Life Science Tools & Technology UV Products | Light Sources | Lab Products





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Product Catalog

UV Products | Light Sources | Lab Products

About Analytik Jena US

Since 1932, UVP has created and designed ultraviolet lamps and products for science, industry and education. Today, Analytik Jena US continues its research and development of laboratory equipment.

In 2013, UVP was acquired by Analytik Jena AG which is based in Jena, Germany. The UVP Company name was changed to Analytik Jena US LLC, and operates as part of Analytik Jena's Life Science Business Unit.

Analytik Jena US designs and manufactures the ultraviolet product solutions for applications including criminology, electrophoresis, thin-layer chromatography, toxicology, inspection, non-destructive testing and UV curing. Ultraviolet Products include UV lamps, UV transilluminators, UV cabinets, UV crosslinkers and UV intensity meters.

Laboratory Products is a direct outgrowth of Analytik Jena US's leading position in the design, development, and manufacture of equipment for the scientific marketplace. Closely related technology and applications are being created and produced in the areas of electrophoresis, blotting, hybridization, and proteomics.

Light Source designs custom ultraviolet light sources to specific requirements. The group manufactures low-pressure, mercury, zinc and rare gas ultraviolet Pen-Ray Lamps for analytical and industrial applications.

Biolmaging Systems - Analytik Jena is a global leader in life science products, supplying Biolmaging Systems for academic, pharmaceutical and biotechnology applications. Analytik Jena continues to create innovative products and specialize in fluorescence and luminescence-based imaging applications for proteomics, genomics, in vivo small animal and plant imaging. To view our full line of advanced imaging systems, please visit our website.

The Analytik Jena US manufacturing facility is located in Upland, California. With sales, marketing, R&D and manufacturing personnel of over 100 employees, Analytik Jena US provides comprehensive service and support to customers and dealers worldwide.

This catalog covers the UVP branded general line including ultraviolet and laboratory products, light sources and Basic Imaging Systems.

Additional information, including our full Life Science Product Line, further product details, application notes, technical support information and new product releases are available on our website at www.analytik-jena.us.

Outside of the US? Visit www.uvp.com

Basic Imaging Systems

UVP brand basic imaging systems are designed for multi-user laboratories in that they are easy-to-use, out of box systems that require no training. These systems cover a range of applications including, simple gel documentation, thin layer chromatography (TLC), and colony counting.

UVP MultiDoc-It

The sturdy housing of the MultiDoc-It is designed for multiple user laboratories capturing gel images. For imaging in Thin Layer Chromatography (TLC) applications, the system is available without a transilluminator.



Dimensions: 14W x 12.7D x 19H in. (356 x 323 x 483 mm), 42 lbs.

Description

- High resolution megapixel digital color camera for capturing images
- Rugged metal darkroom, with three viewing doors and overhead white light, mounts onto a transilluminator (or plate for TLC applications)
- Capture software enables image capture, enhancement and reporting capabilities
- Optional UV lamps can be mounted in the darkroom for overhead UV illumination (The MultiDoc-It TLC includes two UV lamps but no transilluminator)

Systems include: Digi Camera, darkroom, UV transilluminator, capture/control software (Win XP or higher), EtBr filter. MultiDoc-It TLC includes UV lamps but no transilluminator, with only one viewing door on the front of the system.

For current camera and system specifications visit our website.

Order Number

115 V	230 V	UVP MultiDoc-It Imaging Systems and Accessories
97-0192-04	97-0192-05	MultiDoc-It Imaging System, M-20V Transilluminator (20 x 20 cm)
97-0193-04	97-0193-05	MultiDoc-It Imaging System, LM-20E Transilluminator (20 x 20 cm)
97-0194-04	97-0194-05	MultiDoc-It Imaging System, M-26V Transilluminator (21 x 26 cm)
97-0195-04	97-0195-05	MultiDoc-It Imaging System, LM-26E Transilluminator (21 x 26 cm)
97-0202-01	97-0202-02	MultiDoc-It TLC Imaging System, with (2) UVGL-25 UV Lamps
95-0021-12	95-0021-10	UVGL-25 UV Lamp, 254/365 nm UV

UVP DigiDoc-It

The DigiDoc-It System is economically designed for image capture and documentation of gels and plates. Analytik Jena's exclusive software loads on the user's PC, controls the camera functions and offers many image enhancement and reporting features.

- High resolution digital color camera captures brilliant color images
- Exclusive software controls the camera and enables image capture, enhancement, annotation, and archiving
- Quickly see live preview of gel images on the computer monitor
- Used with High Performance UV Transilluminator; for gels up to 25 x 30 cm, select the DigiDoc-It with the TFM-30V Transilluminator

Systems include: Digi camera, hood, EtBr filter; capture/control software (Windows XP or higher), with or without a UV transilluminator.

System is available with an optional drawer and Benchtop UV Transilluminator (ordered separately, see pages 8-13 for transilluminators).

For current camera and system specifications visit our website.



Hood Dimensions: 17.75W x 16.6 x 12D in. $(451 \times 422 \times 305$ mm), 18 lbs. Drawer Dimensions: 19.1W x 7.7H x 15.1D $(485 \times 196 \times 384$ mm)

Order Number

Description

115 V	230 V	UVP DigiDoc-It Imaging Systems and Accessories
97-0243-01	97-0243-02	DigiDoc-It Imaging System, TFM-20V Transilluminator (20 x 20 cm)
97-0244-01	97-0244-02	DigiDoc-It Imaging System, TFM-26V Transilluminator (21 x 26 cm)
97-0246-01	97-0246-02	DigiDoc-It Imaging System, TFM-30V Transilluminator (25 x 30 cm)
98-0068-01		Drawer (order Benchtop Transilluminator separately)

UVP ChromaDoc-It

The ChromaDoc-It features a high resolution digital color camera plus overhead UV for capturing brilliant color Thin Layer Chromatography (TLC) images. Software loads on the user's computer for image capture, image enhancement and reports.



- Cabinet features built-in overhead shortwave and longwave UV positioned on two sides of the cabinet for uniform UV illumination
- Interior overhead white light
- Software controls the camera, image capture and enhancement functions

System includes: Digi Camera (High Megapixel Digital Color), Cabinet with 254/365 nm UV and Camera Mount, TLC filter; Capture/Control Software (Windows XP or higher).

For current camera and system specifications visit our website.

Dims: 19.75W x 16.5D x 15.375H in. (502 x 419 x 391 mm), 30 lbs.

Order Number

115 V	230 V	UVP ChromaDoc-It Imaging System
97-0109-01	97-0109-02	ChromaDoc-It Imaging System

UVP PhotoDoc-It

The compact PhotoDoc-It provides an entry-level system for gel documentation. The system is designed to replace instant Polaroid photodoc systems for low cost prints. No computer required with this system.

- Illuminate stained gels with the UV fluorescence of the Benchtop UV Transilluminator
- Capture brilliant color images with the high resolution digital camera
- Save images to memory card or transfer to a computer (USB connection) for viewing or documentation
- Instantly print images on the lab quality color photo printer (included)

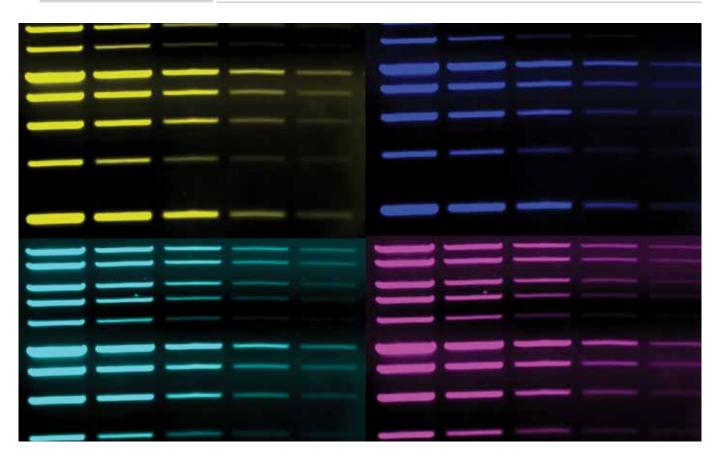


Dimensions: 17H x 13.25W x 9.5D in. (432 x 337 x 241 mm), 20 lbs

Systems include: DigiCam Camera, hood enclosure, EtBr filter, color printer and choice of UV Transilluminator. For current camera and system specifications visit our website.

Order Number

115 V	230 V	UVP PhotoDoc-It Imaging Systems and Accessories
97-0274-04	97-0274-05	PhotoDoc-It Imaging System, M-20V Transilluminator (302 nm UV, 20 x 20 cm filter)
97-0274-07	97-0274-08	PhotoDoc-It Imaging System, LM-20 Transilluminator (302/365 nm UV, 20 x 20 cm filter)
97-0274-10	97-0274-11	PhotoDoc-It Imaging System, M-26V Transilluminator (302 nm UV, 21 x 26 cm filter)
97-0274-13	97-0274-14	PhotoDoc-It Imaging System, LM-26 Transilluminator (302/365 nm UV, 21 x 26 cm filter)
96-0164-01		Paper/Ink kit (for PhotoDoc-It printer)

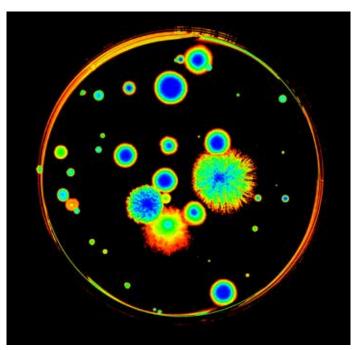


UVP ColonyDoc-It

Accurate and automated colony counting is possible with this compact station. High resolution megapixel digital color camera captures white light and fluorescent marked colonies. The epi blue light and the optional GFP filter enable users to visualize GFP fluorescence detection.



Dimensions: 13W x 12.5D x 17.5H in. (343 x 318 x 445 mm), 20 lbs.



For current camera and system specifications visit our website.

Order Number

Description

115 V	230 V	UVP ColonyDoc-It Imaging Station and Accessories
97-0539-01	97-0539-02	ColonyDoc-It Imaging Station
38-03	40-01	Filter, GFP

Thermal Printer

Document gel and blot images with a 256 grayscale thermal printer. The compact printer easily connects to any of Analytik Jena's imaging systems (except the PhotoDoc-It).

- Low cost, prints in seconds
- High resolution, 3 x 4" archive quality thermal prints



Dimensions: 6W x 9.5D x 3.3H in. (154 x 240 x 84 mm), 7.5 lbs.

Order Number

115 V	230 V	Thermal Printers and Accessories
89-0069-06	89-0069-07	Digital Thermal Printer, Mitsubishi
89-00)38-01	Thermal Paper, Mitsubishi, High density, 4 rolls (800 prints)
89-0174-01		Thermal Paper, Sony, Super Glossy, UPP110HG 5 rolls (1000 prints)

Transilluminators

All UVP transilluminators provide back-illumination of transparent fluorescent materials. UV Transilluminators are equipped with an UV blocking cover to shield the user from UV. The transilluminator base is painted with a high-quality, scratch-resistant powder coat. Models include either a stainless steel top assembly or powder coat paint.

UVP FirstLight Transilluminator Uniform UV Illuminator

The FirstLight UV Illuminator represents a unique, highly uniform 302 nm UV excitation source for quantitative fluorescent imaging in a wide range of applications. The transilluminator achieves accurate and reproducible RNA, DNA and protein results. The illuminator emits 302 nm UV excitation and combined with a patented phosphor coating configuration generates exceptionally uniform UV illumination over each band and lane. Multiple gels may be placed on the surface with assurance of uniformity for each gel.

