Analytik Jena
Product Overview Life Science Solutions

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We Support You Through the Complete Process of Lab Work

We focus on products that guarantee high quality and reproducibility of your daily laboratory results.

Biotechnological Competence by Analytik Jena

Life Science is all about understanding the structures and behavior of living organisms. For Analytik Jena, it is also about understanding the needs of researchers all around the world – and coming up with innovative solutions for a rapidly growing market.

The Life Science product area showcases Analytik Jena's biotechnological competence. The company offers its customers a comprehensive portfolio of instruments throughout the biomolecular workflow needed to obtain fast and reliable results from a sample.

Its more than 150 patents are testament to the company's innovative potential – the patented high-performance optics guaranteeing the outstanding homogenous excitation and illumination in the qTOWERiris series instruments being just one example.

Bundling expertise under one roof

Analytik Jena is dedicated to providing its customers with powerful systems throughout every phase of analysis. Its range of products includes sample preparation, robotics, standard and real-time PCR instruments and automated nucleic acid extraction. For those special requirements, we offer customized solutions and support to establish the workflow exactly to your needs. A number of instruments are defining new standards in their fields and are enjoying considerable prestige among users worldwide.

Product Overview

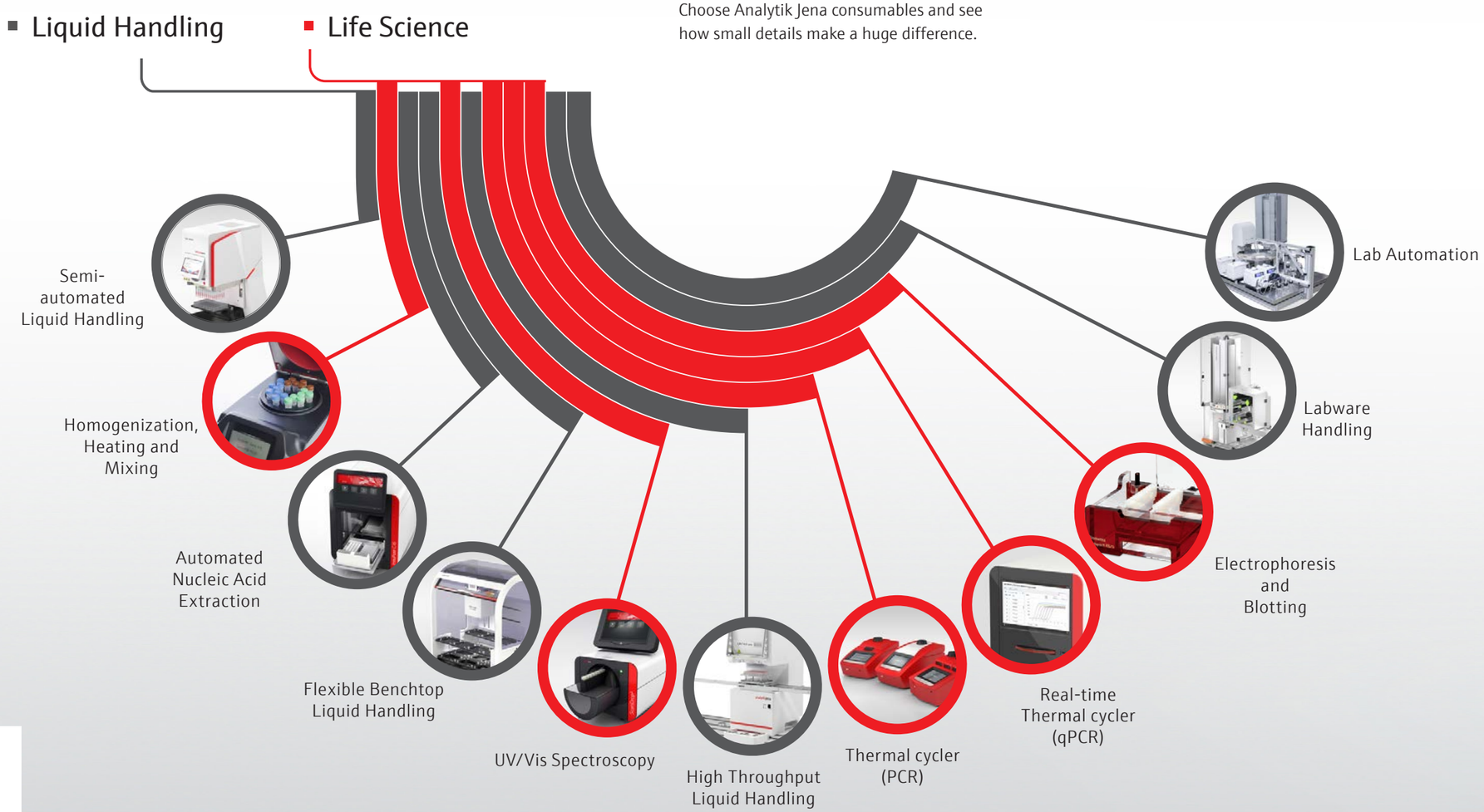
The Life Science Solutions portfolio of Analytik Jena includes a wide range of products for automated and overall solutions for molecular biology.

Sample preparation
- Innovative solutions for automated nucleic acid extraction
- Semi-automated liquid handling for beginners
- Powerful thermal shaking and homogenization
- Optimized quantification through nano-volume spectral photometer

Liquid handling and automation
- Flexible pipetting robots meet the need of each individual application
- Perfect solutions from low to high throughput
- Smart & collaborative laboratory bench automation

Reliable detection
- More than 30 years experience in PCR thermal cycling
- Real-time PCR technology with ten years long-term warranty on patented optical components
- Reliable and precise quantitative and qualitative detection of nucleic acid

Analytik Jena Life Science Solutions Portfolio
Don't compromise when it comes to your data. Choose Analytik Jena consumables and see how small details make a huge difference.



All From One Hand

Biotechnological competence by Analytik Jena

Powerful and Highly Efficient Homogenizer

SpeedMill PLUS

SpeedMill PLUS

- Complete and reproducible homogenization
- Efficient sample cooling during the whole preparation
- Touch control panel and large display provide considerable operating convenience
- Pre-programmed protocols or user-defined programming with freely selectable parameters

The SpeedMill PLUS is the perfect homogenizer for a wide variety of starting materials. Through a patented process, this homogenizer avoids the substantial sample warming that occurs with other homogenizers, allowing the instrument to be operated continuously. The SpeedMill PLUS uses an unique sample holder for efficient sample cooling at different temperatures, which are freely selectable due to the storage down to as low as -80 °C. This makes handling of liquid nitrogen or dry ice a thing of the past.

