



UVP

- **BiImaging Systems**
- **Ultraviolet Products**
- **Laboratory Equipment**
- **Light Sources**

Life Science | Education | Pharmaceutical | Biotechnology | Forensics | Industrial

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Not all products are available in all countries or through all dealers. Contact UVP or a dealer for product availability.

ABOUT UVP

Thank you for your interest in UVP's products. We look forward to assisting you with product information and technical and sales assistance. We appreciate the opportunity to be of support to you.

Additional information is available on our website at **UVP.com** including further product details, application notes, technical support information and new product releases.

Since 1932, UVP has created and designed ultraviolet lamps and products for science, industry and education. Today, UVP continues its research and development of laboratory equipment including an extensive array of gel documentation and imaging systems, ultraviolet products, hybridization ovens and UV sterilization equipment. Applications for UVP's instruments range from chemiluminescence, electrophoresis, fluorescence, bioluminescence, colorimetric, sterilization and more. See the difference in your results with UVP's equipment. Visualize, identify, document and analyze with assurance that you are using quality, reliable equipment from UVP.

In addition to over 100 employees in our Upland facility, UVP has a worldwide network of sales, service and support representatives to assist with your requirements. Our innovative engineering and state of the art manufacturing techniques and equipment make UVP products the first choice of leading organizations around the world. Integrated manufacturing processes allow quick turnaround of production. UVP's capabilities combine computer-aided product design engineering, cost-effective sheet metal and paint production, focused work-cell assembly and inspection and quality control assurance for complete customer satisfaction.

UVP, accelerating life science research. Our mission is to offer customers an increasing array of technically advanced products to enable and accelerate discovery. UVP's headquarters and manufacturing facility is located in Upland, California. The European Operations, Ultra-Violet Products Ltd., is located in Cambridge, England.

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ULTRAVIOLET LAMPS

UVP designs and manufactures the largest selection of UV handheld, portable, high intensity, benchtop and display lamps for many uses.

PL Series UV Hand Lamps

PL Series ultraviolet lamps (4 or 6-watts) are made of durable, lightweight plastic. These lamps can be used in a variety of applications including fluorescence of stained gels and sterilization.

Compact UV Lamps

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

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

J-124 Stand for use with Compact Lamps.



Dimensions J-124 Stand:

6.5H x 7.5W x 4.8D in. (165 x 190 x 122mm)

Handheld UV Lamps

Handheld UV Lamps (6-watts) include shortwave (254nm), longwave (365nm) UV or the combination shortwave/longwave in one lamp.

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

Handheld Lamps - Ordering Information

| | |
|--------------------|-------------------|
| UVG-54 | 95-0004-09 (115V) |
| 6-watt, 254nm UV | 95-0004-10 (230V) |
| Replacement Filter | 98-0004-03 |
| Replacement Tube | 34-0013-01 |

| | |
|-----------------------------|-------------------|
| UVGL-55 (split-tube) | 95-0005-05 (115V) |
| 6-watt, 365nm/254nm UV | 95-0005-06 (230V) |
| Replacement Filter | 98-0005-03 |
| Replacement Tube | 34-0015-01 |

| | |
|--------------------|-------------------|
| UVL-56 | 95-0006-02 (115V) |
| 6-watt, 365nm UV | 95-0006-03 (230V) |
| Replacement Filter | 98-0006-03 |
| Replacement Tube | 34-0034-01 |

| | |
|--------------------|-------------------|
| UVM-57 | 95-0104-01 (115V) |
| 6-watt, 302nm UV | 95-0104-02 (230V) |
| Replacement Filter | 98-0004-03 |
| Replacement Tube | 34-0044-01 |

| | |
|---------------------------|-------------------|
| UVGL-58 | 95-0007-05 (115V) |
| 6-watt, 365nm/254nm UV | 95-0007-06 (230V) |
| Replacement Filter | 98-0004-03 |
| Replacement Tube 365nm UV | 34-0034-01 |
| Replacement Tube 254nm UV | 34-0013-01 |

| | |
|-------------------------|------------|
| J-129 Lamp Stand | 98-0016-03 |
|-------------------------|------------|

Dimensions J-129: 9.75H x 13L in. (248 x 330mm)



Compact UV Lamps 4-watts lamps feature an on/off button conveniently located on the back of the lamp.