Uniformity ensures consistent illumination over the imaging surface, resulting in high quality images
 Applications include DNA and protein gel documentation and analysis

Additional Wavelengths: When other wavelengths are

the full filter area

Accurate gel-to-gel comparisons



Dimensions: $14W \times 11D \times 5.63H$ in. ($356 \times 279 \times 143$ mm), 20 lbs.

Additional Wavelengths: When other wavelengths are required for fluorescence of various stains, optional plates convert the transilluminator's 302 nm to 365 nm, 460 - 470 nm or white light. See page 14 for converter plates.

Produces <5% coefficient of variance (CV) across

Exceptionally uniform, edge-to-edge illumination

 UVP FirstLight and 3UV models are patented and available only from Analytik Jena

Order Number Description

115 V	230 V	UVP FirstLight Transilluminators
95-0364-01	95-0364-02	FI-26X, 302 nm UV, Filter Size 25 x 26 cm
95-0365-01	95-0365-02	FI-20, 302 nm UV, Filter Size 20 x 20 cm
95-0366-01	95-0366-02	FI-26, 302 nm UV, Filter Size 21 x 26 cm

UVP Benchtop UV Transilluminators

All Benchtop Transilluminators are compact and lightweight. Benchtop models are available in four different variations of UV illumination: an economical Single UV with optional variable intensity (302 nm), 2UV (302 and 365 nm) or 3UV (254, 302, and 365 nm). Multiple filter sizes are available and may be seen on page 10.

3UV, 2UV, Single UV, and Variable Intensity Benchtop models (except Mini) feature increased performance and efficiency with an electronic ballast. This design produces higher UV intensity and uniformity plus instant start up.

3UV Benchtop Models



Dimensions: 14W x 11D x 5.4H in. (356 x 279 x 137 mm), 16lbs

2UV Benchtop Models



Dimensions: 14W x 11D x 4.8H in. (356 x 279 x 122 mm), 12.7 lbs.

Single Intensity and Variable Intensity Benchtop Models



Dimensions: $14W \times 11D \times 4.8H$ in. $(356 \times 279 \times 122 \text{ mm})$, 12.7 lbs.

Unique 3UV benchtop models include 254, 302 and 365 nm UV wavelengths in one unit.

- View gels using longwave UV for extended periods of time, reducing photonicking damage
- Switch to 302 nm to increase the fluorescence for photodocumentation
- Use shortwave to irradiate samples
- Compact size is an alternative to larger High Performance UV Transilluminators
- Stainless steel filter assembly

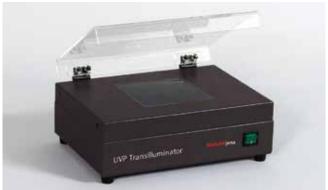
The 2UV models allow users to switch between 302 nm and 365 nm UV wavelengths in one unit.

- A single intensity setting and 8-watt UV tubes
- Select from 20 x 20 or 21 x 26 cm filter areas

Variable Intensity Models feature adjustable intensity with selection of high, medium, and low settings.

- High setting allows UV excitation of fluorophores on gels for routine photography. Also excites gels with low sample concentration.
- Medium intensity setting is excellent for viewing and quick single-band excision.
- Low setting is used for positioning and preparation of the gel, excising multiple bands and focusing for photography purposes.

Mini Benchtop Transilluminator



Dimensions: 10.25W x 7.25D x 4.5H in. (260 x 184 x 114 mm), 7.7 lbs.

Mini benchtop M-10E is an economical transilluminator using 6-watt, 302 nm tubes. This model is excellent for educational purposes.



Order Number

Description

115 V	230 V	UVP Benchtop UV Transilluminators and Replacement Tubes
95-0417-01	95-0417-02	LMS-20, Single Intensity 254/302/365 nm UV, Filter Size 20 x 20 cm
95-0414-01	95-0414-02	LMS-26, Single Intensity 254/302/365 nm UV, Filter Size 21 x 26 cm
95-0449-01	95-0449-02	LM-20, Single Intensity 302/365 nm UV, Filter Size 20 x 20 cm
95-0459-01	95-0459-02	LM-26, Single Intensity 302/365 nm UV, Filter Size 21 x 26 cm
95-0566-01	95-0566-02	LS-26, Single Intensity 254/365 nm UV, Filter Size 21 x 26 cm
95-0455-01	95-0455-02	M-15 Single Intensity, 302 nm UV, Filter 15 x 15 cm
95-0456-01	95-0456-02	M-15V Variable Intensity, 302 nm UV, Filter 15 x 15 cm
95-0447-01	95-0447-02	M-20 Single Intensity, 302 nm UV, Filter 20 x 20 cm
95-0452-01	95-0452-02	M-20V Variable Intensity, 302 nm UV, Filter 20 x 20 cm
95-0457-01	95-0457-02	M-26 Single Intensity, 302 nm UV, Filter 21 x 26 cm
95-0458-01	95-0458-02	M-26V Variable Intensity, 302 nm UV, Filter 21 x 26 cm
95-0413-01	95-0413-02	M-26XV Variable Intensity, 302 nm UV, Filter 25 x 26 cm
95-0180-01	95-0180-02	M-10E Single Intensity, 302 nm UV, Filter Size 10 x 10 cm
34-0	007-01	Tube, 8-watt, 254 nm UV
34-0	042-01	Tube, 8-watt, 302 nm UV
34-0	006-01	Tube, 8-watt, 365 nm UV
34-0	044-01	Tube, 6-watt, 302 nm UV

UVP High Performance UV Transilluminators

All High Performance UV Transilluminators include exclusive 25-watt ultraviolet tubes which provide brilliant UV illumination.

Single Wavelength UV & Variable Intensity UV Models



Choose a model with shortwave (254 nm), midrange (302 nm) or longwave (365 nm) UV for high fluorescence and sensitivity of stained gels.

- Deliver high UV output and intensity, no light flicker, fast lamp start-up and reduced electrical consumption
- Stainless steel frame enables easy cleaning
- The back-lit UV illumination is further enhanced with Analytik Jena's UVG long-life filter and uniformity screen
- The UV blocking cover, included with each transilluminator, is adjustable for access to the filter area

2UV High Performance Models



High Performance 2UV models are the same size and design as other high performance models but are equipped with midrange (302 nm) and longwave (365 nm) UV in each unit.

- Deliver high UV output and intensity, no light flicker, fast lamp start-up and reduced electrical consumption
- Stainless steel frame enables easy cleaning
- The back-lit UV illumination is further enhanced with Analytik Jena's UVG long-life filter and uniformity screen
- The UV blocking cover, included with each transilluminator, is adjustable for access to the filter area

Dimensions for all High Performance UV Transilluminators: $19.13W \times 13.25D \times 5.63H$ in. (486 x 337 x 143 mm), 21 lbs.

Order Number

115 V	230 V	UVP High Performance UV Transilluminators and Replacement Tubes
95-0423-01	95-0423-02	TFM-20V, Variable Intensity 302 nm UV, Filter Size 20 x 20 cm
95-0422-01	95-0422-02	TFM-26V, Variable Intensity 302 nm UV, Filter Size 21 x 26 cm
95-0424-01	95-0424-02	TFM-30V, Variable Intensity 302 nm UV, Filter Size 25 x 30 cm
95-0421-01	95-0421-02	TFM-40V, Variable Intensity 302 nm UV, Filter Size 20 x 40 cm
95-0420-01	95-0420-02	TFL-40V, Variable Intensity 365 nm UV, Filter Size 20 x 40 cm
95-0427-01	95-0427-02	TFS-20V, Variable Intensity 254 nm UV, Filter Size 20 x 20 cm
95-0428-01	95-0428-02	TFS-26V, Variable Intensity 254 nm UV, Filter Size 21 x 26 cm
95-0429-01	95-0429-02	TFS-30V, Variable Intensity 254 nm UV, Filter Size 25 x 30 cm
95-0430-01	95-0430-02	TFS-40V, Variable Intensity 254 nm UV, Filter Size 20 x 40 cm
95-0431-01	95-0431-02	TFML-20, Single Intensity 302/365 nm UV, Filter Size 20 x 20 cm
95-0425-01	95-0425-02	TFML-26, Single Intensity 302/365 nm UV, Filter Size 21 x 26 cm
95-0432-01	95-0432-02	TFML-30, Single Intensity 302/365 nm UV, Filter Size 25 x 30 cm
95-0426-01	95-0426-02	TFML-40, Single Intensity 302/365 nm UV, Filter Size 20 x 40 cm
34-0	073-01	Tube, 25-watt, 254 nm UV
34-0	072-01	Tube, 25-watt, 302 nm UV
34-0	060-01	Tube, 25-watt, 365 nm UV

UVP Visi-Blue Transilluminators

Visi-Blue Transilluminators are excellent for use with blue 460 - 470 nm excitation samples including SYBR Green, SYPRO Orange and GFP stains. A special amber camera filter (50 mm sq) is included for photography of gels.

- Visi-Blue transilluminators and converter plates minimize photonicking of DNA samples
- The amber protective cover blocks blue light transmission and allows visualization of most samples above 500 nm
- VB-26V is a compact 8-watt model
- VB-40V is a large format 25-watt model

VB-26V Visi-Blue Transilluminator patented design supplies 460 - 470 nm illumination.



Dimensions: VB-26V: 14W x 11D x 4.8H in. (356 x 279 x 122 mm), 15 lbs. VB-V40: 19.13W x 13.25D x 5.6H in. (486 x 337 x 143 mm), 21 lbs.

UVP Visi-White Transilluminators

White Light Transilluminators offer uniform light diffusion for autoradiographs, film positives, negatives, X-ray film, microtiter plates and gels. Plexiglas® and glass filter plates are sealed into the unit for durability.



Dimensions: TW-26: 13.25W x 9.5D x 4.25H in. (337 x 241 x 108 mm), 8 lbs. TW-43: 16W x 19.1D x 4.25H in. (406 x 486 x 108 mm), 19 lbs.

• The UVP Visi-White transilluminator is also available as dual use version: UV table and white light table.

Work areas of 21 x 26 cm or 36 x 43 cm.



115 V	230 V	UVP Visi-Blue Transilluminators, UVP Visi-White Transilluminators and Replacement Tubes
95-0461-01	95-0461-02	VB-26 8-watt Variable Intensity, Filter Size 21 x 26 cm
95-0433-01	95-0433-02	VB-40V 25-watt Variable Intensity, Filter Size 20 x 40 cm
95-0208-01	95-0208-02	TW-26 8-watt, Filter Size 21 x 26 cm
95-0214-01	95-0214-02	TW-43 14-watt, Filter Size 36 x 43 cm
34-00	031-01	Tube, 8-watt, 365 nm BLB UV (for VB-26)
34-0	060-01	Tube, 25-watt, 365 nm BLB UV (for VB-40V)
34-0056-01		Tube, 8-watt (for TW-26)
34-0059-01		Tube, 14-watt (for TW-43)

UVP UV/White Transilluminators

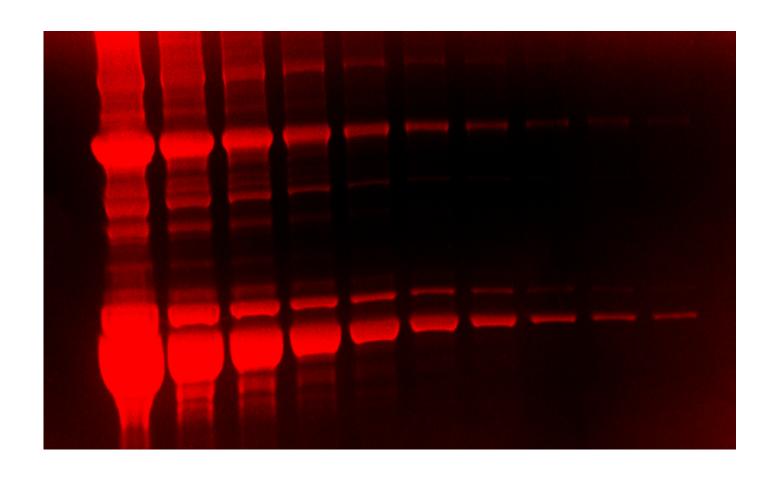


Dimensions: $19.13W \times 13.25D \times 5.64H$ in. $(486 \times 337 \times 143 \text{ mm})$, 21 lbs.