Additionally SpeedMill PLUS convinces by its intuitive handling based on modern touch sensors and the extra-large display. Users can program and save linear or cyclic protocols. SpeedMill PLUS is a small, smart tabletop device for fast preparation of up to 20 samples simultaneously.

- Compact construction and comparatively quiet operation
- Easy and continuous operation
- Flexible system, thanks to the wide product range of Lysis Tubes

Consumables for SpeedMill PLUS

Lysis tubes with a capacity of 0.5 mL and 2.0 mL and a standing edge can be used as consumables in the SpeedMill PLUS. These are provided with different, application-specific beads that are suitable for the respective material to be homogenized.

The innuSPEED Lysis Tubes are recommended, which have been validated during a long-term partnership with IST Innuscreen GmbH and can be used for a wide range of starting materials (e.g. plants, tissue, cells).
In general: The smaller the sample, the smaller the beads.
For further information, please contact IST Innuscreen at info.innu@ist-ag.com or www.ist-innuscreen.com.

innuSPEED Lysis Tubes

Open platform to be used with 2.0 mL and/or 0.5 mL skirted tubes

- Optimal for mechanical disruption of different types of starting materials
- Flexible Lysis Tubes due to variable material and size of beads (e.g., glass, ceramic, circonia, steel...)
- Fast and efficient preparation of resistant samples for isolation of nucleic acids or proteins

Thermal Mixers

Biometra TS1 and Biometra TSC

Biometra TSC ThermoShaker and Biometra TS1 ThermoShaker

Thermal mixers belong to the basic equipment of most laboratories. Established thermal mixers are models TS1 (heating up 100 °C) and TSC (as TS1 plus cooling till ambient minus 15 °C). They can be used as pure shaker, as dry-block thermostat and as thermal shaker. They ensure reliable incubation parameters with a stable temperature maintenance over the complete sample block. The set mixing speed is quickly reached.

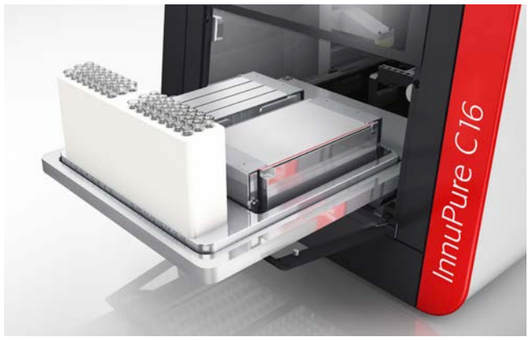
- Compact devices for incubation, shaking and cooling of samples
- Fast shaking and effective mixing of samples up to 1,400 rpm
- For unskirted or semi-skirted PCR plates, and 0.2 mL/ 0.5 mL/1.5 mL/2.0 mL tubes
- LCD display shows the set and actual temperature, speed and time
- Quiet, smooth running conditions without vibration and noise combined with a small footprint

The New Standard in Automated Extraction

InnuPure C16 *touch*

InnuPure C16 *touch*

InnuPure C16 *touch* combines highly precise liquid handling with automated extraction. Thanks to its walk-away principle, all you have to do is load the samples. After initial start-up, the entire process is fully automated. The InnuPure C16 *touch* is used in combination with a broad range of extraction kits offered by our long-term partner IST Innuscreen GmbH. Ready-to-use reagent strips and/or plates make pipetting errors a thing of the past, while 1 mL pipette tips with aerosol filters prevent contamination of the dispensing unit and samples. Economic non-filled kits for manual prefilling are available via IST Innuscreen GmbH, too.
The nucleic acids to be isolated are adsorbed onto magnetic particles whose surfaces have been specially adapted for this purpose. Additionally, the InnuPure system can be used with the unique SmartExtraction technology, which is based on Smart Modified Surfaces. The extraction chemistry has been optimized for these applications, allowing users to isolate high yields of extremely pure nucleic acids.



Intelligent kit architecture

Please note that nucleic acid extraction kits are available via IST Innuscreen GmbH. For more information please contact info.innu@ist-ag.com.

- Fully automated nucleic acid extraction processes
- Featuring preprogrammed extraction protocols
- Adjustable elution volumes
- Automatic transfer of eluates into separate tubes
- Ensuring reliability and efficiency without cross-contamination
- Optional UV lamp for easy decontamination
- Compact design that fits any lab bench
- Working in combination with magnetic particle separation and unique Smart Modified Surfaces (SmartExtraction)
- Flexible for varying starting materials and volumes
- Ready-to-use purification kits for easy handling
- Extraction of high quality nucleic acids
- Prefilled, sealed reagent plastic requiring minimum hands-on time

InnuPure C16 *touch*	
Tip volume	▪ Up to 1000 µL
Number of samples	▪ Up to 16 samples simultaneously and single sample handling
Reagents	▪ Prefilled reagent plates or strips ▪ Pierced by using a piercing tool ▪ Non-filled kits for manual prefilling
Plastic transfer	▪ Sample tray is moved automatically
Device operation	▪ Easy and convenient to use, thanks to 10" tablet PC (Windows 10 IoT) ▪ Intuitive software including wizzard-based selection of pre-installed extraction protocols
Optional function/accessories	▪ UV lamp for decontamination between runs ▪ 2D Bar code reader for comfortable data feed