Dimensions Compact Lamps:

7.8L x 2.8W x 2.1H in. (198 x 71 x 53mm)
Weight: 1 lb (0.45kg)

Compact Lamps - Ordering Information

| | |
|--------------------|-------------------|
| UVG-11 | 95-0016-14 (115V) |
| 4-watt, 254nm UV | 95-0016-15 (230V) |
| Replacement Filter | 98-0016-02 |
| Replacement Tube | 34-0003-01 |

| | |
|-----------------------------|-------------------|
| UVGL-15 (split-tube) | 95-0017-09 (115V) |
| 4-watt, 365nm/254nm UV | 95-0017-10 (230V) |
| Replacement Filter | 98-0017-02 |
| Replacement Tube | 34-0004-01 |

| | |
|--------------------|-------------------|
| UVL-21 | 95-0018-02 (115V) |
| 4-watt, 365nm UV | 95-0018-03 (230V) |
| Replacement Filter | 98-0018-02 |
| Replacement Tube | 34-0005-01 |

| | |
|---------------------------|-------------------|
| UVGL-25 | 95-0021-12 (115V) |
| 4-watt, 365nm/254nm UV | 95-0021-10 (230V) |
| Replacement Filter | 98-0016-02 |
| Replacement Tube 365nm UV | 34-0005-01 |
| Replacement Tube 254nm UV | 34-0003-01 |

| | |
|----------------------|-------------------|
| UVL-23 | 95-0019-01 (115V) |
| 4-watt, 365nm BLB UV | 95-0019-03 (230V) |
| Replacement Tube | 34-0010-01 |

| | |
|---------------------|------------------|
| UVL-23R | 95-0019-14 (12V) |
| 4-watt, 365nm BL UV | 34-0005-01 |

| | |
|-------------------------|------------|
| J-124 Lamp Stand | 98-0020-03 |
|-------------------------|------------|



Handheld UV Lamps are lightweight 6-watt models; J-129 Lamp Stand (left).

Dimensions Handheld Lamp:
14.9L x 3.2W x 2.5H in. (378 x 81 x 64mm)
Weight: 2 lb (0.91kg)

3UV™ Multi-Wavelength UV Lamps

This innovative lamp (patented) houses three UV wavelengths operated via A/C (mains) power.

- 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 and ergonomically designed for handheld or stationary use

Ordering Information

| | | |
|----------------------|----------------------|-------------------|
| 3UV-34 4-watt | 254nm/302nm/365nm UV | 95-0341-01 (115V) |
| | | 95-0341-02 (230V) |
| 3UV-36 6-watt | 254nm/302nm/365nm UV | 95-0342-01 (115V) |
| | | 95-0342-02 (230V) |
| 3UV-38 8-watt | 254nm/302nm/365nm UV | 95-0343-01 (115V) |
| | | 95-0343-02 (230V) |

For replacement tubes: see bottom of page.

Protective eyewear is essential for anyone using UV equipment. See page 7 for UV blocking eyewear.

EL Series 2UV and 3UV Lamps

EL Series Lamps are fabricated of an 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. The lamps can be placed in the J-138 stand (see p. 5) for hands-free use.

The **3UV™** EL model is available with 8-watt tubes.

- 3UV model houses three UV wavelengths (254nm shortwave, 302nm midrange and 365nm longwave) in one unit, reducing the need to purchase multiple lamps
- Easily switch among the three UV wavelengths as required for your application

The **2UV™** models include two different UV wavelengths in one lamp.

Lamp Dimensions:

4-Watt: 9.8L x 3.8W x 2.5D in. (249 x 97 x 64mm)
 6-Watt: 12L x 3.8W x 2.5D in. (302 x 97 x 64mm)
 8-Watt: 14.8L x 3.8W x 2.5D in. (376 x 97 x 64mm)

UV is used in many applications. Refer to page 36 for a many uses.