The UV/White Transilluminators have 20 x 20 cm white light and UV filter areas side by side for illumination and documentation of all visible colored samples like silver or Coomassie blue stained gels as well as for radiographs. UV/White Transilluminator easily switches between UV and white light sources.

- White light can be used for viewing Coomassie blue and silver stained protein gels, autoradiographs and microtiter plates
- The UV side can be used for viewing Ethidium Bromide and other stained gels

115 V	230 V	UVP UV/White Transilluminators and Replacement Tubes
95-0415-01	95-0415-02	TLW-20 8-watt, 365 nm UV/White, Filter Size 20 x 20 cm
95-0415-04	95-0415-05	TMW-20 8-watt, 302 nm UV/White, Filter Size 20 x 20 cm
95-0418-01	95-0418-02	LMW-20 8-watt, 365/302 nm UV/White, Filter Size 20 x 20 cm
34-00	056-01	Tube, 8-watt, White
34-0006-01		Tube, 8-watt, 365 nm UV
34-0042-01		Tube, 8-watt, 302 nm UV



Converter Light Plates and Gel Tools

Convert UV to white and UV to blue (460 - 470 nm) with choice of UVP converter plates. Gel tools are useful for researchers when working with gels of any size prior to transillumination.

UV/White Converter Plates

Specially designed plate converts the transilluminator's UV radiation to white light for viewing protein gels, Coomassie blue stained or silver stained media.

- Uniquely phosphored glass assembly (patented) converts the UV radiation via a white diffuser
- Handles are placed on two sides of the plate for easy handling



Convert UV to White Light with the phosphor coated Visi-White converter plate.

UV/Blue and UV/UV Plates

Position the plate on top of a UV transilluminator to convert the 302 nm UV. Visi-Blue Plate converts UV to 460 - 470nm blue light for use with various stains including SYBR Green, SYPRO Orange, and GFP.

UV/UV Converter Plate converts 302 nm to 365 nm UV which is ideal for preparation and gel excision work.

• The Visi-Blue Converter Plate includes an amber camera filter for use in photographing gels.



A scratch resistant glass surface is secured to the metal frame of the Visi-Blue converter plate.

	Converter Plates
38-0191-01	Visi-White, UV to White Light, 21 x 26 cm
38-0191-02	Visi-White, UV to White Light, 20 x 40 cm
38-0191-04	Visi-White, UV to White Light, 25 x 26 cm
38-0200-01	Visi-Blue, 460-470 nm UV, 21 x 26 cm
38-0200-02	Visi-Blue, 460-470 nm UV, 20 x 40 cm
38-0200-04	Visi-Blue, 460-470 nm UV, 25 x 26 cm
38-0242-01	Visi-Blue, 460-470 nm UV, 21 x 26 cm, with Amber Cover
38-0325-01	UV/UV, 302 to 365 nm UV, 25 x 26 cm

Gel Tools



Photo shows Gel-Trays, Gel-Scooper, Gel-Cutter, and Gel-Ruler.

- Gel-Cutter: Edge allows for easy cutting and removal of gel material
- Gel-Scooper: Made of strong acrylic with a beveled edge designed for transfer of gels
- Gel-Trays: UV transmitting trays can be used for moving gels to the transilluminator. Tray protects the filter surface from scratches
- **Gel-Ruler:** Centimeter markings fluoresce under 365 nm and 302 nm UV wavelengths
- Gel-Tool Kit: Combines a Gel-Ruler, Gel-Cutter, Gel-Tray, Gel-Scooper, and Faceshield

Fluorescent Standard Step Tablet

Place the non-photobleaching Step Tablet next to your gel on a FirstLight UV Illuminator. The Step Tablet has a calibrated 21-step gradation with density from totally clear (step 1) to totally opaque (step 21). The gradation allows accurate, consistent comparison of the bands and spots on acquired images against one another and the step tablet for variations in lighting and optical conditions. Allows evaluation of the image against the grayscale.



	Gel Tools and Fluorescent Standard Step Tablet
98-0109-01	Gel-Tool Kit (Gel-Ruler, Gel-Cutter, Gel-Tray, Gel-Scooper plus Faceshield)
85-0007-05	Gel-Tray, Plexiglas®, 10.75W x 9D in. (27 x 23 cm)
85-0007-01	Gel-Tray, Plexiglas®, 11.5W x 9D in. (29 x 23 cm)
85-0005-01	Gel-Tray, Plexiglas®, 16.5W x 10.5D in. (42 x 27 cm)
38-0296-03	Gel-Tray, stainless steel/glass, 16.5W x 10.5D in. (42 x 27 cm)
85-0002-01	Gel-Cutter, 20 cm
85-0003-01	Gel-Ruler, 25 cm
85-0006-01	Gel-Scooper, 5W x 12L in. (12.7 x 30.5 cm)
33-0014-02	Step Tablet

UV and HEPA PCR Hoods

A sophisticated platform for any sample preparation. UVP PCR Cabinets and Workstations combine a number of important features for all contamination-sensitive applications.

UVP PCR Cabinets & Workstations

UV PCR hoods use shortwave ultraviolet to control PCR contamination. In addition to standard UV PCR models, HEPA/UV PCR systems with three-stage filters are available. Both the HEPA/UV and the standard UV PCR Systems are available in two sizes: Cabinet and Workstation. The Cabinet has a smaller footprint than the Workstation.



- Built-in shortwave (254 nm) UV tubes for deactivation of DNA between experiments
- Timer sets UV exposure for up to 30 minutes
- Safety shut-off switch automatically turns the ultraviolet light off when the door is opened
- Easy-clean antimicrobial coating on the metal surfaces resists bacteria growth
- Hinged door flips up for easy access to the work area
- Built-in power outlets for operation of equipment inside the PCR work area
- Two shelves allow placement of small equipment
- Makrolon® panels block UV below 400 nm

UV Decontamination. All UVP PCR systems create an ideal environment for PCR preparation by reducing the chance of sample contamination. Control potential PCR contamination with 254 nm UV tubes built into the chamber.

Antimicrobial Protection. Additional contamination control is provided with a uniquely coated metal design that maintains antimicrobial efficacy. The easy clean, durable coating material contains silver ions, a safe and natural antimicrobial agent for continuous antimicrobial protection.

Order number

115 V	230 V (EU)	230 V (UK)	UVP PCR System		Dimensions (W x D x H)
849-95-0600-01	849-95-0600-02	849-95-0600-03	UVP PCR HEPA Workstation	(130 lbs.)	Exterior: 826 x 616 x 991 mm
849-95-0601-01	849-95-0601-02	849-95-0601-03	UVP PCR Workstation	(115 lbs.)	Interior: 787 x 546 x 737 mm
849-95-0602-01	849-95-0602-02	849-95-0602-03	UVP PCR HEPA Cabinet	(92 lbs.)	Exterior: 685 x 510 x 890 mm
849-95-0603-01	849-95-0603-02	849-95-0603-03	UVP PCR Cabinet	(80 lbs.)	Interior: 635 x 430 x 620 mm
	Accessories				
849-17-0151-01	HEPA filter				
849-17-0152-01	Carbon pre-filter				
849-20-1985-01	Shelf				
849-34-0073-01	UV Lamp, 254 nm UV, 25-watt				
849-98-0125-01	Makrolon® replacement kit				

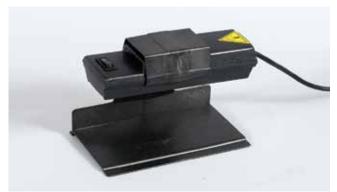
Ultraviolet Lamps

Analytik Jena manufactures a large selection of Mineralight, Blak-Ray and UV lamps to accommodate many appplications and budgets.

Ultraviolet Lamps: Hand & Specialty

Compact UV Lamps

Compact UV Lamps (4-watts) feature models with longwave (365 nm), shortwave (254 nm), or multiple UV. J-124 Stand for use with Compact UV Lamps.



Dimensions: $7.8L \times 2.8W \times 2.1H$ in. (198 x 71 x 53 mm), 1 lb. J-124 Stand: $6.5H \times 7.5W \times 4.8D$ in. (165 x 190 x 122 mm), 1 lb



- Combination wavelength version comes with a snapon selector plate for switching between wavelengths
- Lightweight, easy-to-handle lamp design
- Comes in 12V style (for cigarette lighter operation)

Order Number

115 V	230 V	Compact UV Lamps, Replacement Tubes and Accessories
95-0016-14	95-0016-15	UVG-11, 4-watt, 254 nm UV
95-0017-09	95-0017-10	UVGL-15 (split-tube), 4-watt, 365 nm/254 nm UV
95-0018-02	95-0018-03	UVL-21, 4-watt, 365 nm UV
95-0021-12	95-0021-10	UVGL-25, 4-watt, 365 nm/254 nm UV
95-0019-01	95-0019-03	UVL-23, 4-watt, 365 nm BLB UV
95-0019	-14 (12V)	UVL-23R, 4-watt, 365 nm BL UV
34-00	003-01	Tube, 4-watt, 254 nm UV
34-0004-01		Tube, 4-watt, 365/254 nm UV
34-0005-01		Tube, 4-watt, 365 nm UV
34-0010-01		Tube, 4-watt, 365 nm, BLB UV
98-0020-03		J-124 Lamp Stand

Handheld UV Lamps

Handheld UV Lamps (6-watts) include shortwave (254 nm), longwave (365 nm) UV or the combination shortwave/ longwave in one lamp. Pair with J-129 Lamp Stand for hands-free lamp use.

- Comfortable, ergonomically designed handle for easy handling
- On/off switch is located on the back of the lamp





Dimensions: 14.9L x 3.2W x 2.5H in., 2 lbs. J-129 Stand: 9.75H x 13L in. (248 x 330 mm), 3 lbs.

Order Number

Description

115 V	230 V	Handheld UV Lamps, Replacement Tubes, and Accessories
95-0004-09	95-0004-10	UVG-54, 6-watt, 254 nm UV
95-0005-05	95-0005-06	UVGL-55 (split-tube), 6-watt, 365 nm/254 nm UV
95-0006-02	95-0006-03	UVL-56, 6-watt, 365 nm UV
95-0007-05	95-0007-06	UVGL-58, 6-watt, 365 nm/254 nm UV
95-0104-01	95-0104-02	UVM-57, 6-watt, 302 nm UV
34-00	013-01	Tube, 6-watt, 254 nm UV
34-0	015-01	Tube, 6-watt, 365/254 nm UV
34-0034-01		Tube, 6-watt, 365 nm UV
34-00	044-01	Tube, 6-watt, 302 nm UV
98-0016-03		J-129 Lamp Stand

3UV Multi-Wavelength UV Lamps

This innovative 3UV lamp (patented) houses three UV wavelengths in one lamp. 3UV Lamps hold longwave, shortwave and midrange UV in one lamp (8-watt model pictured).