Maximum Flexibility in UV/Vis Spectrophotometry

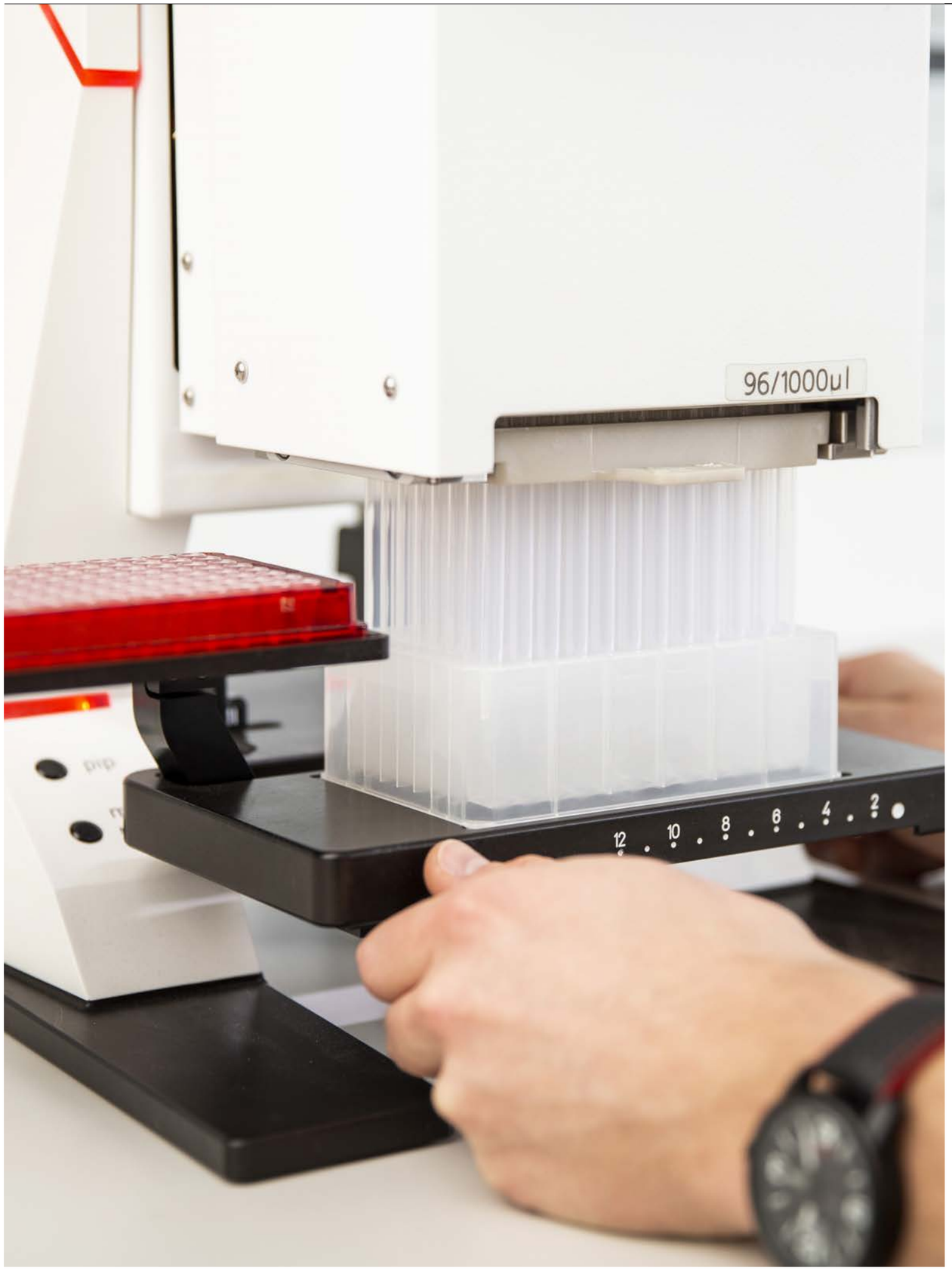
ScanDrop²

The ScanDrop² raises the bar when it comes to design and user friendliness. Thanks to its long-life xenon lamp the system is ready to go, just switch on and measure. Analytik Jena offers a number of measurement adapters to supplement the built-in test position for 10 mm cuvettes: the CHIPCUVETTE adapter accommodates the patented CHIPCUVETTE with 16 channels for measurement at up to 32 positions, the eight-position cuvette adapter which holds up to 8 standard 10 mm cuvettes, and the Butterfly Cuvette which allows for testing nine samples with no consumable needed. This selection provides a solution for a wide range of measurement needs. The ability to record the entire spectrum from 190 nm to 1,000 nm in only a few seconds makes the system the ideal choice for UV/Vis applications, particularly for protein and nucleic acid determinations.

ScanDrop²

- Easy handling – just pipette the sample and measure
- Optimal access thanks to the rotating mechanism, never blocking the 10" tablet PC
- Supporting interchangeable adapters that prevent contact between samples and the optical system
- Including a 2D scanning area adaptable to different center heights
- Ensuring highly precise measurements with or without consumables
- Applying the walk-away principle to everything from individual to simple series of samples
- Featuring stand-alone operation from an integrated 10" tablet and/or PC

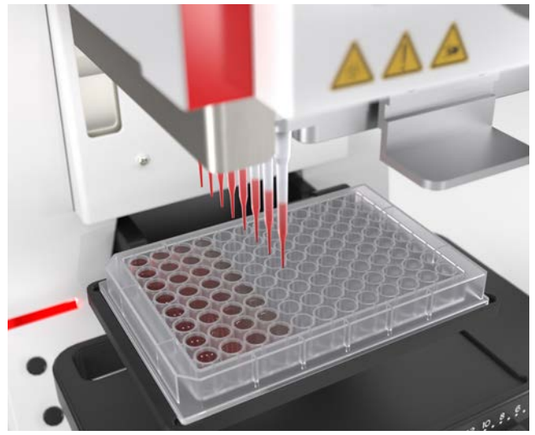
Standard Cuvette Adapter, CHIPCUVETTE Adapter, and Butterfly Cuvette



Reliable Semi-Automated Pipetting Routines

CyBio SELMA

CyBio SELMA 96



CyBio SELMA consists of 96 or 384 pipetting channels which enable a safe and error-free transfer

Your personal pipetting assistant

CyBio SELMA is a semi-automatic electronic pipettor with minimal required space for fast and precise processing of 96 and 384 well microplates without the need for programming. CyBio SELMA is amazingly easy to operate via touchscreen. All manual operating tasks such as tip change and plate change are shown on the display. Microplates of varying heights and well dimensions can be handled easily by CyBio SELMA – a simple dial adjusts pipetting head position. Any adjustments such as dispense height, volume, and pipetting speed are saved, retrievable, and changeable for regular use anytime.