Replacement Tubes

| | |
|---------------------|------------|
| Tube, 8-watt, White | 34-0056-01 |
| Tube, 8-watt, 365nm | 34-0006-01 |
| Tube, 8-watt, 302nm | 34-0042-01 |
| Tube, 8-watt, 254nm | 34-0007-01 |
| Tube, 6-watt, 365nm | 34-0034-01 |
| Tube, 6-watt, 302nm | 34-0044-01 |
| Tube, 6-watt, 254nm | 34-0013-01 |
| Tube, 4-watt, 365nm | 34-0005-01 |
| Tube, 4-watt, 254nm | 34-0003-01 |

3UV Lamps house longwave, shortwave and midrange UV in one lamp (8-watt model pictured).



Lamp Dimensions:

3UV-34: 9.5L x 3W x 4.5D in. (241 x76 x114mm)
 3UV-36: 12.5L x 3W x 4.5D in. (318 x76 x114mm)
 3UV-38: 15.5L x 3W x 4.5D in. (394 x76 x114mm)



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

Ordering Information

| | | |
|-----------------------------|--------------------|---------------------------------|
| UVLMS-38 8-watt, 3UV | 365nm/302nm/254nm | 95-0252-01 (115V) |
| | Replacement Filter | 95-0252-02 (230V) 38-0158-06 |
| UVLM-28 8-watt, 2UV | 365nm/302nm | 95-0251-01 (115V) |
| | Replacement Filter | 95-0251-02 (230V) 38-0158-03 |
| UVLS-28 8-watt, 2UV | 365nm/254nm | 95-0201-01 (115V) |
| | Replacement Filter | 95-0201-02 (230V) 38-0158-03 |
| UVLM-26 6-watt, 2UV | 365nm/302nm | 95-0278-01 (115V) |
| | Replacement Filter | 95-0278-02 (230V) 38-0182-03 |
| UVLS-26 6-watt, 2UV | 365nm/254nm | 95-0279-01 (115V) |
| | Replacement Filter | 95-0279-02 (230V) 38-0182-04 |
| UVLS-24 4-watt, 2UV | 365nm/254nm | 95-0271-01 (115V) |
| | Replacement Filter | 95-0271-02 (230V) 38-0183-03 |

EL Series - White/UV and Twin

UV/White and Twin EL Series Lamps are available in four, six and eight watt configurations.

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



EL Series White/UV lamps include UV and white light (UVS-14 shown).



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

UV/White Models - Ordering Information

| | |
|---|--|
| UVL-18 8-watt, 365nm UV/white Replacement Filter | 95-0198-01 (115V) 95-0198-02 (230V) 38-0158-04 |
| UVM-18 8-watt, 302nm UV/white Replacement Filter | 95-0199-01 (115V) 95-0199-02 (230V) 38-0158-05 |
| UVS-18 8-watt, 254nm UV/white Replacement Filter | 95-0200-01 (115V) 95-0200-02 (230V) 38-0158-05 |
| UVL-16 6-watt, 365nm UV/white Replacement Filter | 95-0272-01 (115V) 95-0272-02 (230V) 38-0182-02 |
| UVM-16 6-watt, 302nm UV/white Replacement Filter | 95-0273-01 (115V) 95-0273-02 (230V) 38-0182-01 |
| UVS-16 6-watt, 254nm UV/white Replacement Filter | 95-0274-01 (115V) 95-0274-02 (230V) 38-0182-01 |
| UVL-14 4-watt, 365nm UV/white Replacement Filter | 95-0264-01 (115V) 95-0264-02 (230V) 38-0183-02 |
| UVS-14 4-watt, 254nm UV/white Replacement Filter | 95-0266-01 (115V) 95-0266-02 (230V) 38-0183-01 |

Accessories for EL Series UV Lamps:

- 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 the EL Lamps - see page 13 for additional information

J-138 Stand shown with the 8-watt EL Lamp.