- Selection of each wavelength is by an easy turn of the dial located on one end of the housing
- The uniquely designed reflectors mounted behind each tube provide maximum UV for fluorescence applications
- Lightweight plastic and ergonomically-designed housing for handheld or stationary use



Lamp Dimensions: 3UV-34: 9.5L x 3W x 4.5D in. (241 x76 x114 mm), 5 lbs. 3UV-36: 12.5L x 3W x 4.5D in. (318 x76 x114 mm), 5 lbs. 3UV-38: 15.5L x 3W x 4.5D in. (394 x76 x114 mm), 6 lbs.

EL Series Lamps

EL Series Lamps are fabricated of extruded metal with a scratch resistant powder paint finish. EL Series UV lamps are available with 4, 6, or 8-watts and a selection of UV wavelengths and white light combinations. A lamp can be placed in the J-138 Stand (see page 20) for hands-free use.

3UV and 2UV EL Series Lamps

- The 3UV EL Lamp model is available with 8-watt tubes
- 3UV model houses three UV wavelengths (254) nm shortwave, 302 nm midrange, and 365 nm longwave) in one unit, reducing the need to purchase multiple lamps
- Easily switch among the three UV wavelengths as required for your application
- 2UV models include two different UV wavelengths in one lamp



EL Series UV Lamps are lightweight and easy to handle (left to right: UVLMS-38, UVLS-28, UVL-14).

Lamp Dimensions: 4-Watt: $9.8L \times 3.8W \times 2.5D$ in. $(249 \times 97 \times 64 \text{ mm})$, 2 lbs. 6-Watt: $12L \times 3.8W \times 2.5D$ in. $(305 \times 97 \times 64 \text{ mm})$, 2.5 lbs. 8-Watt: $14.8L \times 3.8W \times 2.5D$ in. $(376 \times 97 \times 64 \text{ mm})$, 3 lbs.

Order Number

Order Number		Description	
115 V	230 V	3UV Multi-Wavelength UV Lamps, EL Series Lamps, and Rep	placement Tubes
95-0341-01	95-0341-02	3UV-34, 4-watt, 254 nm/302 nm/365 nm UV	
95-0342-01	95-0342-02	3UV-36, 6-watt, 254 nm/302 nm/365 nm UV	
95-0343-01	95-0343-02	3UV-38, 8-watt, 254 nm/302 nm/365 nm UV	
95-0252-01	95-0252-02	UVLMS-38, 8-watt, 3UV, 365 nm/302 nm/254 nm UV	
95-0251-01	95-0251-02	UVLM-28, 8-watt, 2UV, 365 nm/302 nm UV	
95-0201-01	95-0201-02	UVLS-28, 8-watt, 2UV, 365 nm/254 nm UV	
95-0278-01	95-0278-02	UVLM-26, 6-watt, 2UV, 365 nm/302 nm UV	
95-0279-01	95-0279-02	UVLS-26, 6-watt, 2UV, 365 nm/254 nm UV	
95-0271-01	95-0271-02	UVLS-24, 4-watt, 2UV, 365 nm/254 nm UV	
34-0	0006-01	Tube, 8-watt, 365 nm UV	
34-	0042-01	Tube, 8-watt, 302 nm UV	
34-	0007-01	Tube, 8-watt, 254 nm UV	Protective eyewear is
34-0034-01		Tube, 6-watt, 365 nm UV	essential for anyone using UV equipment.
34-0	0044-01	Tube, 6-watt, 302 nm UV	See page 24 for UV
34-0013-01		Tube, 6-watt, 254 nm UV	blocking eyewear.
34-0005-01		Tube, 4-watt, 365 nm UV	
34-0	0003-01	Tube, 4-watt, 254 nm UV	•••••••••••••••••••••••••••••••••••••••

White/UV and Twin EL Series Lamps



UV/White and Twin EL Series Lamps are available in four, six and eight watt configurations. Lamps include UV and white light (UVS-14 shown).

Accessories for EL Series UV Lamps



J-138 Dimensions: 10.74H x 13L x 3W in. (273 x 330 x 76 mm)

- White/UV Models include one UV tube (254, 302 or 365 nm) and one white light tube in one lamp
- Twin Models include two tubes of the same UV wavelength for added UV intensity



EL Series Twin Models have two tubes of the same UV wavelength (UVL-28 shown).

- J-138 Lamp Stand is for use with any EL Series Lamps; allows for hands free use
- C-10E4 and C-10E6 Cabinets can be used with EL Lamps which emit UV in a darkroom environment (see page 35 for cabinet ordering information)
- The uniquely designed reflectors mounted behind each tube provide maximum UV for fluorescence applications
- The 8-watt EL lamps can be used with the C-65
 Cabinet when a darkroom environment is needed (see pages 34-35 for cabinet ordering information)

115 V	230 V	UV/White EL Series Lamps and Lamp Accessories
95-0198-01	95-0198-02	UVL-18, 8-watt, 365 nm UV/white
95-0199-01	95-0199-02	UVM-18, 8-watt, 302 nm UV/white
95-0200-01	95-0200-02	UVS-18, 8-watt, 254 nm UV/white
95-0272-01	95-0272-02	UVL-16, 6-watt, 365 nm UV/white
95-0273-01	95-0273-02	UVM-16, 6-watt, 302 nm UV/white
95-0274-01	95-0274-02	UVS-16, 6-watt, 254 nm UV/white
95-0264-01	95-0264-02	UVL-14, 4-watt, 365 nm UV/white
95-0266-01	95-0266-02	UVS-14, 4-watt, 254 nm UV/white
18-0063-01		J-138 Lamp Stand
95-0072-08		C-10E4 Cabinet, (for 4W EL Lamps)
95-0072-09		C-10E6 Cabinet, (for 6W EL Lamps)

Mini UV Lamps

Mini UV Lamps are 4-watt models with longwave (365 nm), shortwave (254 nm) ultraviolet or multiband split-tube shortwave and longwave in one unit. Lamps operate on four AA batteries (not included).

- Excellent lamps for office or field inspection
- Lamps are lightweight and can fit into a pocket
- A nylon strap is attached for easy handling



Mini UV Lamps UVG-4, UVSL-14P, UVL-4. The UVL-4F Mini UV Lamp includes a longwave UV tube and a flashlight.

Lamp Dimensions: UVG-4 & UVSL-14P: $6.25L \times 1W \times 2.6H$ in. $(159 \times 25 \times 66 \text{ mm})$, 1 lb. UVL-4: $6.25L \times 1W \times 2H$ in. $(159 \times 25 \times 51 \text{ mm})$, 1 lb. UVL-4F: $6.5L \times 2W \times 1H$ in. $(165 \times 51 \times 25 \text{ mm})$, 1 lb.

115 V	230 V	Twin Model EL Series Lamps and Replacement Tubes for UV/	White and Twin Model Lamps	
95-0248-01	95-0248-02	UVL-28, 8-watt, 365 nm UV		
95-0249-01	95-0249-02	UVS-28, 8-watt, 254 nm UV		
95-0250-01	95-0250-02	UVM-28, 8-watt, 302 nm UV		
95-0275-01	95-0275-02	UVL-26, 6-watt, 365 nm UV		
95-0276-01	95-0276-02	UVM-26, 6-watt, 302 nm UV		
95-0277-01	95-0277-02	UVS-26, 6-watt, 254 nm UV		
95-0267-01	95-0267-02	UVL-24, 4-watt, 365 nm UV		
95-0268-01	95-0268-02	UVM-24, 4-watt, 302 nm UV		
95-0269-01	95-0269-02	UVS-24, 4-watt, 254 nm UV		
34-00	56-01	Tube, 8-watt, White		
34-00	06-01	Tube, 8-watt, 365 nm UV		
34-00	42-01	Tube, 8-watt, 302 nm UV		
34-00	07-01	Tube, 8-watt, 254 nm UV		
34-0063-01		Tube, 6-watt, White UV		
34-00	34-01	Tube, 6-watt, 365 nm UV		
34-00	44-01	Tube, 6-watt, 302 nm UV		
34-00	13-01	Tube, 6-watt, 254 nm UV		
34-00	66-01	Tube, 4-watt, White UV		
34-00	05-01	Tube, 4-watt, 365 nm UV		
34-00	03-01	Tube, 4-watt, 254 nm UV		
34-0071-01		Tube, 4-watt, 302 nm UV		
		Mini UV Lamps	Replacement Tubes	
95-0158-	04 (4AA)	UVG-4, 4-watt, 254 nm UV	34-0003-01	
95-0125-	05 (4AA)	UVL-4, 4-watt, 365 nm BLB UV	34-0010-01	
95-0188-	02 (4AA)	UVSL-14P, Multiband split-tube, 4-watt, 254 nm/365 nm UV	34-0004-01	
95-0305-	03 (4AA)	UVL-4F, 4-watt, 365 nm BLB UV, with Flashlight	34-0010-01	

Portable & Rechargeable UV Lamps



Portable UV Lamps are lightweight for field use.

- Portable UV Lamps (6-watt) are operated by two 6-volt batteries
- The distinctive wrap around handle comfortably balances the lamp in your hand
- A built-in flashlight is included
- Optional rechargeable 6V batteries and a charger are available

- Rechargeable UV Lamps (6-watt) feature a lightweight design and come in three dual-tube
- Lamps are equipped with an internal gel based, lead-acid battery which can be charged from a standard wall outlet
- Use with the C-10P Cabinet (see page 35 for details)



Rechargeable UV Lamps with built-in rechargeable battery. UVSL-26P (shown) can operate with both longwave and shortwave at the same time.

Lamp Dimensions: Portable: $9.5L \times 2.8W \times 9.4H$ in. $(241 \times 71 \times 239 \text{ mm})$, 4 lbs. Rechargeable: $5.5L \times 3.0W \times 9.8H$ in. $(140 \times 76 \times 249 \text{ mm})$, 4 lbs.

order ramber	Description.
	Portable UV Lamps, Replacement Tubes and Accessories
95-0011-01 (12V)	Portable UV Lamp, ML-49 6-watt, 365 nm BLB UV
95-0009-02 (12V)	Portable UV Lamp, UVG-47 6-watt, 254 nm UV
95-0010-02 (12V)	Portable UV Lamp, UVGL-48 split-tube, 6-watt, 254 nm/365 nm UV
34-0016-01	Replacement Tube, ML-49
34-0013-01	Replacement Tube, UVG-47
34-0015-01	Replacement Tube, UVGL-48
34-0014-01	Bulb, White
45-0005-01	Battery, 6V
45-0005-02	Battery, rechargeable 6V (115V)
58-0136-01	Charger (115V)

Order Number

Description

115 V	230 V	Rechargeable UV Lamps, Replacement Tubes and Accessories
95-0186-01	95-0186-02	Rechargeable UV Lamp, UVL-26P, 6-watt, 365 nm UV
95-0187-01	95-0187-02	Rechargeable UV Lamp, UVS-26P 6-watt, 254 nm UV
95-0181-01	95-0181-02	Rechargeable UV Lamp, UVSL-26P 6-watt, 254 nm/365 nm UV
34-0016-01		Replacement Tube, 365 nm BLB, UVL-26P
34-0013-01		Replacement Tube, 254 nm, UVS-26P and UVSL-26P
34-0034-01		Replacement Tube, 365 nm, UVSL-26P

Signature UV Lamps

Signature and fraud detection UV lamps use longwave UV to check the authenticity of signatures, documents, tickets, passports, currency and credit cards.

- Easy to operate
- Easy to detect forged documents and currency
- Safe to use

SL-2M Lamp: Invisible inks or altered documents fluoresce when exposed to the UV.



Dimensions: SL-2M: $6.5W \times 5.75D \times 4.5H$ in. (165 x 145 x 114 mm), 3 lbs.

Mineralight UV Lamps

Mineralight R-52G Grid Lamp provides a powerful, uniform source of high-intensity 254 nm shortwave UV.

