



MAKE NO MISTAKE
IT'S UV THAT
EVERYONE CAN USE



LAMBDA™ 265 / 365 / 465
UV/Vis Solutions


PerkinElmer[®]
For the Better



PUTTING *OUR* FOCUS
ON THE NEEDS
OF INDUSTRY
AND ACADEMIA



Based on our long history of UV/Vis leadership, our LAMBDA family of UV/Vis systems delivers reliability and great results for the work you do.

Industrial

LAMBDA systems deliver outstanding performance for analyzing a wide range of applications such as measuring film thickness, and reflectance and transmission of optical and nonoptical coatings and materials. In addition, they're an excellent choice for:

- QA/QC in development and production of dyeing reagents, inks, and paints
- Measurement of color-difference values and color indices
- Multicomponent analysis and chemical analysis

Environmental

LAMBDA systems' high-quality optical features and excellent performance specifications make these instruments an ideal choice for environmental analysis. They're just the thing for:

- Quantification of heavy metals (nanomaterials) in freshwater, seawater, air, and soil
- Soil contamination from organic materials
- Sunscreen efficacy
- Water and wastewater analysis

Food and Beverage

The LAMBDA family makes it easy to generate methods for common food analysis without the need for extensive training, ensuring that the correct results are reported – and food and beverage quality is maintained. LAMBDA is a great choice for:

- Packaging characterization
- Color testing
- Browning index of fruit juices
- Purity of olive oil
- Enzymatic determination of alcohols, aldehydes, and malic acid
- Wine color and intensity

Pharmaceuticals and Life Sciences

These systems are perfect for a wide variety of applications in R&D, QA/QC, and dissolution testing of materials and products – helping you meet your most stringent government and industry regulations. Solutions include:

- Quantification of DNA and proteins
- DNA melting experiments
- Enzyme kinetics
- USP method compliance
- Solvent analysis

THE PERFECT ARRAY OF UV/VIS INSTRUMENTS FOR *YOUR* LAB

New materials testing, research and development, analytical testing – the challenges in these and other key areas of manufacturing and academics are becoming more complex all the time. And so are most labs' operations, with the analysis of nanomaterials, metamaterials, and other industrial materials development requiring global alignment on an unprecedented scale.

If ever there was a time for easy-to-use UV that brings all your operations together, it's now. And that's what the LAMBDA™ UV/Vis family is all about.

With LAMBDA instrumentation, your people are able to run complex as well as basic analytical experiments quickly and easily, whether they're UV/Vis experts or novice users. Meaning you can have much more confidence in your results – regardless of who produces them. And with automatic accessory alignment, those results are as mistake-free as possible.

Best of all, these systems' advanced design packs all these global capabilities into a compact footprint that fits into any lab. Put that together with industry-leading expertise in UV/Vis, and you have systems you can count on for a long time to come.

LAMBDA systems: The perfect UV/Vis instruments for your lab.

BENCHTOP UV WITH RESULTS THAT SAY "CONFIDENCE"

Whatever the demands of your lab for material analysis, with the LAMBDA family of UV/Vis instruments, we're delivering a new level of confidence. These benchtop-friendly systems help maximize your lab's efficiency, enabling you to handle your current sample workload, then expand as your lab's business changes and grows. And with their simple interfaces and intuitive software, training costs are minimized – and uniform global integration is an achievable goal.

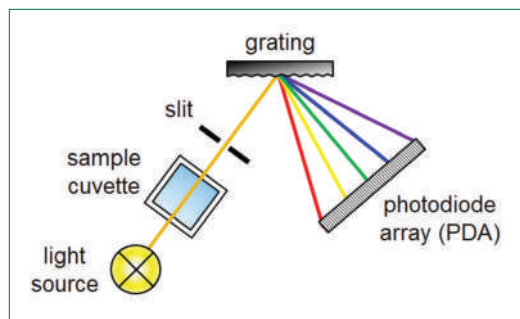


LAMBDA 265

Fast, easy-to-use, affordable photodiode array single-beam UV/Vis

With data collection and maximum reliability, the LAMBDA 265 is the ideal system for a wide range of R&D environmental laboratories conducting routine analysis.

Its photodiode array (PDA) detector enables data to be acquired simultaneously across the full wavelength range – from 190 nm to 1100 nm. In under three seconds, your processing is complete and ready for you to act on. Plus, the LAMBDA 265 system's robust modular design, with no moving parts, is ideal for any busy lab. The high-energy Xenon flash lamp is active only when spectrum is being acquired and provides years of worry-free operation and low cost of ownership. And the system's easy-to-use software and compact size make it easy for your scientists to move it to any location and get instant results.



Photodiode Array (PDA) Solution



LAMBDA 465

Ultrafast, high-performance, reliable photodiode array single-beam UV/Vis

Designed specifically for high-end research and high-throughput applications, the LAMBDA 465 is the innovative PDA solution that provides maximum reliability – for maximum confidence in your results.