J-138 Stand Dim:

10.74H x 13L x 3W in. (273 x 330 x 76mm)



Twin Models - Ordering Information

| | |
|---|--|
| UVL-28 8-watt, 365nm UV Replacement Filter | 95-0248-01 (115V) 95-0248-02 (230V) 38-0158-01 |
| UVM-28 8-watt, 302nm UV Replacement Filter | 95-0250-01 (115V) 95-0250-02 (230V) 38-0158-01 |
| UVS-28 8-watt, 254nm UV Replacement Filter | 95-0249-01 (115V) 95-0249-02 (230V) 38-0158-02 |
| UVL-26 6-watt, 365nm UV Replacement Filter | 95-0275-01 (115V) 95-0275-02 (230V) 38-0182-05 |
| UVM-26 6-watt, 302nm UV Replacement Filter | 95-0276-01 (115V) 95-0276-02 (230V) 38-0182-04 |
| UVS-26 6-watt, 254nm UV Replacement Filter | 95-0277-01 (115V) 95-0277-02 (230V) 38-0182-04 |
| UVL-24 4-watt, 365nm UV Replacement Filter | 95-0267-01 (115V) 95-0267-02 (230V) 38-0183-05 |
| UVM-24 4-watt, 302nm UV Replacement Filter | 95-0268-01 (115V) 95-0268-02 (230V) 38-0183-04 |
| UVS-24 4-watt, 254nm UV Replacement Filter | 95-0269-01 (115V) 95-0269-02 (230V) 38-0183-04 |

Replacement Tubes

| | |
|---------------------|------------|
| Tube, 8-watt, White | 34-0056-01 |
| Tube, 8-watt, 365nm | 34-0006-01 |
| Tube, 8-watt, 302nm | 34-0042-01 |
| Tube, 8-watt, 254nm | 34-0007-01 |
| Tube, 6-watt, White | 34-0063-01 |
| Tube, 6-watt, 365nm | 34-0034-01 |
| Tube, 6-watt, 302nm | 34-0044-01 |
| Tube, 6-watt, 254nm | 34-0013-01 |
| Tube, 4-watt, White | 34-0066-01 |
| Tube, 4-watt, 365nm | 34-0005-01 |
| Tube, 4-watt, 254nm | 34-0003-01 |
| Tube, 4-watt, 302nm | 34-0071-01 |

Accessories

| | |
|--|------------|
| J-138 Lamp Stand | 18-0063-01 |
| C-10E4 Cabinet (for 4W EL Lamps) | 95-0072-08 |
| C-10E6 Cabinet (for 6W EL Lamps) | 95-0072-09 |

Mini, Portable and Rechargeable UV Lamps

Mini UV Lamps



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

Mini UV Lamps
UVG-4, UVSL-14P, UVL-4.

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

Dimensions:

UVG-4, UVSL-14P 6.25L x 1W x 2.6H in. (159 x 25 x 66mm)
UVL-4 6.25L x 1W x 2H in. (159 x 25 x 51mm);
 Weight: 0.5 lb (0.23 kg)

UVL-4F Mini UV Lamp
includes a longwave UV tube and a flashlight.



Dimensions:

UVL-4F 6.5L x 2W x 1H in. (165 x 51 x 25mm)
 Weight: 0.5 lb (0.23kg)

Ordering Information

| | |
|---|--------------------------------|
| UVG-4 4-watt, 254nm Replacement Tube | 95-0158-04 (4AA) 34-0003-01 |
| UVL-4 4-watt, 365nm BLB Replacement Tube | 95-0125-05 (4AA) 34-0010-01 |
| UVSL-14P Multiband split-tube 4-watt, 254nm/365nm Replacement Tube | 95-0188-02 (4AA) 34-0004-01 |
| UVL-4F 4-watt, 365nm BLB/Flashlight Replacement Tube | 95-0305-03 (4AA) 34-0010-01 |

Portable and Rechargeable UV Lamps

Portable 6-watt UV lamps are operated by two 6-volt lantern batteries.