- For small scale mineral displays and laboratory applications including bacteria destruction and photochemistry
- Removable filter assembly converts the lamp for each of your application purposes



Lamp Dimensions: 7.8H \times 16L \times 7.8W in. (198 \times 406 \times 198 mm); Primary cord: 8 ft., secondary cord 3 ft.); Weight: 9.5 lb (4.3 kg)

Order Number

115 V	230 V	Signature UV Lamps, Minerlight UV Lamps and Replacement Tubes
95-0164-01	95-0164-02	SL-2M Fraud Detection, UV Lamp, 4-watt, 365 nm UV
94-0012-05	95-0012-06	R-52G Grid Lamp, 254 nm UV
34-00	010-01	Replacement Tube, 4-watt, BLB UV (UVL-4 Lamp)
77-0002-02		R-52G Grid Replacement

UV Blocking Eyewear



Eyewear protects the eyes from harmful UV. Goggles and Faceshield comply with ANSI-Z87.1 1986 specifications for eye and face protection devices.

Eye and face protection is essential for anyone working with ultraviolet sources which can cause burning to unprotected eyes and skin. Eyewear blocks wavelengths from 200 - 400 nm.

- Spectacles are made of impact resistant polycarbonate. Top and side-shield design provides UV protection for the eyes. Orange spectacles block blue light that can cause haze
- Goggles are constructed of specially-formulated plastic for optimum viewing contrast and lessened eye fatigue. Goggles feature a lightweight design and flexible rubber trim. Air vents allow air flow while blocking ultraviolet transmission
- Faceshield covers the face and neck area

Order Number Description

	UV Blocking Eyewear
98-0002-01	UVC-303 Spectacles; 2H x 6W in. (51 x 152mm)
38-0240-01	UVC-310 Spectacles, orange; 2H x 6W in. (51 x 152mm)
98-0002-02	UVC-503 Goggles; 3H x 6W in. (76 x 152mm)
98-0002-03	Replacement Goggle Lens
98-0002-04	UVC-803 Faceshield; 17dia x 8.25H in. (432 x 210mm)
38-0151-01	Replacement Shield

Ultraviolet Lamps: High Intensity & Display

High Intensity UV Lamps

Blak-Ray® B-100 high intensity lamps supply brilliant UV irradiance for optimum fluorescence of materials. All "AP" series lamps come with a special heat resistant plastic. The Cool-Touch™ housing allows users to handle the lamp head regardless of how long the lamp has been operating.

Accessories

- 1) Funnel directs the UV source to a specific area
- 2) Visor shields the user from blue haze emitted from the lamp
- 3) Finger Guard blocks fingers from touching the bulb
- 4) Exposure Box for fluorescing small samples



Accessories from left to right: Finger guard, visor, funnel.

B-100AP and B-100AP/R UV Lamps

- 100 watt longwave bulb and ballast base
- At 18 in. (457 mm), the lamp produces a highly intense center of UV irradiance approximately 5 in. (127 mm) in diameter
- Lamp head rotates 360° when attached to the base
- The grip handle fits into the transformer base for easy lamp storage and hands-free lamp operation
- The B-100AP/R has the same features as the B-100AP but includes 20 ft (6.1 m) primary and secondary cords for added mobility
- Two cord holders on the B-100AP/R, extending 2.93 in. (74 mm) on two sides of the ballast, keep loose cord under control



B-100 SP Lamp Dimensions: Lamp Head 9.75L x 6Dia. in. (248 x 152 mm), 3.14 lbs.



The B-100AP provides 100 watts of high intensity longwave (365 nm) illumination. Uses include science, non-destructive testing and fluorescence inspection.

B-100 AP and AP/R Lamp Dimensions: Lamp Head 9.75L x 6Dia. in. (248 x 152 mm), 12.5 lbs.

B-100SP Lamp

The B-100SP lamp, a 90-watt longwave, self-ballasted lamp, is Analytik Jena's most powerful portable lamp. The bulb included with the B-100SP lamp has an average life of 450 to 2000 hours.

- Ballast is built directly into the bulb
- Lamp cord length is 8 ft. (2.44 m)
- The on/off switch is positioned on the handle for easy accessibility
- Perfect for automotive leak detection

115 V	230 V	B-100 AP, B-100 AP/R, B-100SP Lamps and Accessories
95-0127-01	95-0127-02	B-100AP 100-watt, 365 nm longwave, Intensity 2 in. /10 in. (μW/cm²): 20,000 / 5,000
95-0127-06	95-0127-07	B-100AP/R 100-watt, 365 nm longwave, Intensity 2 in. /10 in. (μW/cm²): 20,000 / 5,000
95-0128-01		B-100SP 90-watt, 365 nm longwave, Intensity 2 in. /10 in. (μW/cm²): 8,000 / 1,800
34-00	054-01	Bulb, Spot (B-100AP/R & B-100AP)
38-01	168-01	Filter/Bezel Assembly (B-100AP/R & B-100AP)
17-0057-01		Bulb Protector (B-100SP)
34-0049-01		Bulb, Self Ballasted (B-100SP)
38-01	168-05	Filter/Bezel Assembly (B-100SP)
89-00	068-01	Finger Guard
19-0126-01		Lamp Funnel
19-01	125-01	Lamp Visor
76-0055-01		Exposure Box

B-100A and B-100A/R Lamps

- Manufactured with a scratch-resistant, powder painted aluminum lamp head
- Lamp head is connected to the transformer base by an 8 ft. (2.44 m) cord
- The handle fits into the transformer base allowing the lamp head to rotate a full 360 degrees
- The B-100A/R has the same features as the B-100A plus 20 ft. (6.1 m) primary and secondary cords for additional mobility; cord holders (on two sides of the ballast) keep slack cord under control

The B-100A High Intensity Lamp features 100 watts of 365 nm longwave UV which is excellent for many uses including inspection purposes.



B-100A, B-100A/R Lamp Dimensions: Lamp Head $8.5L \times 5.5$ Dia. in. (216 x 140 mm), 11.72 lbs.



B-100Y Dims: Lamp head 8.5L x 5.5Dia. in. (216 x 140mm), 13 lbs B-100YP Dims: Lamp Head 9.75D x 6Dia in. (248 x 152mm), 13 lbs

B-100Y and B-100YP Lamps

The B-100Y and B-100YP lamps provide high-contrast light for the semiconductor fabrication industry and fine surface particle detection.

- A yellow filter blocks wavelengths shorter than 500 nm and produces three strong mercury lines at 543, 574 and 576 nm
- Lamp intensity is so brilliant, particles down to 10 microns are routinely visible
- The lamp handle fits into the transformer base allowing the lamp head to rotate 360 degrees
- B-100Y has scratch-resistant, powder painted aluminum housing, while the B-100YP has a Cool-Touch design

115 V	230 V	B-100 A, B-100 A/R, B-100Y, B-100YP Lamps and Accessories
95-0044-22	95-0044-02	B-100A, 100-watt, 365 nm longwave, Intensity 2 in./10 in. (μW/cm²): 20,000 / 5,000
95-0044-03	95-0044-04	B-100A, 100-watt, 365 nm longwave, Intensity 2 in./10 in. (μW/cm²): 20,000 / 5,000
95-0044-24	95-0044-18	B-100Y, 100-watt
95-0127-03	95-0127-04	B-100YP, 100-watt
34-00	054-01	Bulb, Spot (B-100AP/R & B-100AP)
19-0124-01		Lamp Visor (B-100Y, B-100A)
38-0168-02		Filter/Bezel (B-100YP)
38-0168-03		Filter/Bezel (B-100A, B-100A/R)
38-0168-04		Filter/Bezel (B-100Y)

BL-15 UV Inspection Lamp

The BL-15 longwave 365 nm BLB UV lamp is ideal for inspection applications in hard to reach places. It has a narrow, durable plastic housing and a 15' cord.

- The lamp has a long, narrow housing that is lightweight for easy handheld use
- Two adjustable hooks are included



BL-15 Lamp Dimensions: 20L x 2Dia in. ($508 \times 50.8 \text{ mm}$), 2.5 lbs. Cord length: 15 ft.

Order Number

Description

115 V	230 V	BL-15 UV Inspection Lamp and Replacement Tube
95-0130-01	n/a	BL-15 (not CE)
34-00	017-01	Replacement Tube, 15-watt

UV Display and Bench Lamps

The 225D Bench Series, UVGD-68 Mineralight Lamp, and XX-Series UV Bench Lamps are ideal for a range of applications including; fluorescence, and inspection. Depending on the model, lamps can be mounted by brackets for overhead use.



225D Lamp Dimensions: $18.5L \times 4.5W \times 3.5H$ in. $(470 \times 114 \times 89$ mm), 10 lbs.

225D Mineralight Lamps

225D 25-Watt Mineralight Display Lamps can be mounted by brackets for overhead use.

- Mineralight 225D Display Lamps provide hours of UV illumination for fluorescence or inspection applications with 25-watt UV
- The lamp is manufactured with adjustable handles and mounting brackets for hanging the lamp

UVGD Mineralight Lamp

UVGD-68 uses a high intensity, shortwave (254 nm) quartz grid lamp.

- UVGD-68 quartz shortwave UV grid lamp is rated at 20,000 hours of use with unlimited on/off capability
- The UVG Long-Life Filter is included
- Excellent for large gem and mineral displays



UVGD-68 Lamp Dimensions: $18.5 L \times 4.75 W \times 5 H$ in. (470 x 120 x 89 mm), 10 lbs.

XX-Series UV Bench Lamps

Blak-Ray XX-Series bench lamps - longwave (365 nm), BLB (black light) or midrange (302 nm) UV and Mineralight (shortwave 254 nm) bench lamps are available in a selection of 15, 20 and 40-watt housings.

- Durable aluminum housings are painted with a scratch resistant powder finish
- Lamp uses include detection, NDT, fluorescence display, as well as benchtop inspection stations

XX Series shortwave bench lamps use 254 nm UV as a reliable and effective tool for disinfection in hospitals, research labs, pharmaceutical labs and clinics. Work areas and equipment can become contaminated with bacteria which may be passed via air or by hand, infecting research projects and workers. Once the micro-organism is determined and how much energy is needed, divide the energy required (in units $\mu W/cm^2$ at 12 in. for the XX - 15S) to calculate the total exposure time required to do the job.

- Place the lamp in an upward facing position for purifying air or facing downward for cleaning work surfaces
- The UV intensity can be increased by bringing the lamp closer to the object being sterilized



XX-15 lamp models can be attached to the Exposure Stand for exposure of materials to ultraviolet. Shelf is adjustable to set distances from the UV source.



Optional UV transmitting filter for the XX-15S allows use for fluorescence applications. Filter Cover can be attached to the XX-15S lamp.



XX-15S Lamp shown with brackets for downward illumination of a work area.



XX-Series Lamps are available in 15-watt, 20-watt, and 40-watt models.



Exposure Stand shelf is adjustable to different levels for exposure of samples.