Simplify your pipetting tasks

- Easy and intuitive handling via touchscreen, without the need for programming
- Simple saving and loading of pipetting protocols

Save your valuable lab space

- Small footprint to fit on any lab bench and into most laminar flow hoods

Accelerate your pipetting performance

- Fast and precise processing of 96 and 384 well microplates
- Easy and fast tip changing with ready to use CyBio TipTrays

Trust your results

- Error-free and reproducible results due to 96 or 384 parallel pistons and proven "Tip Sealing Technology"

Benchtop Liquid Handling and Benchtop Workstations

Transform your manual workflows to automated processes on your benchtop.

Future-Proof Automated Liquid Handling

CyBio FeliX

CyBio FeliX is a liquid handling platform with 1–384 channels in a volume range of 1 µL up to 1000 µL. The CyBio FeliX meets the market demand for advanced, medium- to high-throughput robotics within the liquid handling community. The high-precision parallel transfer in 96 or 384 well format is complemented by pipetting in single wells, as well as pipetting into columns and rows. CyBio FeliX offers maximum flexibility with minimal space requirements through a unique deck design with twelve positions on two levels. Despite its compact design, CyBio FeliX provides sufficient space for microplates, tubes, shaker, magnet adapter, and gripper. The modular concept of CyBio FeliX enables customized configurations for a wide variety of applications and can be adapted at any time to suit changing requirements.

Liberate yourself from work intense manual pipetting

- Fully automated pipetting in different formats
- Integrated tool and tip exchange
- Processing of whole microplates, columns, rows, and single wells
- Extend your experimental possibilities
- Numerous applications: Plate replication, serial dilution, preparation of reaction set-ups for qPCR, and PCR, Next Generation Sequencing, and ELISA

Use your lab space smartly

- Ultra compact design fitting on standard lab bench
- Embrace new discoveries
- The modular concept enables customized configurations
- CyBio FeliX can be adapted at any time to changing requirements

For Your Individual Systems and Closed Applications

Whether you need small-scale benchtop integration or a multi-assay system completely enclosed in an air-conditioned biosafety cabinet, Analytik Jena helps to maximize your productivity at every level.

Benchtop Workstation for (q)PCR

The fully automated system for qPCR is based on the high performance qTOWER^3 auto real-time PCR cycler and includes enhanced sample preparation. It applies a smart robotic integration and allows for an ultracompact design fitting on a standard lab bench.
For a fully automated PCR system the Biometra TRobot II thermal cycler is the suitable choice.

Benchtop Workstation for MS Sample Preparation

Reliable and precise sample preparation to accomplish the demands of today's mass spectrometry techniques such as MALDI-TOF-MS. The fully automated system covers the whole sample preparation process from matrix to sample transfer. The modular approach of Analytik Jena's benchtop workstation delivers a flexible application solution, including features such as "On target washing" – desalting as well as tip washing and active drying of the MALDI plates in parallel.

Fully Automated and Modular Lab Automation

Raise your throughput and stay flexible

Flexibility and Precision for Highest Throughput

CyBio Well vario

The CyBio Well vario is an automated, simultaneous pipetting platform ideal for large and complex test series in the HTS or uHTS range. The CyBio Well vario base unit provides fast, exact, and secure movement of microplates via a linear plate moving assembly with a three-, four- or five-position carriage. For more complex experimental protocols, the CyBio Well vario is also available in a disk platform configuration with ten open-access stations in a circular arrangement. The various interchangeable heads and the huge range of tips and capillaries allow for a wide range of applications and possible configurations, which make the CyBio Well vario a powerful liquid handling platform.
A working volume range of four orders of magnitude allows liquid transfers from 50 nL up to 250 µL with 96 to 1536 channels simultaneously.

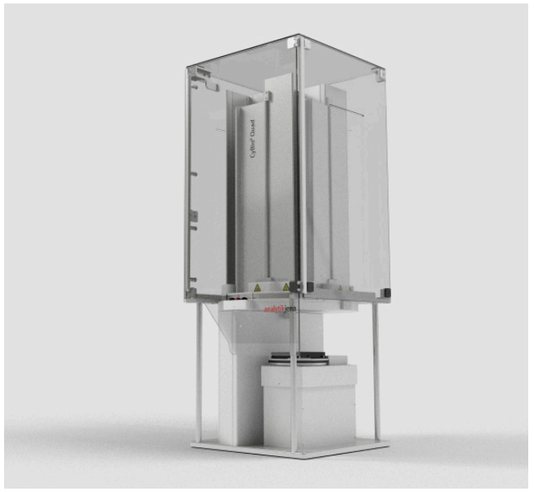
Stay precise while being flexible
- Powerful platform with a wide range of configuration opportunities
- Extensive volume range due to interchangeable pipetting heads
- Advanced capillary technology for reliable nanoliter pipetting
- A working volume range allows liquid transfers from 100 nL up to 250 µL on one platform

Use your reagents cost-effectively
- Saves reagent costs with accurate nanolitre pipetting

Automate depending on your needs
- Powerful graphical scripting environment allows access to every aspect of this reliable and flexible liquid handling robot

Compact and Flexible Microplate Storage with four Stacks

CyBio QuadStack



CyBio QuadStack is the high-capacity benchtop solution for microplate storage. With four rotating stacks and one transfer position, the CyBio QuadStack offers a compact setup with a capacity of up to 230 microplates. Its high flexibility and modularity comes from its small footprint (370 mm x 380 mm), three different stack heights, and various access modules for versatile operations.

Be flexible and secure
- The ergonomic design allows a comfortable loading and unloading of microplates
- Three different stack heights and different access modules for versatile operation possibilities

Push your throughput limits
- Plate presentation in only two seconds

Save valuable lab space
- Small footprint with high capacity for microplates

Compact, High Speed and Precise Barcode Label Printer

CyBio QuadPrint

The CyBio QuadPrint sets new automation standards for plate labeling. The CyBio QuadPrint is the most compact print-and-apply system on the market, and it easily achieves efficient and reliable results within a short time. Due to its smart technology, the CyBio QuadPrint needs less than ten seconds for labeling one side of the plate.

Stay flexible in plate orientation
- Flexible labeling on all four sides of the microplate

Avoid time consuming manual adjustments
- Automatically adjustable label height

Just print your barcodes
- A well-designed user front-end allows easy and efficient barcode definition and printing
- Your data can be linked into this application to create linear or 2D barcodes

Ideal for PCR Sample Preparation

UVP PCR Workstations[1]

Preparations on the UVP PCR HEPA workstation

Analytik Jena offers a complete line of PCR UV hoods. These products bring together UV irradiation and antimicrobial stainless steel and aluminum to create a dual-attack environment against PCR contaminations. The latest addition to this product line are the powerful new UVP PCR Workstations[1]. These Workstations are designed for placement of large instruments on the work area or small items on the removable shelves. They can be configured with or without a HEPA filter assembly based on customer needs. These systems have been specially designed to enable unbelievably easy assembly and service.

