

MAKE NO MISTAKE, IT'S UV THAT EVERYONE CAN USE







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, accurate, affordable results

With ultrafast data collection and maximum reliability, the LAMBDA 265 is the ideal system for a wide range of R&D and QA/QC applications, all while taking up minimal bench space.

Its photodiode array (PDA) detector enables data to be acquired simultaneously across the full wavelength range – from 190 nm to 1100 nm. In 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 compact size makes it simple to move it to any location where it might be needed.



LAMBDA 465

High-performance PDA that delivers reliability — and confidence

Designed specifically for high-end research as well as routine 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 1100 nm to 190 nm – in as little as 20 msec. 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 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/VS



LAMBDA 365

Compact, versatile high-performance 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 accomodate 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.

When high stability and low stray light are critical, the LAMBDA 365 double-beam technology is the ideal solution. The large sample compartment can easily accommodate more than 10 sampling accessory combinations. Easy-to-install accessories minimize setup time and effort, and multicell changers are autoaligned by the instrument software to optimize the sample position for the best results in a wide range of routine applications, including manufacturing and pharmaceutical QA/QC, environmental testing, academics, and more.

In today's hurry-up lab, everyone is expected to step up and run samples like an expert. Our LAMBDA UV Lab 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.

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









Software with your application in mind

The ideal software 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 our UV Lab software: It's a great solution for any busy lab, as a single sample can run quickly – in a matter of seconds. Plus, it's 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.

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 nearsynchronous 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.



LAMBDA 265 with accessories



LAMBDA 365 with accessories



LAMBDA 465 with accessories

Everything you need under one roof



When you engage with us, you're benefiting from multivendor service and support from the absolute best in the business. Thousands of certified technicians in the field, who are familiar with all the techniques you employ. More than 500,000 multivendor assets under our care. And operations in more than 120 countries across the globe.

Analytic method services, asset procurement and disposition, business intelligence, qualification and validation, lab relocation, and, of course, instrument service and repair – all these services and more, plus a deep-seated knowledge of the business requirements of our customers, uniquely qualify us to help empower your science and drive your business.

Learn more at: www.perkinelmer.com/LAMBDA

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