

Product Guide

Quick Customer Reference

This is a guick customer reference guide for our innovative tools for advanced spectroscopy and liquid analysis.

Our cphnano products are tailored to specific needs and empower researchers and lab users with cutting-edge technology and seamless workflows on existing UV-Vis spectrophotometers. The products offer comprehensive and efficient solutions to these challenges by upgrading existing UV-Vis spectrophotometers.

Finally, we offer virtual demos and typically work closely together with the customers to ensure the best possible experience and support.



NEXT GENERATION UV-VIS SPECTROSCOPY



NanoCuvette™ One

Semi-disposable cuvette consumable with an integrated nanotechnology optical chip for accurate and fast liquid analysis.

Description: NanoCuvette[™] One replaces traditional micro-volume spectrophotometers, refractometer etc. and offers advanced features such as refractive index, protein, enzyme, and microvolume measurements, replacing the need for expensive instruments such as Nanodrop.

Is it relevant for me? You work with a UV-Vis spectrophotometer, but are lacking a micro-volume instrument such as NanoDrop, mySPEC (VWR), etc., or a refractometer.



What are relevant samples? Protein analysis, chemical concentration measurements, colourless reaction monitoring.

Where is this applicable? Academia, life sciences, pharmaceuticals, biotechnology, chemical industry, food, academic research

What could be current challenges I am facing in the lab?

- Do you currently use a spectrophotometer for liquid analysis or absorbance measurements?
- Are you facing challenges with sample preparation or dilution?
- Are you interested in measuring small volumes without investing in a separate micro-volume instrument?

Why should I investigate this solution?

- Enhanced efficiency and accuracy in liquid analysis.
- Cost savings through reduced need for additional micro-volume instruments.
- Compatibility with existing UV-Vis spectrophotometers.

Can you provide some customer examples?

- Customer that needed to quantify colour-less enzyme reactions to test for compounds in water samples.
- Customer interested in control of sugar and honey quality in relation to food fraud investigations.
- Customer needing to do micro-volume protein measurements in research for testing drug doses, especially for high concentration samples where traditional methods often are not linear.
- Customer that needed to know the refractive index of small amounts of molecular imprinted polymers to verify that the optical properties used in the calculation of size and yield in the production were correct.

What are the key features?

- Measure absorbance and refractive index
- Cuvette reusable up to 50 times depending on sample
- No need for dilution or sample preparation
- Can do both high sample volume (3 mL) or low sample volume (down to 0.5 μL)

What is the value for me with this solution? Enhanced efficiency and accuracy in liquid analysis, reducing the need for additional micro-volume instruments, resulting in cost savings and faster results. Typically, you can buy NanoCuvette™ One on a recuring basis and use it daily for a minimum of 4 years before they have spent the same money as buying a micro-volume instrument. Expands the capabilities of UV-Vis spectrophotometers, enabling the measurement of small volumes and colourless reactions.

4 years.

Buy NanoCuvette™ One on a recuring basis and use it daily for a minimum of 4 years before having spent the same money as buying a micro-volume instrument.



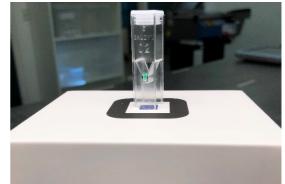
NanoCuvette™ S

Semi-disposable cuvette consumable with an embedded optical chip for particle size analysis, cell/bacteria size and concentration analysis.

Description: NanoCuvette™ S offers particle, biological cell and bacteria size measurements, replacing the need for costly instruments such as Dynamic Light Scattering (DLS) and laser diffraction measurements from for example Malvern.

Is it relevant for me? You work with a UV-Vis spectrophotometer but are lacking a particle size instrument such as Dynamic Light Scattering (DLS, Zetasizer, etc.) or laser diffraction (Mastersizer, etc.). You do Optical Density (O.D.), but are looking for both size and concentration results.





Where is this applicable? Academia, nanotechnology, materials science, microplastics research, pharmaceuticals, food & beverages, academic research.

What could be current challenges I am facing in the lab?

- Do you currently perform particle size analysis or Optical Density (O.D.) measurements?
- Challenges measuring particle size, cell, or bacteria?
- Do you face challenges in investing in specialized particle size analysis instruments?

Why should I investigate this solution?