- 254 nm UV irradiation to achieve efficient decontamination
- Easy-clean antimicrobial coating on the stainless steel and aluminum surfaces doubles up the attack on PCR contaminants
- Safety shut-off switch automatically turns the UV light off when door is opened
- Makrolon®[2] panels block all UV light below 400 nm
- Built-in power outlets for operation of equipment inside the workstation
- Touch screen interface to control all system functions
- Choice of HEPA or non-HEPA system configurations based on customer needs
- HEPA models only: three layers of UV irradiation and air filtration/circulation to ensure the maximum decontamination, carbon pre-filter with long-life UV, HEPA filter with standard UV lamps, and recirculator with long-life UV
- Unique folding assembly that takes as little as 20 minutes
- Quick and easy filter and lamp replacement as well as service

[1] Please note that UVP Products are available via Analytik Jena US only.

[2] Makrolon® is a registered trademark of Bayer AG.

35 Years Experience in PCR

Biometra Thermal Cyclers

Tradition meets innovation: Analytik Jena is proud of its long tradition of developing high-quality analytical systems. The Biometra thermal cyclers come from this tradition, yielding precise, reproducible results with easy-to-use functionality, and excellent technical specifications. All cyclers are manufactured with high-quality materials to create robust, long-lasting products that meet even the highest demands.

Choosing a Biometra thermal cycler will guarantee you a relaxed working day. The airflow inside the system has been optimized to keep the maximum noise level of the instruments down to quiet 45 decibels. This also keeps the additional space requirement down to just ten centimeters – much lower than other thermal cyclers.

All cyclers come with a perfect temperature uniformity across the block, which ensures optimal results and stress-free experiments. Especially for the requirements of sensitive PCR programs, the high-precision temperature control benefits and makes the Biometra thermal cyclers ideal for e.g. the preparation of DNA libraries for next-generation-sequencing (NGS). The High-Performance Smart Lid (HPSL) always maintains constant contact pressure, regardless of the shape and height of the plasticware. This provides maximum reproducibility.

The Biometra thermal cyclers are also known for their standout user-friendliness. With features like a Protocol Wizard, the Linear Gradient Tool, a user-specific quick start, and an ethernet-based control option for a full cycler network, the system will quickly become your favorite PCR device.

In addition to the simple control and monitoring of thermal cyclers via the Biometra PCR Control app for smartphones and tablets, the optional thermal cycler management software Biometra TSuite is a modern and versatile alternative: In addition to complete operation and monitoring of the thermocyclers connected in the network, programs can be edited and copied as well as various log files for GMP-compliant Documentation can be saved and exported. Thanks to the clear and context-sensitive user interface, use is self-explanatory and opens up new horizons in terms of convenience, live monitoring and documentation.

PCR Control App

Biometra TSuite

Biometra PCR thermal cyclers

Relaxed working day
- Low noise emission (45 dB)
- Outstanding performance for results that are always reliable
- No need to repeat experiments

Experience stress-free experiments
- Perfect temperature uniformity
- Prevent sample loss due to HPSL
- Open to different plasticware

Let this PCR system become your favorite
- Easy to use
- Clever software features
- Robust in everyday use

Biometra TSuite Software

Biometra TOne Optimal Amplification Performance	**Biometra TAdvanced** No Compromises in Technology	**Biometra TRIO** Triple Powered PCR
Precise and cost-effective aluminum sample block	High-end Quick-Block-Exchange with first-class silver and well established aluminum sample blocks	Highly flexible triple-block system for different applications and ideal space saving
96 well block format	Block modules with 96 well, 60 well, 384 well, 2 x 48 well, 2 x 30 well, 2 x combi formats	3 x 48 well, 3 x 30 well, 3 x combi block formats
Linear Gradient Tool (LGT) up to a gradient range of 20 °C	Linear Gradient Tool (LGT) up to a gradient range of 40 °C	Temperature Optimization Tool (TOS) for easy optimization of annealing temperatures
Up to 4 °C/sec ramping	Up to 8 °C/sec ramping	Up to 5 °C/sec ramping
User management	Protocol Wizard and advanced user management	Protocol Wizard and advanced user management

PCR Expertise for the Automated Workflow

Biometra TRobot II

The proven technology is also used in the Biometra TRobot II automated thermal cycler and allows workflows to be made even more efficient.

In addition to the typical main application, the polymerase chain reaction (PCR), the Biometra TRobot II is also suitable for all other molecular biological or chemical incubations in PCR plates. For example, the generation of libraries for next-generation-sequencing (NGS) is an important step in a larger workflow where the automated thermal cycler can be used. This reduces the manual effort and the possibility of errors. The PCR cycler has outstanding heating and cooling rates and excellent temperature homogeneity across the sample block for highly reproducible PCR results.

In automated systems, compact components with the smallest possible footprint are particularly important. The Biometra TRobot II meets this requirement through its modular design with a compact PCR module that is placed directly on the automation deck, while the controller can be stored underneath the platform. At the same time, the block design was constructed to enable the gripper to access the sample block from three sides. This opens up many possibilities for positioning the thermal cycler on the deck.

A conveniently prepared library allows a fast integration into automation systems. In addition, powerful computer software, the Biometra TSuite, is available for direct control of the automated thermal cycler, which is helpful for first PCR runs in preparation for the actual application. Maximum user safety is ensured with a unique, touch-sensitive safety frame which immediately stops the lid closing in case of contact with a resistance. The smooth block surface without gaps is essential for easy and effective cleaning and decontamination.