- The distinctive wrap around handle comfortably balances the lamp in your hand
- A built-in flashlight is included
- Optional rechargeable 6V batteries and charger are available

Portable UV Lamps are *lightweight for field use.*

Dimensions:

9.5L x 2.8W x 9.4H in. (241 x 71 x 239mm)
 Weight: 4 lb (1.8 kg)

Portable Lamp - Ordering Information

| | |
|--|--|
| ML-49 6-watt, 365nm BLB Replacement Tube | 95-0011-01 (12V) 34-0016-01 |
| UVG-47 6-watt, 254nm Replacement Tube Replacement Filter | 95-0009-02 (12V) 34-0013-01 98-0019-04 |
| UVGL-48 split-tube 6-watt, 254nm/365nm Replacement Tube Replacement Filter | 95-0010-02 (12V) 34-0015-01 98-0010-04 |
| Bulb, White | 34-0014-01 |
| Battery, 6V | 45-0005-01 |
| Battery, rechargeable 6V (115V) Charger (115V) | 45-0005-02 58-0136-01 |

Rechargeable 6-watt 26P series lamps come in three dual-tube models.

- Lamps are equipped with an internal gel based, lead-acid battery which can be charged for field operation from a standard wall outlet
- UVSL-26P (shown) can operate with both long and shortwave on at the same time
- Optional 12V adapter operates the lamp from a car cigarette lighter
- Use with the C-10P Cabinet



Rechargeable UV Lamps with built-in *rechargeable battery.*

Dimensions:

5.5L x 3.0W x 9.8H in. (140 x 76 x 249mm)
 Weight: 4 lb (1.8 kg)

Rechargeable Lamps - Ordering Information

| | |
|---|--|
| UVL-26P 6-watt, 365nm Replacement Tube, 365nm BLB | 95-0186-01 (115V) 95-0186-02 (230V) 34-0016-01 |
| UVS-26P 6-watt, 254nm Replacement Tube, 254nm Replacement Filter | 95-0187-01 (115V) 95-0187-02 (230V) 34-0013-01 38-0154-01 |
| UVSL-26P 6-watt 254nm/365nm Replacement Tube, 365nm Replacement Tube, 254nm Replacement Filter | 95-0181-01 (115V) 95-0181-02 (230V) 34-0034-01 34-0013-01 38-0154-02 |
| Adapter, 12V | 58-0127-02 |

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.

- Speed up customer service
- Deter criminals
- Easy to operate
- Easy to detect forged documents and currency
- Safe to use

For other
UV lamps,
see page 3

Ordering Information

| | |
|--|--|
| SL-2M Fraud Detection UV Lamp, 4-watt, 365nm | 95-0164-01 (115V) 95-0164-02 (230V) |
| UVL-4 UV Lamp, 4-watt, 365nm | 95-0125-01 (4-AA not included) |

Dimensions:

SL-2M: 6.5W x 5.75D x 4.5H in. (165 x 145 x 114 mm)
UVL-4: 6.25L x 1W x 2H in. (159 x 25 x 51mm)

Mineralight® UV Lamps

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

- For small scale mineral displays and laboratory applications including bacteria destruction, sterilization and photochemistry
- Removable filter assembly converts the lamp from fluorescent analysis to sterilizing uses

Dimensions: 7.8H x 16L x 7.8W in. (198 x 406 x 198mm)
Weight: 9.5 lb (4.3 kg)

UVL-4 Lamp



SL-2M (above) Pass the item in question under the longwave ultraviolet. Invisible inks or altered documents fluoresce when exposed to the UV.

- Instant document verification
 - Signatures
 - Currency
 - Credit Cards

R-52G provides high intensity 254nm UV.



Ordering Information

| | |
|--------------------------|--|
| R-52G Grid Lamp 254nm UV | 94-0012-05 (115V) 94-0012-06 (230V) |
| R-52G Grid Replacement | 77-0002-02 |

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.

Dimensions:

Spectacles: 2H x 6W in. (51 x 152mm)
Goggles: 3H x 6W in. (76 x 152mm)
Faceshield: 17dia x 8.25H in. (432 x 210mm)

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 - 400nm.

