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Typical Specification Sheet

UV-2600i

UV-VIS Spectrophotometer

The 0.00025%(340nm Typical values) stray light level is very low for a single monochromator model.
It is the standard double-beam model, which provides high cost-effectiveness.
The wavelength measurement range can be extended to include the near-infrared region by attaching an optional integrating sphere.

Don't Miss Any Piece of the Puzzle

Hardware Specifications

Item	Specification
Wavelength range	185 to 900 nm 220 to 1,400 nm when the ISR-2600Plus Integrating Sphere Attachment is used.
Spectral bandwidth	0.1, 0.2, 0.5, 1, 2, 5 nm L2, L5 (Low stray-light mode)
Wavelength setting	0.1 nm increments (1 nm increments when setting scanning range)
Wavelength sampling pitch	0.01 nm
Wavelength accuracy	±0.07 nm 656.1 nm D_2, ±0.3 nm, All range
Wavelength repeatability	±0.01 nm
Wavelength scanning speed	Wavelength transfer: Approx.14,000 nm/min Wavelength scan rate: Approx.4,000 to 0.5 nm/min
Lamp interchange wavelength	Auto switching synchronized with wavelength; switching range selectable between 290 and 370 nm (0.1 nm increments)
Stray light	0.002% or less (220 nm, NaI) 0.00025% or less (340 nm, 370 nm, $NaNO_2$) 0.2% or less (198 nm, KCl)
Photometric system	Double beam
Photometric range	–5 to 5 Abs (Display range ±10Abs, $\pm 10^{12}$%)
Photometric accuracy	±0.0015 Abs (0.5 Abs) ±0.002 Abs (1.0 Abs) ±0.004 Abs (2.0 Abs) ±0.3%T Measured using NIST930/NIST1930 or equivalent filter

Item	Specification
Photometric repeatability	±0.0002 Abs or less (0.5 Abs) ±0.0003 Abs or less (1 Abs) ±0.0004 Abs or less (2 Abs) ±0.1%T
Baseline stability	0.00015 Abs/h or less (700 nm) 1 hour after light source is turned ON
Baseline flatness	Within ±0.00015 Abs (200〜860 nm) 1 hour after light source is turned ON
Noise level	0.000015 Abs or less (500 nm)
Light source	50 W halogen lamp, deuterium lamp Light source auto position adjustment built in
Monochromator	Czerny–Turner mounting Lo-Ray-Ligh™ grade blazed holographic grating Use grating Single monochromator
Detector	Photomultiplier
Sample compartment	Internal dimensions: W 150 x D 260 x H 140 mm Distance between light beams: 100 mm
Power requirements	AC 100 to 240 V, 50/60 Hz, 170 VA
Operating temperature/ humidity	15°C to 35°C 35 to 80% (no condensation, less than 70% above 30°C)
Dimensions	W 450 x D 600 x H 250 mm
Weight	23 kg

Note: The specifications shown here represent the average performance of the UV-2600i.
These specifications are typical values, not guaranteed values.
The guaranteed specifications are listed in a separate publication.

Software Specifications
LabSolutions™ UV-Vis

Measurement Modes	Spectrum, quantitation, photometric, and time course
General	• Save data files, parameter files, and template files. • Retain history of changes to data files and parameter files. • Manage sample information (sample name, sample ID, comments, etc.). • Specify all sample information settings before measurements. • Control automatically from external application. • Real-time display of wavelength, photometric value, and concentration values • Graph settings (line type, line color, etc.) • Adjust graph scale or use auto-scale. • Automatically send measurement data to Excel® spreadsheet. • Automatically output measurement data in text format.
Spectrum Mode	• Automatically analyze data after measurements (evaluation function, peak detection, extract photometric value for specified wavelength, calculate area, correction, and conversion). • Automatically print report after measurements. • Overlay spectral waveforms. • Analysis and pass/fail judgment using spectral evaluation function • Data processing (detect peaks, extract photometric value of specified wavelength, calculate area) • Correction (dilution factor correction, optical path length correction, etc.) • Conversion (smoothing, differentiation, etc.) • Specialized analysis (color calculation, film thickness calculation, solar reflectance calculation, UPF calculation)* • Output text for multiple spectra in matrix format.
Quantitation Mode	• Quantitation for specified wavelengths (one wavelength, difference between two wavelengths, ratio of two wavelengths, three wavelengths) • Quantitation based on maximum/minimum spectrum value • Single-point calibration curve, multi-point calibration curve, K-factor method • Calibration curve method (first to fourth-order equations) • Correct dilution factor for each sample. • Specify weighting factors for each sample (standard samples). • Concentration value pass/fail judgment • Perform repeated measurements. • Remeasure
Photometric Mode	• Measure fixed wavelength or range (max./min. value). • Correct dilution factor for each sample. • User-defined calculation formulas (polynomial) • Calculation formula pass/fail judgment • Perform repeated measurements. • Remeasure
Time Course Mode	• Automatically print report after measurements. • Measure at one wavelength or two wavelengths. • Pause and resume • Overlay time course waveforms. • Data processing (activity value or total change) • Conversion (smoothing, differentiation, etc.)
Reports	• Freely specify report layouts. • Save report template files. • Automatically print report after measurements. • Print with single-click in data analysis window. • Insert graphs or data processing results. • Insert metadata, such as measurement parameters or data summary.
Optional Products	• Automatic analysis application* • UVProbe file viewer
Configuration Settings	• Set number of decimal places displayed. • Set format for displaying data. • System log management • Set regulation value for output folders.
ER/ES Regulations*	• Manage data in a database. • Manage user privileges. • Input reasons for changing data files and parameter files. • Data integrity support (report set function and analysis sequence management function)

UV Validation Software

Inspection Items	• JP, EP, USP • Various performance values indicated in JIS standards
Inspection Conditions	• Select inspection to perform. • Select wavelength inspected or filter used. • Set inspection pass/fail criteria. • Save inspection conditions in a file.
Inspection Execution	• Inspections (measurements and calculations) performed fully automatically (filter set manually)
Inspection Results	• Print reports of inspection results. • Save file of inspection results. • Manage inspection results in a database.*

* Requires separate purchase of optional software.

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Pricing on any accessories shown can be found by keying the part number into the search box on our website.

The specifications listed in this brochure are subject to change by the manufacturer and therefore cannot be guaranteed to be correct.
If there are aspects of the specification that must be guaranteed, please provide these to our sales team so that details can be confirmed.

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