Order Number

Description

115 V	230 V	Mineralight Lamps, XX-Series Lamps, XX-Accessories and Replacement Tubes
95-0190-01	95-0190-02	UVL-225D, Mineralight, 365 nm UV, 25-watt
95-0191-01	95-0191-02	UVS-225D, Mineralight, 254 nm UV, 25-watt
95-0192-01	95-0192-02	UVLS-225D, Mineralight, 365 nm/254 nm UV, 25-watt
95-0189-01	95-0189-02	UVM-225D, Mineralight, 302 nm UV, 25-watt
95-0026-07	95-0026-08	UVGD-68, Mineralight, 254 nm UV grid
95-0042-05	95-0042-09	XX-15S, 254 nm UV, 15-watt
95-0042-08	95-0042-15	XX-15M, 302 nm UV, 15-watt
95-0042-07	95-0042-13	XX-15L, 365 nm UV, 15-watt
95-0042-06	95-0042-11	XX-15 BLB, 365 nm BLB UV, 15-watt
95-0045-07	95-0045-08	XX-20S, 254 nm UV, 20-watt
95-0045-04	95-0045-05	XX-20 BLB, 365 nm BLB UV, 20-watt
95-0043-07	95-0043-08	XX-40S, 254 nm UV, 40-watt
95-0043-04	95-0043-05	XX-40 BLB, 365 nm BLB UV, 40-watt
19-0	0140-01	Clear Cover (XX-15 BLB)
38-0)172-02	Filter Cover (XX-15S)
18-0	0062-01	XX-15 Stand
34-0	060-01	Replacement Tube, UVL-225D/UVLS-225D, 365 nm UV, 25-watt
34-0	073-01	Replacement Tube, UVS-225D/UVLS-225D, 254 nm UV, 25-watt
34-0	0072-01	Replacement Tube, UVM-225D, 302 nm UV, 25-watt
77-0	001-04	Replacement Grid, UVGD-68, 254 nm UV grid
34-0	008-01	Replacement Tube, XX-15S, 254 nm UV, 15-watt
34-0	039-01	Replacement Tube, XX-15M, 302 nm UV, 15-watt
34-0	009-02	Replacement Tube, XX-15L, 365 nm UV, 15-watt
34-0	0017-01	Replacement Tube, XX-15 BLB, 365 nm BLB UV, 15-watt
34-0067-01		Replacement Tube, XX-20S, 254 nm UV, 20-watt
34-0	068-01	Replacement Tube, XX-20 BLB, 365 nm BLB UV, 20-watt
34-0	0067-02	Replacement Tube, XX-40S, 254 nm UV, 40-watt
34-0	068-02	Replacement Tube, XX-40 BLB, 365 nm BLB UV, 40-watt

XX Lamp Dimensions: XX-15: $19.75L \times 6W \times 4.25H$ in. $(502 \times 152 \times 108 \text{ mm})$, 5 lbs. XX-20: $24L \times 6W \times 4.25H$ in. $(610 \times 152 \times 108 \text{ mm})$, 10 lbs. XX-40: $49.6L \times 6W \times 4.25H$ in. $(1260 \times 152 \times 108 \text{ mm})$, 20 lbs

Exposure Stand Dimensions: $20W \times 6D \times 13H$ in. (508 x 152 x 330 mm), 8 lbs.

Hybridization Ovens

Analytik Jena's hybridization ovens provide accurate temperature and rotation speed controls plus variable bottle sizes and offset bottle positioning.

UVP Hybridizer

The UVP Hybridizer Hybridization Oven provides uniform temperature and rotation controls for thorough mixing of materials. This oven features fast heat-up capability. Units are stackable for maximizing lab space.



- Variable rotary wheel speed control (10 to 15 rpm) enables consistent saturation of samples
- Microprocessor accurately controls temperature
- Large LCD displays the current temperature inside the chamber
- Protective trays are removable to allow easy cleanup of spilled media
- RPM knob adjusts speed control of the rotary wheel
- Carousel holds twenty 35 x 150 mm bottles, ten 35 x 300 mm bottles or combination
- Offset bottle positioning for thorough mixing
- Carousel is removeable for use of the optional rocker tray (stainless steel 12.5W x 10D in.)

Order Number

Description

115 V	230 V	UVP Hybridization Oven
95-0030-01	95-0030-02	UVP Hybridizer - 17.5 W x 16 H x 15 D in. $(445 \times 406 \times 381 \text{ mm})$, 50 lbs. Heating Element: 1250 Watts, Rotary Wheel Variable Speed: 10 to 15 rpm, Bottle Included: One 35×300 mm Bottle Capacity: Twenty 35×150 mm, Ten 35×300 mm

Upper Chamber - Hybridization Oven

- Same features as UVP Hybridizer
- Variable speed control
- Large LCD display
- Stainless steel internal design

Lower Chamber - UV Crosslinker

- Shortwave 254 nm, 8-watt, ultraviolet tubes
- Preset and manual controls for ultraviolet or time exposures
- Microprocessor measures and controls UV output, ensuring maximum energy efficiency
- Large LCD display continuously displays time or energy settings
- Window on the door allows viewing of the process yet blocks UV radiation

UVP HybriLinker

The UVP HybriLinker Hybridization Oven combines a UVP Hybridization oven and UV Crosslinker (254 nm UV) in one unit. Each piece operates independently. The oven has the same features as the UVP Hybridizer.



UVP Multidizer

The UVP Multidizer Hybridization Oven is designed with two separate chambers offering several motion functions: shaking, orbital rocking and rotating all in one unit. Two chambers operate independently and allow hybridization and blotting procedures requiring different containers, motions or temperature settings.

Upper Chamber - Hybridization Oven

- Uses a roller action to operate the shaker tray (included) or optional acrylic carousel or orbital tray
- Shaker tray is designed for placement of flasks or other containers

Lower Chamber - UV Crosslinker

- Same features as UVP Hybridizer
- Multiple bottle sizes and offset bottle positioning



UVP Hybridizer and UVP Multidizer Temperature Settings:

Temperature: Ambient +10°C to 99.9°C

Temperature Stability: Inside Oven: +0.3°C to 68°C

Inside Bottles: +0.1°C to 68°C

Temperature Uniformity: Inside Oven: +0.1°C to 68°C

Inside Bottles: +0.1°C to 68°C

Order Number		Description
115 V	230 V	UVP Hybridization Ovens and Accessories
95-0031-01	95-0031-02	UVP Hybrilinker - 17.5W x 24H x 15D in. (445 x 610 x 381 mm), 70 lbs. Upper Chamber Heating Element: 1250 Watts, Rotary Wheel Variable Speed: 10 to 15 rpm, Bottle Included: One 35 x 300 mm Bottle Capacity: Twenty 35 x 150 mm, Ten 35 x 300 mm Lower Chamber UV Light Source: 254 nm UV
95-0340-01	95-0340-02	UVP Multidizer - 17.5W x 28.5H x 15D in. (445 x 725 x 381 mm), 75 lbs. Upper Chamber Heating Element: 500 Watts, Shaker Tray Dimension: 10W x 6D in. (254 x 152 mm), Shaker Tray Speed: 54 - 106 cycles/min., Carousel Rotation: 12 - 20 rpm Lower Chamber Heating Element: 1250 Watts, Rotary Wheel Variable Speed: 10 to 15 rpm, Bottle Included: One 35 x 300 mm Bottle Capacity: Twenty 35 x 150 mm, Ten 35 x 300 mm
07-0194-01		Bottle, small, 35 x 150 mm
07-01	.94-02	Bottle, large, 35 x 300 mm
98-0067-03		Rocker Tray (Hybridizer, Hybrilinker, Multidizer) Tray moves at 7 cycles/min and up to 14 cycles/min on the highest speed
98-0067-04		Orbital Tray (Hybridizer, Hybrilinker, Multidizer) Dimensions: $10.3W \times 8D$ in. (318×254 mm) Motion: 30 rpm at 2° angle
76-0089-01		Carousel, Acrylic (Hybridizer, Hybrilinker, Multidizer) Carousel holds up to Eight 35 \times 150 mm; Four 35 \times 300 mm bottles or Eight 50ml conicals
76-00)75-01	Carousel, Metal (Hybridizer, Hybrilinker, Multidizer) fits Ten 50 ml conicals, replaces rotary wheel
76-00	066-02	Carousel Kit for oversized bottles

UVP Minidizer

The UVP Minidizer Hybridization Oven is designed as a personal desktop unit ideal for use in laboratories with low use and space requirements. LCD displays current temperature.

- Rotation speed set at 12 rpm
- Easy-clean stainless steel interior
- 3/8" thick ß-blocking acrylic cover
- Cover swings open for easy access to the carousel



UVP Minidizer Temperature Settings:

Temperature Range: Ambient +10°C to 80°C Temperature Accuracy: +0.5°C at 78°C Temperature Uniformity: +0.1°C at 68°C

Order Number

Description

115 V	230 V	UVP Hybridization Oven
95-0330-01	95-0330-02	UVP Minidizer - 9H \times 13W \times 8D in. (229 \times 330 \times 203 mm), 12 lbs. Heating Element: 500 Watts, Speed: 12 rpm, Bottle Capacity: Four 35 \times 150 mm, Four 50 ml or Eight 15 ml

UV Crosslinkers

UV Crosslinkers assure consistent UV output for many uses including DNA bonding and UV curing.

UVP Crosslinker

UV crosslinking is used for attaching nucleic acids to a membrane for example which takes seconds as compared to oven baking. The crosslinkers utilize a microprocessor to control and measure the dose of UV radiation.

- Built-in radiometer calibrated to a NIST traceable standard enables precise and accurate dosing to obviate end-user calibration
- Safety interlocks to prevent users from accidental UV
- Capable of delivering up 10 J/cm2 of UVA, UVB, or
- Highly-uniform surface illumination
- Compact-size to accommodate limited lab space
- Extensive publication record using UVP Crosslinkers



External Dim (L x W x H): 41 cm x 40 cm x 26.5 cm Internal Dim (L x W x H): 35 cm x 27 cm x 16 cm Weight: 6.8 Kg; 15 lb Operating Power: 100 - 115VAC & 230VAC 50/60Hz Certifications: CE, RoHS (CSA In Process)

Order Number

Description

115 V	230 V	UVP Crosslinkers, UVP Translinkers and Replacement Tubes
849-95-0615-01	849-95-0615-02	CL-3000 Crosslinker, 254 nm
849-95-0615-03	849-95-0615-04	CL-3000M Crosslinker, 302 nm
849-95-0615-05	849-95-0615-06	CL-3000L Crosslinker, 365 nm
34-0007-01		Replacement UV tube, 8 Watt, 254 nm
34-0042-01		Replacement UV tube, 8 Watt, 302 nm
34-0006-01		Replacement UV tube, 8 Watt, 365 nm

UVP Incubator

This UV incubator provides precise temperature control and uniformity throughout the chamber for incubation of biological assays, fungal, bacterial cultures, eggs, and other samples.



Incubator Dimensions: $17.5W\times14.75D\times18H$ in. (445 x 375 x 457 mm), Volume: 0.95 cubic ft. (26.9 liters), 48 lbs.

- Microprocessor-controlled incubation temperature
- Heating element and fan generate uniform temperature throughout the chamber
- Decontaminate the chamber between growth experiments with the overhead shortwave
 254 nm UV
- Two ventilated shelves included; remove the shelves to stack up to 150 (10 cm) plates
- Temperature Ambient to 68°C, Accuracy: +0.5°C Uniformity: +0.1°C at 37°C, Humidity: ~80%

Order Number

115 V	230 V	UVP Incubator and Replacement Tube
95-0358-01	95-0358-02	UV Benchtop Incubator (SI-950)
34-0007-01		Replacement Tube, 8-watt, 254 nm UV

Chromato-Vue Viewing Cabinets

Chromato-Vue Viewing Cabinets provide a darkroom environment for UV illumination of materials. Large high performance cabinets are designed for chromatography, non-destructive testing (NDT), inspection, quality control and other applications. Compact cabinets are available for viewing minerals and for educational uses.

High Performance UV Cabinets

C-75 UV Cabinet



External Dim: 19.75W x 16.5D x 15.75H in. (502 x 419 x 400mm) Internal Dim: 17W x 14D x 6.6H in. (432 x 356 x 167mm) Weight: 18 lb

High intensity 15-watt shortwave (254 nm) and longwave (365 nm) UV tubes are positioned on two sides of the C-75 Chromato-Vue Cabinet, providing overhead UV illumination for many applications including fluorescence studies and non-destructive testing.

