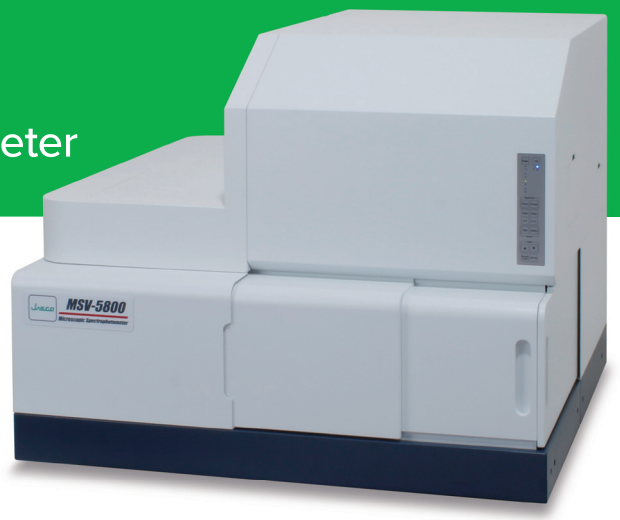
MSV-5800

UV/Vis/NIR Microscopic Spectrophotometer



Specifications

[Hardware]

Optical system:	Single monochromator Czerny-Turner mount Double beam type
Light source:	Deuterium lamp, Halogen lamp
Option for light source:	150 W Xenon lamp
Wavelength range:	200 to 1600 nm
Wavelength accuracy:	±0.3 nm (656.1 nm) ±1.5 nm (1312.2 nm)
Spectral bandwidth:	0.1, 0.2, 0.5, 1, 2, 5, 10 nm (UV/Vis region) L2, L5, L10 nm (low stray light mode, UV/Vis region) 0.2, 0.4, 1, 2, 4, 10, 20 nm (NIR region) L4, L10, L20 nm (low stray light mode, NIR region)
Scanning mode:	Continuous scanning or step scanning
Detector:	Photomultiplier tube, InGaAs photodiode
Mevasurement mode:	Transmittance/reflectance
Sample observation:	High-resolution built-in CMOS camera (3 million pixels), optical zoom, ATOS (Aperture Through Optical System), LED illumination
Options for observation:	Binocular, polarization observation unit, objective lens (10x, 20x)
Objective Mirrors:	Cassegrain objective mirror (10x, 16x, 32x) Automatic 4-position motor-driven objective revolver switching Select one from 3 types of cassegrain mirror[*1]
Condensing Mirrors:	Cassegrain condensing mirror (10x, 16x, 32x) Manual replacement With automatic correction of condensing mirror position Select one from 3 types of cassegrain mirror[*1]
Aperture:	Φ10, 20, 30, 50, 100, 200 µm 10 x 31.5, 10 x 50, 10 x 100, 31.5 x 10, 50 x 10, 100 x 10 µm (when 16x Cassegrain objective mirror is used)
Sample stage:	Manual stage
Moving distance:	X-axis: 75 mm / Y-axis: 50 mm / Z-axis: 20 mm[*2]
Options for sample stage:	Automatic XYZ Stage, joystick
Moving distance:	X-axis: 72 mm / Y-axis: 52 mm / Z-axis: 25 mm[*2] 1 µm interval each for X, Y, Z-axis

Polarizer:	Glan-Taylor prism Automatic insertion/extraction to the light path, and automatic angular setting
Analyzer (option):	Glan-Taylor prism Automatic insertion/extraction to the light path, and automatic angular setting
Control panel:	Objective mirror (lens) switching, measurement mode switching (transmittance/reflectance), aperture switching, measurement start/stop, autofocus, auto-correction of transmittance focus, optical zoom, brightness control of observation light, sample compartment illumination (ON/OFF), ATOS Illumination (ON/OFF)
Dimensions and weight:	740 (W) x 745 (D) x 630 (H) mm, approx. 111 kg
Power requirements:	AC100 to 240 V, 50/60Hz, 340 VA

[Data processing]

Software:	JASCO Spectra Manager Ver. 2
Operating system:	Windows 10 Pro (64-bit)

Standard program

Measurement programs:	[Microscopic Spectra Measurement] program, [Microscopic Fixed Wavelength Measurement] program, [Microscopic Time Course Measurement] program (single-point measurement, image acquision)
Micro imaging analysis:	Peak height, peak height ratio, peak area, peak area ratio, peak shift, full width at half maximum
Spectra analysis:	Film thickness analysis, color analysis, arithmetic, X and Y unit conversion, derivatives, peak find, peak height/area, peak height/area ratio, full width at half maximum, Kramers-Kronig transformation, FFT filter
Other programs:	[Validation] program (jigs are required), [JASCO Canvas] program (print layout tool), [Administrative Tools] program
Automatic XYZ stage operation: (when mounting automatic XYZ stage)	Stage movement, lattice measurement, line measurement, multiple-point measurement, fixed wavelength mapping measurement, autofocus, multiple image acquision
Image display (mapping data):	Color 3-D graph, bird's-eye view graph, contour map, color-coded map, 3-D spectrum graph, 2-D cross-sectional graph, RGB view, overlaying view
Optional program:	[Multi Layer Analysis] program, [Color Diagnosis Analysis] program

*1. MSV-5500/5700/5800 includes cassegrain objective mirror and cassegrain condensing mirror, whose magnifications are same.
*2. The moving distance of the Z-axis is limited by the magnification of the objective/condensing mirror or lens, or sample thickness.

ISO-9001
ISO-14001
CERTIFIED

Products described herein are designed and manufactured by ISO-9001 and ISO-14001 certified JASCO Corporation

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