- Affordable access to particle size analysis and cell/bacteria size and concentration measurements.
- Streamlining workflows and saving on instrument costs.
- Compatibility with most standard spectrophotometers.

Can you provide some customer examples?

- Customer that needed to measure plastic nanoparticles and microparticles for polymer research.
- Customer that needed to measure plastic nanoparticles for environmental research.
- Customer that needed to measure biological cells such as E. coli and vesicle structures for research.
- Customer that needed to measure carbon-based microparticles for use in the electrochemistry industry.
- Customer that needed to measure the size and concentration of titanium-dioxide and other nanoparticles in the production of antibacterial cleaning products.

What are the key features?

- Measures absorbance, refractive index, and particle size and concentrations.
- Compatible with most standard UV-Vis spectrophotometers, including VWR Collection line-up.
- Reusable up to 50 times depending on sample.

What is the value for me with this solution? Affordable access to particle size analysis without the need for additional, specialized equipment, streamlining workflows, and saving on instrument costs. Typically, you can buy NanoCuvette™ S on a recuring basis and use it daily for a minimum of 10 years before they have spent the same money as buying a particle size analysing instrument. Enhances the functionality of UV-Vis spectrophotometers to optimize processes, ensure product quality, and accelerate R&D efforts.

10 years.

Buy NanoCuvette™ S on a recuring basis and use it daily for a minimum of 10 years before having spent the same money as buying a particle sizer.



SpectroLink™

Electronic device that connects spectrophotometers to the SpectroWorks™ cloud platform for seamless instrument control, data management and analysis.

Description: SpectroLink™ replaces traditional thermo printers, allowing for quick and efficient digital collection of results.

Is it relevant for me? You work with a UV-Vis spectrophotometer and spend significant time on lab measurements, teaching, or data analysis.

What are relevant topics? Cumbersome data handling, analysis, and sharing.

Where is this applicable? Academia, life sciences, pharmaceuticals, biotechnology, food, materials science, academic research.



What could be current challenges I am facing in the lab?

- Do you currently face challenges with data management and analysis in your spectrophotometry work?
- Are you interested in a seamless solution for data handling and analysis?
- Would you like to increase productivity by simplifying data management?

Why should I investigate this solution?

- Efficient and simplified data management and analysis.
- Real-time instrument control, data upload, and sharing.
- Automatic software updates.

Can you provide some customer examples?

- Customer that needed to use different brands of UV-Vis spectrophotometers in the same lab and wanted one software solution for all of them.
- Customer that needed to save time and manual typing by upgrading from printing out results using a thermo printer to a digital workflow.
- Customer that needed to control a fleet of UV-Vis instruments in an easy way and save same time on installation, maintenance, and keeping software up to date on multiple computers.

What are the key features?

- Plug-and-play control of existing spectrophotometers without software installation
- Real-time instrument control, data upload, and sharing.
- Over-the-air (OTA) automatic software updates included in purchase of SpectroLink™

What is the value for me with this solution? Efficient and simplified instrument control, data management and analysis, saving time and increasing productivity, allowing researchers and lab users to focus on their core work. Simplifies data collection, analysis, and sharing, making it easier to collaborate with colleagues and get the most out of measurements.



SpectroWorks™ (included in purchase)

A cloud-based platform that integrates and streamlines data management, analysis, and sharing for spectroscopy experiments. Basic SpectroWorks™ access is included in the purchase of NanoCuvette™ One, NanoCuvette™ S and SpectroLink™.

Description: SpectroWorks[™] offers an easy-to-use software platform that replaces traditional Excel spreadsheets and paper lab journals with one-click analysis and jupyter notebooks/COLAB for customization.

Is this relevant for me? You work with a UV-Vis spectrophotometer who require simple to advanced data analysis and management capabilities.

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Can you provide some user examples?

All the above examples use SpectroWorks[™] as the software platform.

What are the key features?

- Control instrument and access lab work from computers, mobile phones, and tablets etc. at any time.
- Real-time data synchronization and sharing between instruments and users.
- Advanced data analysis tools, including multivariate analysis and peak fitting.
- Customizable user interface and workflows.
- Secure data storage and backups.

What is the value for me with this solution? Saves time and improves accuracy in data analysis by providing advanced analysis tools and customizable workflows that streamline data management and analysis. Enables collaboration and knowledge sharing among research teams, increasing efficiency, and accelerating innovation. Simplifies regulatory compliance by providing secure data storage and backups.

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