- Best results thanks to high performance features
- Focused on automation by dedicated design
- Smart control through convenient software

Biometra TRobot II

Feel Free to Explore

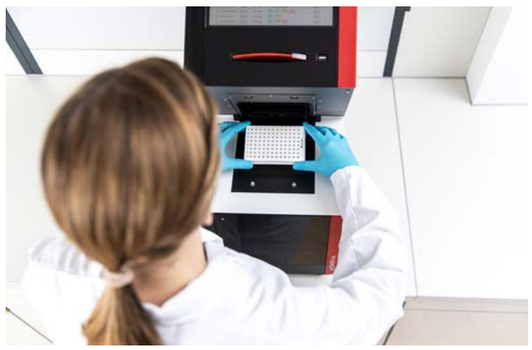
qTOWERiris Series

The real-time PCR thermal cycler qTOWERiris empowers your exploration. It equips you to meet your current and future needs in qPCR, as a truly open system: You are free to choose what it takes for your venture – from consumables, assays, to color modules. The instrument can hit six targets at once. And for your peace of mind, you can count on a system designed for long-term use that operates quietly and smoothly, providing uniform precision across every well.

Efficient Work with Clear Signals

- **The Full Spectrum:** qTOWERiris processes up to six targets simultaneously and provides clear signals across the entire spectrum – from UV-A to Near Infrared (NIR). The device comes factory-calibrated, eliminating the need for recalibration when introducing new dyes.
- **Free Choice:** Color modules are sold separately, and the choice of dyes and consumables is entirely yours. The device does not require recalibration for new dyes, and weak signals can be selectively amplified through software gain settings.

  Ergonomics: qTOWERiris performs a self-test before each run, and the fiber optic system can be checked through Fiber check. The mechanics are faultless and operation is quiet, contributing to a peaceful lab environment.



qTOWERiris Series

Accelerated Research Without Edge Effects

- **Precision in Each Well:** The target temperature is precisely reached during heating and cooling, without overshooting or undershooting, preventing false amplification (artifacts). There are also no edge effects; thanks to uniform temperature distribution across the entire block, the deviation is ± 0.15 °C, compared to the market standard of ± 0.4 °C. This also applies to readout results: Since the fiber optic advances column by column, it reads each well from the same angle, unlike camera optics.
- **Faster Assay Completion:** The Linear Gradient Tool allows for the testing of various temperatures column-wise in the same run, with twelve temperature ranges for the 96 well block (24 for the 384 well block). The gradient function spans up to 40 °C for the 96 well block or 24 °C for the 384 well block and can be adjusted in increments of at least 0.1 °C.

	qTOWER iris | qTOWER iris touch	qTOWERiris 384
Sample block	Silver sample block with gold coating	Aluminum block, special alloy
Block capacity	96 well	384 well
Reaction volume	5–100 µL	2–30 µL (5–20 µL recommended)
Heating	Max. 8 °C/sec	Max. 4 °C/sec
Cooling	Max. 5.5 °C/sec	Max. 2 °C/sec
Temperature uniformity	55 °C ± 0.15 °C after 15 sec	
Gradient (optional)	Over 12 columns 40 °C/0.1 °C	Over 24 columns 24 °C/ 0.1 °C
Control and analysis software	qPCRsoft PC- or touchscreen-based version	qPCRsoft for PC version
Excitation/detection range	440 nm – 670 nm / 505 nm – 730 nm Incl. color module 7 (UV-A): 360 – 670 nm / 460 nm – 730 nm	
Multiplex capacity	Up to 6 targets, no passive reference necessary	
Filter configuration	Flexible filter configuration, up to six positions in the device	

Real-Time PCR Meets Automation

qTOWER³ auto

Optimize your qPCR workflow and reduce your costs without compromising reliability and data quality. With the qTOWER³ auto, a compact, automatable real-time PCR thermal cycler, even high sample numbers can be handled safely and cost-efficiently. The fast and sensitive analysis and quantification of DNA samples is reproducibly ensured by the excellent performance of the qTOWER³ auto, as it is based on the proven technology of the qTOWER³ family.

qTOWER³ auto

Based on lab automation demands, the qTOWER³ auto with its decoupled power module and a freely accessible sample plate tray offers a reduced footprint. In developing the system, special emphasis was placed on compatibility with the common manufacturers of robot arms and automation systems. The unique patent pending motorized plate lifter system simplifies workflows by allowing gentle lifting of the sample plate to release it safely from the sample block, while the innovative labware detection function reliably detects any improper sample plate loading. Discover our solution to provide you with confidence in your system and free up resources to focus on value-adding activities.

- High-end qPCR solution for automated research
- Smooth integration into computer-controlled workflows
- Sophisticated design with a small footprint

Perfect Fit

Consumables and Accessories

Analytik Jena offers a range of consumables ideally suited for achieving the best possible results in combination with the instrument technology. All plastic material and sealing films are optimized to work with Analytik Jena's thermal cyclers and real-time thermal cyclers. Don't compromise when it comes to your data. Choose Analytik Jena consumables and see how small differences make a huge difference.

Lab plasticware may seem like it's "a dime a dozen", but not all PCR consumables are created equal. The product portfolio of Analytik Jena offers the perfect consumable for each individual block format of PCR or qPCR thermal cyclers. Benefit from our expert knowledge and optimize your data results.

- Optimally amplifies PCR products and improves Ct values
- Includes small changes – that have a huge effect
- DNase-free and RNase-free plastics available

All From One Hand –

Instruments, accessories, and plasticware

Selection of Electrophoresis Devices

Electrophoresis, Blotting, Power Supplies

Analytik Jena offers a comprehensive range of instruments for electrophoresis. Based on more than 30 years of experience, this high-quality product range has been developed for daily laboratory routines.

Horizontal Gel Electrophoresis

The Biometra Compact line features a robust family for agarose electrophoresis of different gel sizes from mini- up to maxi-sized gels. Low sample numbers are run in Biometra Compact XS/S. For medium sample numbers, use Biometra Compact M or Biometra Compact Multi-Wide with a choice of different gel trays. Biometra Compact L/XL allows for high-throughput electrophoresis, processing up to 416 samples in a single run.

- Unique plug & cast gel casting systems
- Provides unique lid for space saving storage
- Multichannel pipette compatible combs

Biometra Compact family

Vertical Gel Electrophoresis

The Biometra Eco-Line offers tank-style systems for polyacrylamide gel electrophoresis and tank blotting. The modular concept of this robust line allows for the electrophoresis and blotting of up to four gels (Biometra Eco-Mini) or up to two large gels (Biometra Eco-Maxi).