- **Spectacles** are made of impact resistant polycarbonate. The top and side-shield design provides UV protection for the eyes
- **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

Ordering Information

| | |
|---|--------------------------|
| Spectacles UVC-303 | 98-0002-01 |
| Goggles UVC-503 Replacement Goggle Lens | 98-0002-02 98-0002-03 |
| Faceshield UVC-803 Replacement Shield | 98-0002-04 38-0151-01 |

High Intensity UV Lamps

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

B-100AP and B-10AP/R UV Lamps

The B-100AP provides 100 watts of high intensity longwave (365nm) illumination.

- 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
- Optional equipment: 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



Exposure Box

B-100SP Lamp

This 140-watt longwave, self-ballasted lamp is UVP's most portable high-powered lamp.

- The ballast is built directly into the bulb
- The 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

B-100SP Self-ballasted bulb included with the B-100SP has an average life of 450 to 2000 hours.



B-100AP Uses include science, non-destructive testing and fluorescence inspection.

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



Dimensions:

B-100AP and AP/R Lamp Head 9.75L x 6 Dia in. (248 x 152mm) Weight: 12.5 lb. (5.6kg)

Ordering Information

| | |
|---|--|
| B-100AP 100-watt 365nm longwave Intensity 2 in./10 in. (μW/cm ²) | 95-0127-01 (115V) 95-0127-02 (230V) 21,700/8,900 |
| B-100AP/R 100-watt 365nm longwave Intensity 2 in./10 in. (μW/cm ²) | 95-0127-06 (115V) 95-0127-07 (230V) 21,700/8,900 |
| Bulb, Spot Bulb (lamps prior to June 2002) | 34-0054-01 (34-0011-01) |
| Finger Guard | 89-0068-01 |
| Lamp Funnel | 19-0126-01 |
| Lamp Visor | 19-0125-01 |
| Exposure Box | 76-0055-01 |

Ordering Information

| | |
|--|---|
| B-100SP 140-watt (365nm) longwave Intensity at 2/10 in. (μW/cm ²) | 95-0128-01 (115V) (230V not available) 11,600/5,000 |
| Bulb Protector | 17-0057-01 |
| Bulb, Self Ballasted | 34-0049-01 |
| Lamp Funnel | 19-0126-01 |
| Lamp Visor | 19-0125-01 |

Dimensions:

Lamp Head 9.75L x 6Dia. in. (248 x 152mm)
Weight: 3.14 lb. (1.43kg)

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

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

- 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



B-100A/R includes 20 ft. (6.1 m) primary and secondary cords for additional mobility.

- 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
- Two cord holders (on two sides of the ballast) keep slack cord under control

B-100Y and B-100YP Lamps

These lamps provide high-contrast light for the semi conductor fabrication industry and fine surface particle detection.

- A yellow filter blocks wavelengths shorter than 500nm and produces three strong mercury lines at 543, 574 and 576nm
- Lamp intensity is so brilliant, particles down to only 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.



B-100A The pistol-grip handle balances the lamp comfortably in the hand.

Dimensions:

B-100A, B-100A/R: Lamp Head 8.5L x 5.5Dia. in. (216 x 140mm) Weight: 11.72lb (5.33kg)

Ordering Information

| | |
|---|--|
| B-100A 100-watt, 365nm Intensity at 2/10 in. ($\mu\text{W}/\text{cm}^2$) | 95-0044-22 (115V) 95-0044-02 (230V) 21,700/8,900 |
| B-100A/R 100-watt, 365nm Intensity at 2/10 in. ($\mu\text{W}/\text{cm}^2$) | 95-0044-03 (115V) 95-0044-04 (230V) 21,700/8,900 |
| B-100Y 100-watt | 95-0044-24 (115V) 95-0044-18 (230V) |
| B-100YP 100-watt | 95-0127-03 (115V) 95-0127-04 (230V) |

| | |
|---|----------------------------|
| Bulb, Spot Bulb (lamps prior to June 2002) | 34-0054-01 (34-0011-01) |
|---|----------------------------|

| | |
|------------|------------|
| Lamp Guard | 19-0158-01 |
|------------|------------|

| | |
|-----------------------------|------------|
| Lamp Visor (B-100Y, B-100A) | 19-0124-01 |
|-----------------------------|------------|

| | |
|--------------------------|------------|
| Filter (B-100Y, B-100YP) | 38-0009-02 |
|--------------------------|------------|

Note: B-100A, B-100A/R and B-100Y are not CE marked.