Its PDA technology allows the acquisition of a full spectrum – from 190 nm to 1100 nm – in as little as 20 msec. This ultrafast acquisition speed allows applications with rapid reactions, such as chemical and biochemical analysis, to be captured. In addition, the system has 1-nm resolution, allowing it to meet the requirements of a number of pharmacopoeias. With 21 CFR part 11 compliant software, it's an ideal solution for dissolution, fast kinetics, and other applications where high-speed scanning and high resolution are required – and when combined with an autosampler, it's perfect for method development and sample analysis, too.

For flexibility in sampling along with high resolution and low noise spectrum, a dual light source (tungsten and deuterium) in a see-through configuration is unitized, providing the highest energy throughput possible – an important consideration with accessories that impact energy throughput.

MAKE NO MISTAKE IT'S PLUG-AND-PLAY UV/VIS

In today's hurry-up lab, everyone is expected to step up and run samples like an expert. Our LAMBDA UVExpress is intuitive software, so all your researchers can get productive right away. And our snap-in, self-aligning accessories deliver true plug-and-play UV/Vis sampling. Now *everyone* in your lab is an expert.

1. Open the sampling compartment.
2. Snap the accessory into place.
3. Close the sampling compartment and you're ready to run.

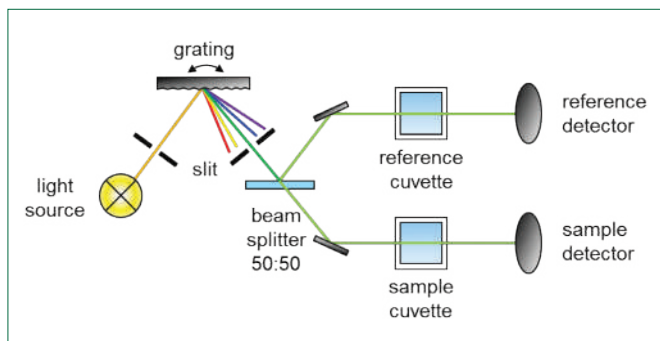


LAMBDA 365

Compact, versatile, easy-to-use double-beam UV/Vis

The LAMBDA 365 delivers state-of-the-art UV/Vis performance that meets the needs of pharmaceuticals, analytic chemists, geneticists, and manufacturing QA/QC analysts everywhere. With 21 CFR part 11 software available, the LAMBDA system is ready to support everything from standard methods and applications to those requiring regulatory compliance.

The system delivers a variable spectral bandwidth capability from 0.5 nm to 20 nm, to meet your application needs. And it can accommodate a wide range of accessories, including multicell changers (both water and Peltier temperature-controlled), solid sample accessories for transmission and reflectance, optical fiber probes for remote measurements, an integrating sphere for color and diffuse measurements, and a range of cuvette holders to meet your sampling requirements.



Double-beam UV/Vis solution

EVERYTHING YOU NEED FOR CLEARLY AMAZING RESULTS

Standard software options built with your application in mind

The ideal standard software packages for UV/Vis applications, our UV Express and UV Lab software are designed to Microsoft® standard guidelines to deliver all the tools your lab needs to store, share, and manipulate data for reliable, consistent results. You don't need to be an expert in spectroscopy to use either software: They are great solutions for any busy lab, as a single sample can run quickly – in a matter of seconds. Plus, they're easy to understand, configure, and print reports. And best of all, it's simple to create methods and store them for continued use – making accurate, predictable, reproducible results available to any researcher in your lab.

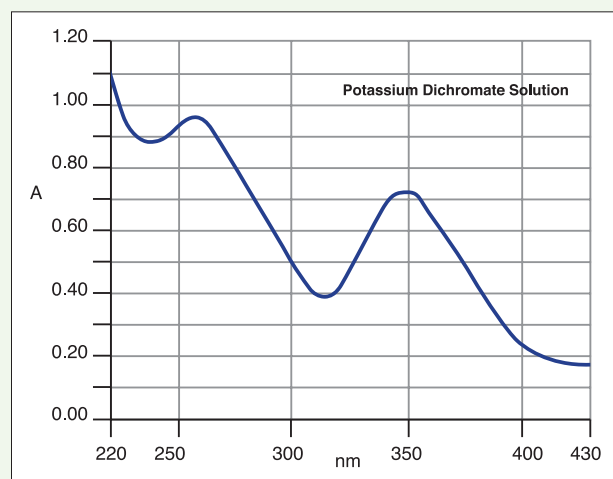
Fully integrated Scan, Kinetic, and Wavelength program data-collection modes are included, with real-time spectral displays and live instrument and accessory status bar. Wavelength quant and scanning quant applications, optimization of calibration curves, and calibration-lifetime and calibration-acceptance criteria are also part of the package. Results and reports are created automatically when an analyst runs or reprocesses data, and a secure, encrypted relational database is used to store all data created. Plus, there's a database query tool containing multiple search criteria, enabling you to quickly and easily locate data.

