopic samples or microscopic areas of large samples at μm level
- Reflectance, fluorescence, Raman scattering and polarization
- High resolution & High stable spectrophotometer
- Built in high sensitivity deep cooled CCD
- High stable light source
- Spinning disk microscope platform
- Infinity plan objective lens
- New generation integrated structure with high stable and user-friendly operation
- Modular design, multi-functions combination, versatility
- Extendable to add on modular of fluorescence, Raman spectrometer
- Free advanced software

►► Application

- Scientific Research Lab, University
- Forensic Identification, Documentation Check Judicial identification, criminal investigation
- Biological samples analysis: Hospital and Biochemical lab, Microscopic evidences analysis, Trace evidence, Evident documentation, Forensic chemistry
- Semiconductor, OLED, thin film thick, MEMS equipment, surface plasma resonance
- New materials research

►► Description

UV-VIS-NIR Microspectrophotometer, or Microscope spectrophotometer combines advantages of microscope and spectrophotometer in order to measure spectra and colorimetry analysis of microscopic samples or microscopic areas of larger samples. It can measure the reflectance, transmission, fluorescence and other emission spectra, Raman scattering, and polarization.

MS3310 series is self-developed microspectrophotometer by Optosky brand. Its built-in high stable light source, high resolution spectrometer, and it goes through objectives to microscopic samples on microscope platform, the reflective light signal transfers through objectives to spectrometer for analysis, the obtained reflectance, absorbance, and colorimetric values of different microscopic areas of samples. It can also add on functions of fluorescence spectroscopy and Raman spectroscopy.

Scientific-grade deep cooled CCD with high reliability, high resolution color imaging system, the advanced operation system and free software for easy to operate It connect to computer by USB for excellent lab experience.