B-100YP produces high contrast light for fine surface particle detection.

Dimensions:

B-100YP: Lamp Head 9.75D x 6Dia in. (248 x 152mm) Weight: 12.48 lb. (5.67 kg)



BL-15 UV Inspection Lamp



BL-15 has a narrow, durable plastic housing.

Dimensions: 20L x 2Dia in. (508 x 50.8mm)
Weight: 2.5 lb (1.1kg); Cord length: 15 ft.

The BL-15 longwave 365nm BLB UV lamp is ideal for inspection applications in hard to reach places.

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

Ordering Information

| | |
|--|---------------------------------|
| BL-15 (not CE) Replacement Tube, 15-watt | 95-0130-01 (115V) 34-0017-01 |
|--|---------------------------------|

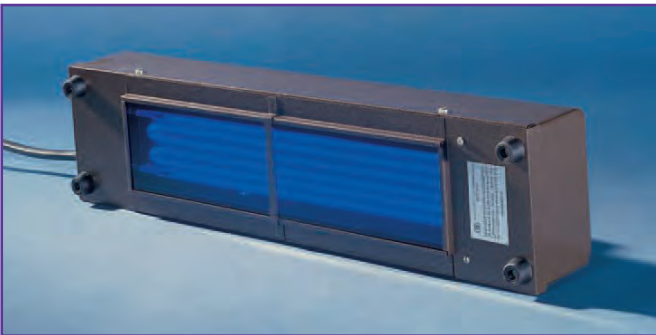
UV Display and Bench Lamps

225D Mineralight Lamps

- **Mineralight® 225D Display Lamps** provide hours of UV illumination for fluorescence, sterilization or inspection applications with 25-watt UV
- Each lamp comes with adjustable handles and mounting bracket for hanging

UVGD Mineralight Lamp

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

XX-Series UV Bench Lamps

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

- Durable aluminum housing has scratch resistant powder paint finish
- Lamp uses include sterilization, NDT, fluorescence display, as well as benchtop inspection stations



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



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

225D Lamp Dimensions:

18.5L x 4.5W x 3.5H in. (470 x 114 x 89mm); **Weight:** 10 lb (4.6 kg)

UVGD-68 Dimensions:

18.5L x 4.75W x 5H in. (470 x 114 x 89mm) **Weight:** 10 lb (4.6 kg)

Ordering Information

| | |
|-------------------|-------------------|
| UVL-225D | 95-0190-01 (115V) |
| 365nm UV, 25-watt | 95-0190-02 (230V) |
| Replacement Tube | 34-0060-01 |

| | |
|-------------------|-------------------|
| UVS-225D | 95-0191-01 (115V) |
| 254nm UV, 25-watt | 95-0191-02 (230V) |
| Replacement Tube | 34-0073-01 |

| | |
|-------------------------|-------------------|
| UVLS-225D | 95-0192-01 (115V) |
| 365nm/254nm UV, 25-watt | 95-0192-02 (230V) |
| Replacement Tube 365nm | 34-0060-01 |
| Replacement Tube 254nm | 34-0073-01 |

| | |
|-------------------|-------------------|
| UVM-225D | 95-0189-01 (115V) |
| 302nm UV, 25-watt | 95-0189-02 (230V) |
| Replacement Tube | 34-0072-01 |

| | |
|------------------|-------------------|
| UVGD-68 | 95-0026-07 (115V) |
| 254nm UV grid | 95-0026-08 (230V) |
| Replacement grid | 77-0001-04 |

UV blocking eyewear is critical for anyone using UV. See page 7 for UV blocking eyewear.



Bench Lamps are available in 40-watt sizes to cover large scale areas.

UV Intensity and Spectral Output data is available upon request. Contact UVP for information.