- Double gel system
- Cooling option
- Electrophoresis and tank blot modules

Biometra Eco-Line

Biometra Minigel-Twin

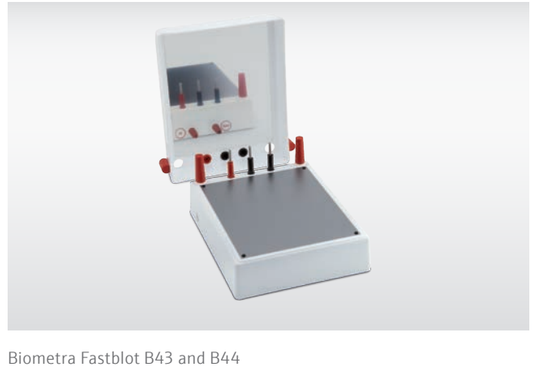
An alternative concept for vertical gel electrophoresis is offered by the Biometra Minigel-Twin. This double-gel system allow for gel casting without any leakage by employing fixed glass spacers and an unique silicone seal.

- Low buffer requirements
- Leak proof casting gel with unique silicone seal

Semi-Dry Blotting

Electro-blotting is a standard method for transferring proteins and nucleic acids from polyacrylamide gels to nitrocellulose or other carrier membranes. The Biometra semidry blotters are equipped with high-quality plate electrodes which create a homogeneous stress field that ensures a fast and homogeneous transfer of biomolecules. To enable reliable and gentle transfer of challenging samples even at high current levels, the Fastblot B43 offers a cooling option. Excess heat can be dissipated efficiently to achieve high-quality despite heterogeneous protein mixtures.

- Maintenance free platinum/titanium electrodes
- Cooling option (B43)
- Transfer of multiple gels possible



Biometra Fastblot B43 and B44

Power Supplies

All the different Analytik Jena electrophoresis instruments are compatible with the offered power supply range.
For low-voltage applications, such as horizontal and vertical gel electrophoresis, tank blotting and semi-dry blotting, different models are available:
The outstanding compact power supply Biometra PS 300TP for general electrophoresis applications and the powerful Biometra P25/P25T for a wide range of electrophoresis and blotting tasks.

- Two to four output connectors to control several instruments simultaneously
- Enable automatic crossover
- Timer with alarm function
- Designed to be compact and easy-to-use

Biometra P25T and Biometra PS 300TP

Gel Documentation
Easy-to-Use Imaging Systems

Analytik Jena offers a wide range of easy-to-use imaging systems designed to meet varied research specifications and satisfy diverse budgets.There is a suitable solution to be found for every laboratory among all the systems offered. All systems are suited for documenting agarose and polyacrylamide gels with fluorescent and visible colored stains.

Laboratories with limited bench space will benefit from the small footprint of the UVP GelSolo[1] and the UVP Solo Elite[1]. These stand-alone options provide high-quality imaging. The systems come with an easy-to-use image acquisition software and powerful software for gel analysis.

UVP GelSolo[1]

UVP GelSolo[1]

UVP Solo Elite[1]

Stand-alone gel documentation system

The UVP GelSolo[1] is a compact, easy-to-use, stand-alone system for gel documentation; ideal for multi-user laboratories and practical trainings. The system features:

- 5.0 megapixel camera, with zoom lens
- Three-position filter tray with ethidium bromide filter; additional filters are available
- Overhead epi-white and epi-blue LED lights enable a variety of gel imaging applications
- Large 11.6" touch screen with user-friendly software optimizes image capture and analysis
- Unique viewing window allows UV-safe viewing of gels without opening the door
- Side access doors for gel repositioning and cutting while viewing the gel on the screen
- Choice of Transilluminator[1]: single, dual or triple wave-length UV Transilluminator models, and blue light models

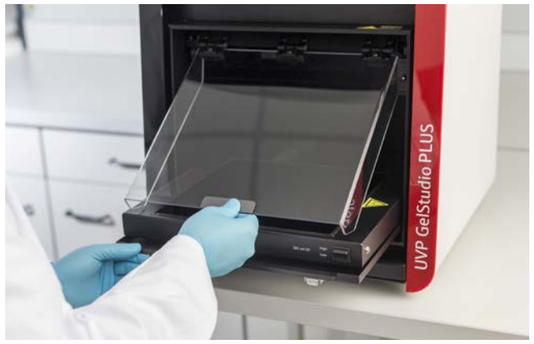
All-in-one automated gel documentation system

The UVP Solo Elite[1] is the perfect addition to any lab running routine gel analysis, imaging and documentation. With the most competitive specifications on the market and a budget friendly price, the UVP Solo Elite is the right fit for your lab. The system features:

- 6.3 megapixel camera, available in monochrome and color version, with an automated lens
- Three-position automated filter tray with broad band filter included
- Overhead epi-white and epi-blue LED lights enable a variety of gel imaging applications
- Large 11.6" touch screen with user-friendly software optimizes image capture and analysis
- Easy access data storage (7 USB ports) for saving images on an USB drive, to the system or a network computer
- Wide front door; safety switch turns the UV light off when darkroom door is open
- UVP Elite UV Transilluminator[1] with 16.8 x 21 cm illumination for a variety of gel sizes

UVP GelStudio Family[1]

UVP GelStudio imaging systems[1]



UV Protection Shield[1]

Gel documentation at its best

The UVP GelStudio imaging systems[1] creators are renowned for delivering advanced solutions to genomic and proteomic applications. UVP GelStudio imagers[1] offer high-resolution and sensitive imaging of DNA and protein gels. They also work with an unlimited range of excitable stains and dyes. All imagers run the powerful VisionWorks software, full package image capture, enhancement functions, and analysis software. Application-based icons for automation, included in the software package, offer one-touch capture.

- Imager for gel documentation in two different sizes
- Available as a touchscreen controlled system or as an external computer operated system
- 12.0 megapixel camera, with an automated f/1.2 zoom lens
- Contrast-rich images of fluorescent and colored samples
- Integrated multi-touch computer, with large storage capacity, ideal for multitasking and viewing several images
- Wide maximum illuminated imaging area for imaging multiple gels of various sizes (up to 27.5 x 21 cm)
- PLUS models available with a unique "Slide2Hide" door which features smooth operation and limits bench top interferences
- UV Protection Shield[1] maximizes protection from UV radiation while working over the transilluminated surface
- Overhead white, red, green, and blue LEDs included
- Five-position automated filter tray for easy access
- Upgradeable to support UVP eLITE Light Source module[1], for excitation from 400 to 800 nm wavelength applications
- VisionWorks Software, with comprehensive features, optimizes image acquisition and analysis

The software allows for creating custom icons and workflows based on users' needs. The UVP GelStudio[1] guarantees top image quality and an optimized range of high performance features. With its high resolution camera, high dynamics, and excitation ranges from 400 to 800 nm, this series introduces a new benchmark that goes far beyond publication-quality images.