- Power switches are conveniently placed for operating the UV and interior white light
- A lightweight curtain blocks exterior light from the cabinet interior
- Soft rubber viewport provides a comfortable viewing area with adequate space for glasses

C-75 Large UV Cabinet features shortwave and longwave plus interior white light.

C-70G and C-71 UV Cabinets

- The C-70G Chromato-Vue Cabinet includes two each of 15-watt shortwave (254 nm) and longwave UV
- The C-71 has four 15-watt, longwave (365 nm) UV tubes on one side of the unit
- Control switches enable selection of the UV wavelengths or the interior overhead white light
- Easy access to the cabinet interior is via the curtain which also blocks ambient light
- Longwave UV provides brilliant fluorescence for uses such as non-destructive testing and document verification
- Shortwave UV can be used for decontamination, document examination and TLC applications
- Chromato-Vue cabinets include a soft rubber viewport and contrast control filter

C-70G UV Cabinet includes two each of 15-watt shortwave and longwave UV tubes mounted inside the cabinet; C-71 has four 15-watt longwave tubes.

The C-70G and C-71 Chromato-Vue UV viewing cabinets feature a removable bottom panel so the cabinet may be placed over large samples or a transilluminator. These cabinets are made of durable, lightweight plastic.



External Dim: $23.4W \times 15.8D \times 13H$ in. (594 x 401 x 330 mm) Internal Dim: $21W \times 13D \times 8H$ in. (533 x 330 x 203 mm) Weight: 22 lbs.

Order Number

Description

115 V	230 V	High Performance UV Viewing Cabinets and Replacement Tubes
95-0253-01	95-0253-02	C-75 Large UV Viewing Cabinet with 254/365 nm UV
95-0020-04	95-0020-05	C-70G Large Viewing Cabinet with 254/365 nm UV
95-0022-01	95-0022-02	C-71 Large Viewing Cabinet with 365 nm UV
34-0009-02		Replacement Tube, 15-watt, 365 nm UV
34-0008-01		Replacement Tube, 15-watt, 254 nm UV

Mini UV Viewing Cabinets

The Mini Chromato-Vue UV Viewing Cabinets are designed with a metal base and plastic top. The C-15G cabinet includes a UVGL-58 UV lamp. Lamps for other mini cabinets are ordered separately.

Mini Cabinet Dimensions: External: $9L \times 10.5W \times 12H$ in. (229 x 267 x 305 mm) Internal: $8.75L \times 10W \times 7H$ in. (222 x 254 x 178 mm) Weight: 4 lbs

- The bottom panel of the cabinet is removable
- The lamp fits snugly on top of the cabinet
- A contrast control filter absorbs UV energy and protects the eyes
- Soft rubber viewport provides a comfortable viewing area with space for eyeglasses
- Lightweight access curtain blocks out external light from the cabinet interior

C-10P Mini UV Cabinet

C-10P Mini accommodates the 6-watt Rechargeable Lamps which are excellent for field use applications (see page 22 for Rechargeable Lamps).

C-10E4 Mini UV Cabinet



C-10E4 Mini UV Cabinet Designed for use with the 4-watt EL Series Lamps (pages 19-20).

C-15G Mini UV Cabinet



C-15G Mini UV Cabinet Combines the C-10 Cabinet with UVGL-58 multi-band lamp with shortwave and longwave UV.

Order Number

115 V	230 V	Mini UV Viewing Cabinets and Replacement Tubes
95-0072-01		C-10 Mini Cabinet for 4 and 6-watt Portable Series UV Lamps
95-0072-02		C-10P Mini Cabinet for 6-watt Rechargeable Lamps
95-0072-08		C-10E4 Mini Cabinet for 4-watt EL Lamps
95-0072-09		C-10E6 Mini Cabinet for 6-watt EL Lamps
95-0072-06	95-0072-07	C-15G Mini Cabinet with UVGL-58 UV Lamp

Multifunctional UV Cabinet

C-65 UV Cabinet

C-65 Chromato-Vue Cabinet accommodates one or two EL Series 8-watt lamps ordered separately. Several lamps are listed below. For additional lamps, see pages 19-20. Use of two lamps illuminates the interior uniformly from two sides of the cabinet.

- The bottom panel of the cabinet is removable
- Includes an interior overhead white light
- Access curtain blocks ambient light
- Soft rubber viewport provides a comfortable viewing area with space for eyeglasses
- Lightweight access curtain blocks out external light from the cabinet interior

C-65 UV Cabinet is designed to accommodate one or two of the EL Series 8-watt Lamps, they can be used with the C-65 cabinet or removed for handheld use (See pages 19-20).



External Dim: $19.75L \times 16.5W \times 15.75H$ in. (602 x 419 x 400 mm) Internal Dim: $17L \times 14W \times 6H$ in. (533 x 330 x 400 mm) Weight: 13.5 lbs.

Order Number

Description

115 V	230 V	Multifunctional UV Cabinet
95-0257-01	95-0257-02	C-65 Mid-Size UV Viewing Cabinet

Blak-Ray Fluorescent Inks

These Fluorescent Inks are ready-made and suited for use on many surfaces including skin, fabric and porous or textured materials. RI-10 and RI-20 inks are used for re-admittance at events. See pages 17-29 for selection of longwave lamps.

- Inks are economical
- Simple to use
- Inks are non-toxic

Order Number	Description	Color	Fluorescent Color	Used For	Used On	Applied By
96-0021-04	RI-10 Ink, Porous Oty: 12 pt./case	Colorless Alcohol Base	Blue	Textile, Marking, etc.	Skin or Fabric	Felt Pen, Stencil, Stamp and Pad, Brush, Auto- matic Marker, Roller
96-0021-05	RI-20 Ink, Porous Oty: 12 pt./case	Faint Yellow Alcohol Base	Green	Textile, Marking, etc.	Skin or Fabric	Felt Pen, Stencil, Stamp and Pad, Brush, Auto- matic Marker, Roller
96-0057-04	A-946 Ink, Non-Porous Oty: 12 pt.	Colorless Solvent Base	Blue	Industrial Coding, Theatrical, Coupons, Security Printing, Raffle Tickets, Inventory Con- trol, Advertising	Aluminum, ABS, Acrylic, Rubber, Cellulose Acetate, Formica, Nylon, Polystyrene, Polyethylene	Roller, Felt Pen, Stamp and Pad, Automatic Marker, Flexographic, Rotogravure, Brush

Pen-Ray Light Sources

Pen-Ray Lamps are available with a variety of lighted lengths and diameters, wavelengths, phosphor and handles.

Pen-Ray light sources are low-pressure, cold cathode mercury UV lamps made of double bore quartz tubing. The lamps are individually created by master craftsmen to ensure quality and reliability. The lamps supply a high degree of stable, isolated spectral line accuracy and long life (3000+ hours). A variety of lighted lengths and wavelengths are available. Lamp uses are numerous because of their convenient small size and positioning of both electrodes at one end only.



Applications for Pen-Ray Lamps include:

Ozone production
Barcode reading
Decontamination
Fluorescent inspections
Photochemical reactions
Interferometry
Chromatography
Photometric and fluorometric instruments
Spectroscopic wavelength calibration
Monochromatic sources for optical systems

Pen-Ray Lamp Variables: Lamp cord/connectors: 16 in. (406 mm) with standard connector; different cable lengths, handles, connectors available.

Power Supplies: Optimum starting and operation of the lamps. Use the recommended power supplies (ordered separately).

Filter Shields: Optional shields direct or modify the emission output for 11SC-1 series lamps:

- Shield A provides a 0.04 in. ID hole
- Shield B has a 0.31 x 0.63 in. window
- Shield C has a 0.19 x 1.5 in. window

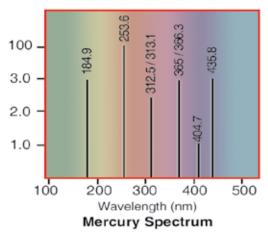
Order Number	Pen-Ray Murcury Lamps	Peak Emission	Lighted Length	Quartz Diameter	Handle Diameter	Lamp Length
90-0001-04	11SC-0.88-AVP302-2 Hg	302 nm	22.3 mm	9.2 mm	11.2 mm	79.5 mm
90-0001-05	11SC-2.25-AV-16-800 Hg	254 nm	57.2 mm	9.2 mm	11.2 mm	114.3 mm
90-0003-01	11SC-2.12-AO-16 Hg	254 nm	53.8 mm	6.5 mm	9.5 mm	117.3 mm
90-0004-01	3SC-9.00-AO-16S	254 nm	228.6 mm	9.5 mm	12.7 mm	295.1 mm
90-0004-07	3SC-6.00-AO-16 Hg	254 nm	152.4 mm	9.5 mm	12.7 mm	218.9 mm
90-0012-01	11SC-1 2.12-PO-16 Hg	254 nm	53.8 mm	6.5 mm	9.5 mm	117.3 mm
90-0019-01	11SC-1L 2.25-PB-16 Hg	351 nm	57.1 mm	6.5 mm	9.5 mm	117.3 mm
90-0019-04	11SC-1 2.25-PB-16-800Hg	351 nm	57.1 mm	6.5 mm	9.5 mm	117.3 mm
90-0019-06	11SC-1 3.75-PL351-16 Hg*	351 nm	95.3 mm	6.5 mm	9.5 mm	155.4 mm
90-0020-01	11SC-2.75-PO-16 Hg	254 nm	19.1 mm	6.5 mm	9.5 mm	82.6 mm
90-0033-01	11SD-0.94-AV-6T Hg*	254 nm	23.8 mm	9.2 mm	11.2 mm	72.1 mm

^{*} Ozone free

Pen-Ray Grid Lamps

Grid lamps emit a 254 nm mercury emission spectra and are made with standard or ozone free quartz. Grids supply excellent uniformity over the entire area. Sizes available from 2 \times 2" to 12 \times 12". Custom reflectors and configurations are available. Recommended power supplies are PS-4 and PS-8. Contact us for specifications and ordering information.

Lamp Spectra



The graph illustrates the relative emission intensities of mercury Pen-Ray lamps (page 37). Additional spectral charts and data can be obtained from Analytik Jena US.

Pen-Ray Power Supplies

Pen-Ray Lamps operate on AC current. For certain systems it may be desirable to operate the lamp at higher frequencies than 60 Hz. Lamps can operate satisfactorily at frequencies from 50 Hz to 50 kHz. Lamps using PS-6 operate at the nominal frequency of 38 kHz. Mating recommendations are available to provide optimum energy output from, and maximum life span of, Pen-Ray Lamps.

The power supplies feature a standard lamp current shown in the chart. Power supplies can be ordered with specific ranges and currents. Contact Analytik Jena US for information.

Specific DC power supplies are designed as open power sources with board only and no housing for placement in other units.



PS-1 Power supply (99-0055-01) with lamp connector. PS-2 and PS-3 have the same housing as the PS-1.



Pen-Ray Rare Gas Lamps

Rare gas lamps incorporate the Pen-Ray lamp body but replace the mercury for other reactive ingredients. Gases available are argon, krypton, neon, neon-mercury, and xenon. Ask Analytik Jena US about other gas combinations. A recommended power supply (order separately) is noted for each lamp.