Advanced software packages that work the way you work

UV WinLab software mimics the way you work, guiding you through method development, analysis, reporting, and results in a series of simple steps. With advanced software capabilities such as macros and sample tables, it's easy to personalize all the stages of your analysis. With a single click, UV WinLab archives all your results and methods into a secure database, transforming your data from a collection of individual results into valuable knowledge to help you make faster decisions. A range of intelligent querying options allows you to instantly answer questions from your customers and auditors and identify potential problems before they happen.

The Enhanced Security (ES) version of UV WinLab software integrates 21 CFR Part 11 compliance. Unlike other packages with bolt-on compliance modules, UV WinLab ES eliminates compliance loopholes without compromising productivity or data integrity, and includes:

- Multilevel user permissions, including administrator, method developer, analyst and reviewer
- Password-protected access control, including password aging and expiry
- Method-lock facility, ensuring methods can't be overwritten and all revisions are saved in a single location
- Fully configurable e-signature points, allowing you to remain paperless without compromising security



The LAMBDA 365 system easily passes the pharmacopeia absorbance accuracy test at 235 nm, 257 nm, 313 nm and 350 nm using 60.06 mg/L potassium dichromate solution.



LAMBDA 265 accessories



LAMBDA 365 accessories



LAMBDA 465 accessories

Accessories built for any and all sample challenges

Flexible and modular, our LAMBDA systems enable you to incorporate a wide range of accessories that fit the type of samples you're concerned with. Plus, most of these accessories snap right in – no tools necessary – and calibrate automatically, so everyone in your lab can be productive right away.

Automated Eight-Cell Changer This eight-cell changer is fully controlled via software, with parameters stored in the application method. It's also simple to change in seconds – no tools necessary.

Advanced Transmission Sample Holder The advanced transmission holder is designed to hold materials such as glass, polymers, and films, providing a positive locating point for the sample that can be adjusted to accommodate a range of sizes and thicknesses.

Six-Cell Peltier Holder This six-cell holder allows near-synchronous data collection across six conditions in a single experiment, with unattended operation.

Fixed Angle Reflectance Accessory An easy-to-use specular reflectance accessory for analysis of solid samples, providing high-quality data for identifying films and coatings, measurement of the film thickness, and surface studies of metals.

Variable Angle Transmission Accessory This accessory allows reproducible measurement at multiple angles without moving the mounted sample. The angle is easily set by rotating the sample mounting stage.

Microsampling Cell The ideal solution for samples smaller than the instrument beam size, the microsampling cell demagnifies the beam, increasing energy throughput.

Technical Description and Specifications

		LAMBDA 265	LAMBDA 465	LAMBDA 365
Available sampling accessories	Single cell	Yes	Yes	Yes
	Single cell (jacketed)	Yes	Yes	Yes
	Variable pathlength cell	Yes	Yes	Yes
	Transmission	Yes	Yes	Yes
	Variable angle transmission		Yes	Yes
	Film holder	Yes	Yes	Yes
	Multi (8) Position cell	Yes		Yes
	Multi (8) Position cell (jacketed)	Yes	Yes	Yes
	Reflectance	Yes	Yes	Yes
	Diffuse reflectance		Yes	Yes
	Test tube holder			Yes
	Single cell (Peltier)	Yes	Yes	Yes
	Multi cell (Peltier)		Yes [Multi (8) cell Peltier]	Yes [Multi (6) cell Peltier]
	Integrating Sphere			Yes
	Sipper	Yes	Yes	Yes
	Fiber probe		Yes	Yes
Autosampler	Yes	Yes	Yes	
Base Plate Adapter for legacy LAMBDA accessories			Yes	

Protect your instruments with PerkinElmer OneSource® Laboratory Services



Now that you've made an investment in new instrumentation for your lab, it's time to protect it. OneSource Laboratory Services can help with routine maintenance and repair service from our team of certified engineers. These experts deliver state-of-the-art solutions and carefully engineered programs designed to achieve your best targeted business outcomes.

With more than 15 years' of experience and a proven track record of success, OneSource has a deep knowledge and understanding of laboratory and R&D needs and offers a one-of-a-kind systems approach to success. Our OneSource experts team up with your business to engineer the right solutions to solve your scientific challenges and to meet your business goals, through:

- **Instrument service and repair**
- **Relocation**
- **Compliance and validation**
- **Laboratory IT services**
- **Asset data visualization tools**
- **Laboratory efficiency consulting**
- **Scientific staffing solutions**

OneSource Laboratory Services can help streamline your lab routines and get your scientists back to their main order of business – *science*.

Learn more at: www.perkinelmer.com/UVVisSolutions

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