►► 1. Working Principle

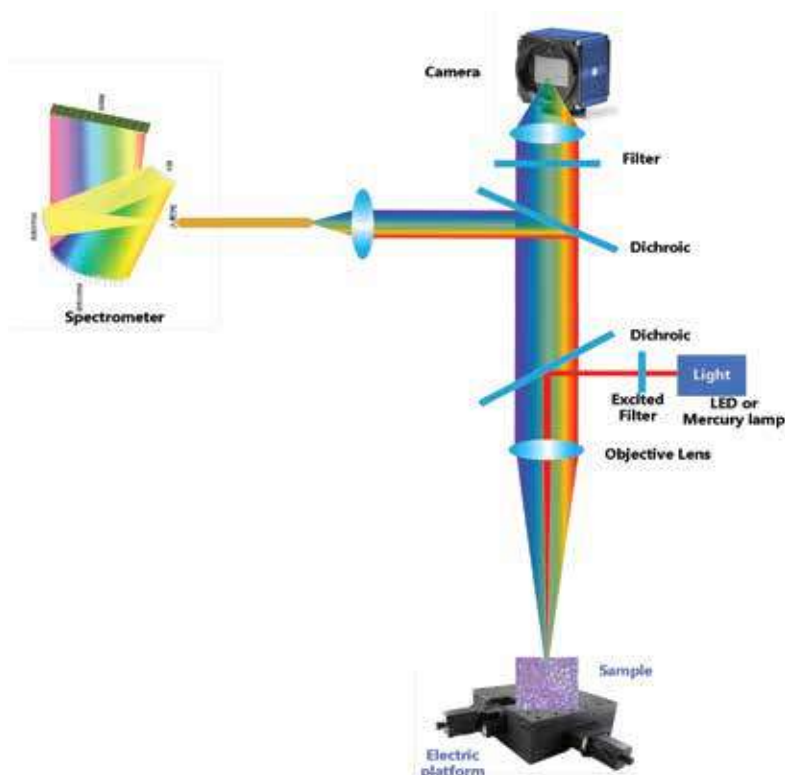


Figure 1 Microspectrophotometer Working Principle

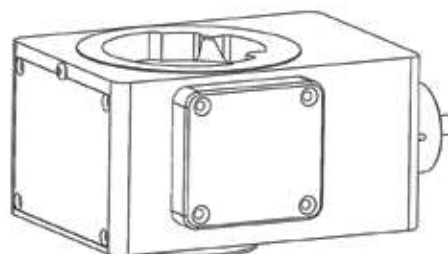
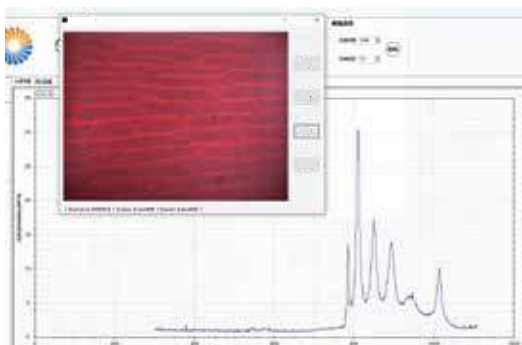
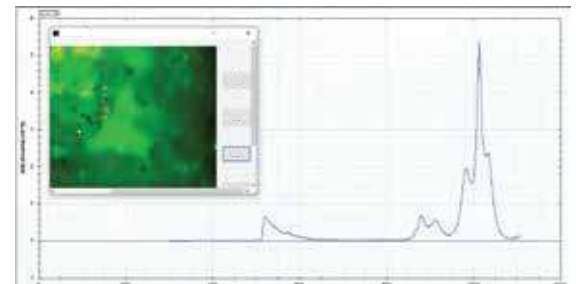
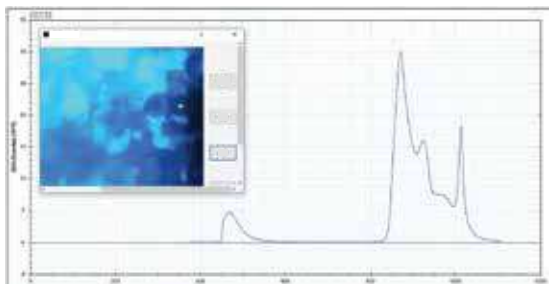
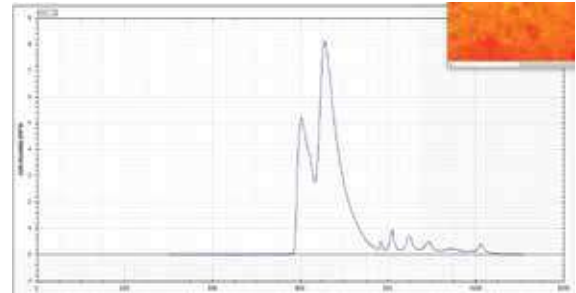
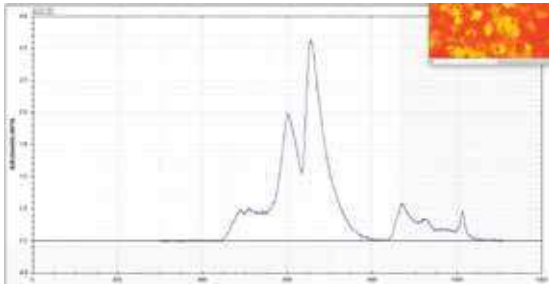


Figure 2 Epi-microscopic spectrum intermediate (left) and spectrum collection intermediate (right)

►► 2. Parameter

Parameters	Specifications
Spectral Method	Reflectance spectrum of different areas on the surface of a Substance
Spectral Range	300-1100nm, 200-1000nm, 300-1700nm, 300-2500nm, 900-1700nm, 900-2500nm (optional)
Resolution	1 - 8 nm
Optical Design	f/4 cross asymmetric C-T optical path
Spectral Detector	2048 pixel detector (CMOS or deep-cooling InGaAs)
Integration Time	1ms-10min
SNR	Visible band: >450:1 SWIR band: >1000:1
Dynamic Range	Visible band: 2000 : 1 SWIR band: 5000:1
Light Source	High stability halogen light source, pulse xenon light source
Optical System	Infinity chromatic aberration correction optical system
Magnification Range	40X~1600X
Infinity plan achromatic objective lens	Standard configuration: 20X; optional configuration: 40X, 100X, 4X, 10X;
Converter	Inward tilt type internal positioning five-hole converter
Focus Method	Manual focus method
Microscope Platform	Steel wire drive stage (X-axis not protruded)
Camera Device	Equipped with a digital camera system such as 5 million pixels for bright-field photography
Moving Range	50 X 50 mm
Maximum stroke	50 mm
Dimensions	290 X 210 X 220 mm
Weight	9.3 kg
Function	Visual real-time spectrum measurement

►► 3. Performance Test



►► 4. Attachments

Order	Goods	Numbers	Optional
1	Microscope photometer host	1 set	Standard
2	Objective lens	1 set	Standard
3	Standard calibration whiteboard	1 pcs	Standard
4	12V power adapter	1 pcs	Standard
5	High-performance shielded USB cable	1 pcs	Standard
6	30% gray board	1 pcs	Optional
7	50%gray board	1 pcs	Optional
8	High and low temperature variable temperature test bench, which can carry out tests in the range of -80°Cto 450°C	1 set	Optional

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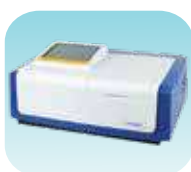
Instruments :Instruments :We offer instruments/Renting Services Modules like pumps,detector etc. on Rent.



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Total Organic
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Ion Chromatograph



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system

Regulatory compliances



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