 Rare Gas Lamps are available with Argon, Krypton, Neon, or Xenon fills

Order Number	Pen-Ray Rare Gas Lamps	Gas Fill	Lighted Length	Quartz Diameter	Handle Diameter	Lamp Length	Cord Length
90-0013-01	11AC-2.12-PO-16	Argon	53.8 mm	6.5 mm	9.5 mm	117.3 mm	406.4 mm
90-0014-01	11KC-2.12-PO-16	Krypton	53.8 mm	6.5 mm	9.5 mm	117.3 mm	406.4 mm
90-0015-01	11NC-2.12-PO-16	Neon	53.8 mm	6.5 mm	9.5 mm	117.3 mm	406.4 mm
90-0016-01	11CC-2.12-PO-16	Neon/Mercury	53.8 mm	6.5 mm	9.5 mm	117.3 mm	406.4 mm
90-0017-01	11XC-2.12-PO-16	Xenon	53.8 mm	6.5 mm	9.5 mm	117.3 mm	406.4 mm

Order Number	Power Supply Model	Input Current	Primary Voltage	Lamp Current Di	mensions

AC INPUT POWER SUPP	PLIES				
99-0055-01	PS-1	AC	115V/60Hz	18 (mA/AC)	160 x 94 x 53 mm
99-0055-02	PS-1	AC	230V/50Hz	18 (mA/AC)	160 x 94 x 53 mm
95-0056-01	PS-2	AC	115V/60Hz	6 (mA/AC)	160 x 94 x 53 mm
95-0056-02	PS-2	AC	230V/50Hz	6 (mA/AC)	160 x 94 x 53 mm
99-0057-01	PS-3	AC	115V/60Hz	10 (mA/AC)	160 x 94 x 53 mm
99-0057-02	PS-3	AC	230V/50Hz	10 (mA/AC)	160 x 94 x 53 mm
95-0004-01	PS-4	AC	115V/60Hz	26 (mA/AC)	117 x 147 x 97 mm
95-0004-02	PS-4	AC	230V/50Hz	26 (mA/AC)	117 x 147 x 97 mm
40-0062-01	PS-8	AC	115V/60Hz	30 (mA/AC)	256 x 102 x 86 mm
40-0062-02	PS-8	AC	230V/50Hz	30 (mA/AC)	256 x 102 x 86 mm
99-0033-01	PS-9	AC	115V/60Hz	48 (mA/AC)	147 x 117 x 92 mm
99-0033-02	PS-9	AC	230V/50Hz	48 (mA/AC)	147 x 117 x 92 mm
DC INPUT POWER SUPP	PLIES				
44-0002-01	PS-7*	DC	12V/30kHz	5/10 (mA/AC)	28 x 56 x 17 mm
99-0076-01	PS-6*	DC	24V/38kHz	18 (mA/AC)	98 x 89 x 38 mm
99-0077-01	PS-5*	DC	12V/38kHz	18 (mA/AC)	98 x 89 x 38 mm
99-0065-03	PS-6	DC	24V/38kHz	18 (mA/AC)	122 x 108 x 51 mm
99-0065-04	PS-6**	DC	24V/38kHz	10 (mA/AC)	122 x 108 x 51 mm
99-0065-05	PS-6	DC	24V/38kHz	10 (mA/AC)	122 x 108 x 51 mm
99-0065-06	PS-6**	DC	24V/38kHz	6 (mA/AC)	122 x 108 x 51 mm
99-0065-07	PS-6	DC	24V/38kHz	6 (mA/AC)	122 x 108 x 51 mm
* Board only **	With timer				

Pen-Ray Zinc and Cadmium Lamps

Zinc and cadmium lamps are designed for use with UV absorption cells and detectors. Because of the close proximities of components and high operating temperatures of the lamps, the configuration (lamp body suspended within a vacuum envelope) insulates the lamp from its environment. Zinc lamps can substitute for deuterium lamps due to the zinc lamps' superior thermal stability, long life and prominent 214 nm energy peak. Cadmium peak lines are at 229 nm and 326 nm. Electrical leads are available in either side (radial) or end (axial) configurations.



Order Number	Pen-Ray Zinc & Cadmium Lamps	Lead Type/ Length	3	Quartz Diameter	Lamp Length	Cord Length	Power Supply
90-0069-05	Zinc	Radial / 203 mm	20 mm	17.8 mm	110 mm	203 mm	PS-9
90-0069-06	Zinc	Axial / 203 mm	20 mm	17.8 mm	110 mm	203 mm	PS-9
90-0069-07	Zinc	Radial / 305 mm	20 mm	17.8 mm	110 mm	305 mm	PS-9
90-0069-11	Zinc	Axial / 432 mm	20 mm	17.8 mm	110 mm	431.8 mm	PS-9
90-0071-03	Cadmium	Radial / 203 mm	24 mm	17.8 mm	110 mm	203 mm	PS-9

Pen-Ray Fields Packs

Pen-Ray Field Packs combine a light source and a DC power supply (9V battery included) in a compact, portable package. Pack is lightweight (0.3 lbs) and small enough to fit in a pocket. Field Pack FP-LSD provides two interchangeable light sources (365 nm and 254 nm).

Order Number	Pen-Ray Field Pack Model	Peak Emission	Lighted Length	Quartz Diameter	Handle Diameter	Lamp Length
95-0256-01	Field Pack FP-L	365 nm	44.5 mm	6.5 mm	9.5 mm	108 mm
95-0256-02	Field Pack FP-S	254 nm	44.5 mm	6.5 mm	9.5 mm	108 mm
95-0256-03	Field Pack FP-LSD	254/365 nm	44.5 mm	6.5 mm	9.5 mm	108 mm

PCQ PhotoChemical Quartz Lamps

PCQ lamps are low pressure and manufactured of high grade mercury quartz. Lamps emit approximately 90% of their radiation at 254 nm. The lamps feature a 24 - 40 mm ground glass taper joint and a quartz diameter of 9.5 mm (0.375 inches). PhotoChemical Quartz Lamp details can be found on our website.

Stable Ozone Generators

Stable Ozone Generators (SOG) use photochemical reaction of oxygen and shortwave (185 nm) UV to produce a continuous flow of ozone. Ozone generators provide a stable source for water purification, oxidant testing, and air pollution studies.

- SOG models use a removable Pen-Ray lamp inserted into the generator box
- Power supply included with the lamp feeds stable power to the lamps for uniform ozone generation

115 V	230 V	Stable Ozone Generator Model	Ozone Production	Lighted Length
97-0066-01	97-0066-02	SOG-1	0.8 ppm @ 0.5 L/min.	2 in. (50.8 mm)
97-0067-01	97-0067-02	SOG-2	0.8 ppm @ 0.5 L/min.	9 in. (228.6 mm)

UV Intensity Meters

The measurement of the UV irradiance is the most effective way to monitor the useful life of any UV light source. Analytik Jena meters ensure maximum operating efficiency of any UV system.

UVX Digital Radiometers

The UVX Radiometer is used with one of the three sensors (ordered separately) for measuring shortwave (254 nm), longwave (365 nm) and midrange (302 nm) UV.

- Choose from three sensors: UVX-25 shortwave, UVX-31 midrange or UVX-36 longwave
- The UVX range switch provides selection from three intensity ranges: 0 to 20 mW/cm² / 0 to 2000 μW/ cm² / 0 to 200 μW/cm2
- The attenuator extends the reading range up to 200 mW/cm2
- 9-volt battery for up to 120 hours of use
- A port enables connection to a chart recorder for continuous monitoring



J-Series Analog UV Meters

J-Series Meters are photovoltaic devices for accurate and repeatable readings of shortwave and longwave UV sources. The durable plastic housing withstands heavy, sustained use.

J-221 Meter measures the intensity of 365 nm longwave UV. The sensor range is within 300 - 400 nm UV with a peak sensitivity at 365 nm. Intensity readings are 0-1200 μ W/cm² (A Scale) and 1000 - 6000 μ W/cm² (B Scale). J-221 Meter complies with MIL STD 45662-A.

J-225 Meter measures the intensity of 254 nm shortwave UV. The sensor range is within 220 - 280 nm UV with peak sensitivity at 254 nm. Intensity readings at 0 - 2400 μ W/cm² (A scale) and 2000 - 12000 μ W/cm² (B Scale).



J-Series meters measure UV sources

	UVX Radiometers, J-Series Meters and Accessories
97-0015-02	UVX Radiometer, 6.2L x 2H x 3.6W in. (157 x 51 x 91 mm), 1 lb.
98-0035-01	Attenuator, 10:1
45-0012-01	9V Battery
97-0016-01	UVX-25 Sensor, Calibration Point: 254 nm, Bandpass: 250 - 290 nm
97-0016-04	UVX-31 Sensor, Calibration Point: 310 nm, Bandpass: 280 - 340 nm
97-0016-02	UVX-36 Sensor, Calibration Point: 365 nm, Bandpass: 335 - 380 nm
97-0003-01	J-221 Longwave Meter 365 nm UV; 3H x 3D x 3W in. (76 x 76 x 76 mm), 9 oz
97-0004-01	J-225 Shortwave Meter 254 nm UV, 3H x 3D x 3W in. (76 x 76 x 76 mm), 9 oz

Ultraviolet Applications

For UV application notes and information, contact Analytik Jena US or visit our website.

UVA Longwave UV - 365 nm

Laboratory/Research

- Bacterial Identification
- Specimen Staining
- Gel Electrophoresis
- Chlorination
- Fluorochemistry
- Pesticide Analysis
- Fluorescence Photography
- Titration Processes
- TIC
- Nucleic Acid Visualization
- Genetic Experiments
- Virology

Criminology

- Detection of Altered Documents
- Counterfeit Currency Detection
- Signature Verification
- Forensic Applications
- Coding/Marking
- Arson Investigation
- Lab Testing

Electronics

- Clean Room Inspection
- Epoxy Coat Inspection

Education

Fluorescence Demonstration and Analysis

Automotive

- Leak Detection
- Windshield Repair

Decontamination

- Aflatoxin Detection
- Rodent Contamination and Lice Detection
- Detection of Food Contamination
- Milkstone Inspection
- E-Coli Water Testing
- Culture Fluorescence

Medical

- Medical Diagnosis
- Dermatology
- Cosmetology

Industrial

- Non-Destructive Testing
- UV Curing
- Magnetic Particle Inspection
- Inspection of Conformal Coatings
- Leak Detection

Miscellaneous

- Examination of Fine Art
- Archaeology
- Entomology
- Photoresist Exposure
- Philately
- Re-Admission Control
- Mineralogy

UVB Midrange UV - 302 nm

Research

- Gel Electrophoresis
- Gel Viewing
- Optical Lab Measurements

Miscellaneous

- Mineralogy
- Art and Museum Inspection

Medical

- Phototherapy
- Dermatological

Industrial

- UV Curing
- Gradient Sampling
- Solar Experimentation

UVC Shortwave UV - 254 nm

Laboratory/Research

- Fluorochemistry
- Mercury Detectors
- Optical Alignment
- Pesticide Analysis
- Polymer Curing
- DNA Analysis
- Biochemical Testing
- Electrophoresis
- TLC
- Mutation
- Mycology
- Nucleic Acid Visualization
- Photochemistry
- Photo Disassociation

Criminology

- Document Examination
- Field Clue
- Arson Investigation
- Toxicology

Education

Fluorescence Demonstration/Analysis

Miscellaneous

- Air Pollution
- E-Coli Testing
- Alumina Testing
- Archaeology
- Fluorescence Photography
- Mineralogy
- Philately



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Close to the customer – for us, this means being present worldwide. We are always working to further expand our personalized service and strong international team of specialists. With a continuously growing distribution and partner network, we also ensure that close contact with users is maintained at all times. A list of world wide dealers for the products listed in this brochure can be found at: uvp.com/partners

For more information on the products listed in this catalog, contact us here:

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Outside of the US? Visit:

www.uvp.com

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