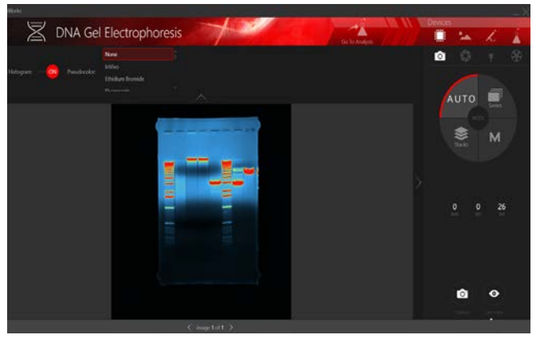
Integrated multi-touch computer

[1]Please note that UVP Products are available via Analytik Jena US only.

VisionWorks Software

Extensive image enhancement and analysis tools

All imagers run the powerful VisionWorks software, full package image capture, enhancement functions, and analysis software. Application-based icons for automation, which are included in the software package, offer one-touch capture. The software allows creating custom icons and workflows based on users' needs. Additionally, user accounts can easily set up with passwords to save and protect user data. Image enhancement and analysis features are included with all systems. Researchers can personalize their experiments and make use of enhancement features and annotation tools, e.g., for publication purposes. The software offers many powerful tools such as background subtraction, inversion, pseudocolor, compositing, and more.

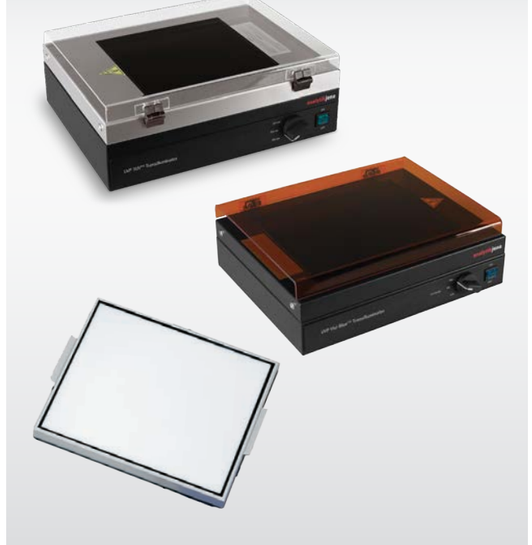


User interface VisionWorks software

UVP Transilluminators[1]

Analytik Jena UV transilluminators[1] feature uniform, bright illumination. The high-grade filter glass provides excellent documentation results with low background noise. The superior illumination uniformity allows for the reliable quantification of electrophoretically separated fluorescent samples. The transilluminators can be used as single units or integrated in imaging systems such as the UVP ChemStudio and GelStudio series[1]. Blue light excitation represents a valuable alternative to UV light for fluorescent dyes with excitation maxima around 470 nm. It prevents the risk of UV exposure and DNA damage. Applying an UV-to-white converter plate or a white light transilluminator allows the documentation of visible colored stains. The white and blue light transilluminators are also available as LED models.

- Filter sizes from 15 cm x 15 cm up to 25 cm x 26 cm or 20 cm x 40 cm
- Can be purchased with optional intensity selectors and different UV wavelengths
- Blue and white light transillumination sources
- Freely adjustable UV protection shield for user UV-protection during gel handling



UV and blue light transilluminators, UV-to-white converter plate

Chemiluminescence Systems

UVP ChemStudio Series[1]

No matter what your preferred method of western blotting is, the UVP ChemStudio Series[1] features the highest sensitivity in gel analysis available. The UVP ChemStudio and ChemStudio PLUS systems[1] were built with flexibility in mind, providing RGB detection as standard. Whatever your research focus is, the UVP ChemStudio product family[1] was built to streamline your protocol from detection to analysis, providing the most accurate quantitation of data for an unlimited range of applications.

The UVP ChemStudio product family[1] features the newest technology, a brand new software interface and top-of-the-line camera options, which guarantees a wider dynamic range of imaging than ever before. With a Studio in your lab, your research is unlimited.

- Imagers for chemiluminescence, fluorescence and colorimetry
- Upgradeable for NIR imaging applications
- Selection of highly sensitive, cooled CCD cameras with f/0.95 wide aperture lenses
- Available as either a PC-operated unit or as a stand-alone instrument with an integrated color touchscreen
- Includes ethidium bromide emission filter in an easy-to-access filter wheel with up to five positions
- Integrated overhead (EPI) RGBW LEDs for optimum illumination and multiplexing
- Chemi tray for optimum sample placement on the black, non-reflective surface
- VisionWorks Software, with comprehensive features, optimizes image acquisition and analysis

UVP ChemStudio series[1]

A new standard for quality and data integrity of your images

High resolution
The UVP ChemStudio[1] includes a high-performance eight MP chemi imaging camera. Multiple hardware and lighting options are configurable with the highly versatile UVP ChemStudio Imaging Systems[1].

Extreme light sensitivity
A range of different cameras are available for applications requiring maximum light sensitivity, a wider dynamic range, or supreme quantum efficiency into the IR range. All cameras utilize a wide aperture lens.

Clean images
Cameras are deeply cooled to deliver clean images with no noise and a low background. Additionally, UVP ChemStudios[1] provide user-controlled software tools to apply background subtraction and noise removal.

Unmodified raw data
The VisionWorks Software tools provide users with the freedom to apply image enhancement and analysis features when needed. They create uncompromised raw data and preserve the true data, promising the highest quantitative value.

[1]Please note that UVP Products are available via Analytik Jena US only.

Overall Support

A global network of product, application and service specialists work hand-in-hand to help you fulfill your daily demands.

We support you with:

- Choosing the best technique and device configuration for your application
- Best maintenance, repair and calibration service
- Setting up devices, accessories, and methods to meet your individual needs
- Ongoing support and application training worldwide
- Finding a suitable financing option

Your benefits:

- Standard-compliant and precise results
- Low downtime and long durability of your devices
- Effective use of your devices
- Always up to date with the latest software upgrade
- Daily availability of our support hotline

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