UV Bench Lamps are available in 15-watt, 20-watt and 40-watt. Select from several wavelengths for UV illumination in many industrial and laboratory applications

Ordering Information

| | |
|-------------------|-------------------|
| XX-15S | 95-0042-05 (115V) |
| 254nm UV, 15-watt | 95-0042-09 (230V) |
| Replacement Tube | 34-0008-01 |

| | |
|-------------------|-------------------|
| XX-15M | 95-0042-08 (115V) |
| 302nm UV, 15-watt | 95-0042-15 (230V) |
| Replacement Tube | 34-0039-01 |

| | |
|-------------------|-------------------|
| XX-15L | 95-0042-07 (115V) |
| 365nm UV, 15-watt | 95-0042-13 (230V) |
| Replacement Tube | 34-0009-02 |

| | |
|-----------------------|-------------------|
| XX-15 BLB | 95-0042-06 (115V) |
| 365nm BLB UV, 15-watt | 95-0042-11 (230V) |
| Replacement Tube | 34-0017-01 |

| | |
|------------------|-------------------|
| XX-20S | 95-0045-07 (115V) |
| 254nm, 20-watt | 95-0045-08 (230V) |
| Replacement Tube | 34-0067-01 |

| | |
|-----------------------|-------------------|
| XX-20 BLB | 95-0045-04 (115V) |
| 365nm BLB UV, 20-watt | 95-0045-05 (230V) |
| Replacement Tube | 34-0068-01 |

| | |
|------------------|-------------------|
| XX-40S | 95-0043-07 (115V) |
| 254nm, 40-watt | 95-0043-08 (230V) |
| Replacement Tube | 34-0067-02 |

| | |
|-----------------------|-------------------|
| XX-40 BLB | 95-0043-04 (115V) |
| 365nm BLB UV, 40-watt | 95-0043-05 (230V) |
| Replacement Tube | 34-0068-02 |

Cover, clear (XX-15 BLB) 19-0140-01

Filter (XX-15S) 38-0172-02

XX-15 Stand 18-0062-01

Dimensions:

XX-15S: 19.75L x 6W x 4.25H in. (502 x 152 x 108mm)
Weight: 5 lb (2.3kg)

XX-20S: 24L x 6W x 4.25H in. (610 x 152 x 108mm)
Weight: 10 lb (4.5 kg)

XX-40S: 49.6L x 6W x 4.25H in. (1260 x 152 x 108mm)
Weight: 20 lb (9.0 kg)

For sterilization applications, the **XX Series Mineralight shortwave bench lamps** use 254nm UV radiation as a reliable and effective tool for sterilization and sanitation applications in hospitals, laboratories, pharmaceutical companies and clinics. Work areas and equipment can become contaminated with bacteria which may be passed via the air or by hand, infecting research projects and workers.

Once the researcher knows the micro-organism to be destroyed and how much energy is required, divide the energy required (in units mW/cm² 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 sanitizing work surfaces
- Shortwave (254nm) ultraviolet can kill up to 99% bacteria, mold spores, yeast and germs
- The UV intensity can be increased by bringing the lamp closer to object being sterilized
- Brackets are included for hanging the lamp to reduce space required on laboratory benchtops
- Lamps are manufactured with a durable aluminum housing and scratch-resistant powder paint finish

Accessories

- XX-15 lamp models can be attached to the **Exposure Stand** for exposure of materials to ultraviolet
- The shelf is adjustable to set distances from the ultraviolet source

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



Stand Dimensions:

20W x 6D x 13H in.
(508 x 152 x 330mm)
Weight: 8 lb (3.6 kg)

An optional UV transmitting filter for the XX-15S allows use for fluorescence applications.

Filter Covers and clear covers can be attached to the XX-15S lamp (left).



CHROMATO-VUE® UV CABINETS

Chromato-Vue® Viewing Cabinets provide a darkroom environment with UV fluorescence for viewing materials. A variety of cabinets are available for viewing minerals and for educational uses. Larger cabinets are designed for chromatography, NDT, and other applications.

High Performance UV Cabinets

C-75 Cabinet

High intensity 15-watt shortwave (254nm) and longwave (365nm) 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

Ordering Information

| | |
|--|--|
| C-75 Large UV Viewing Cabinet 254/365nm UV | 95-0253-01 (115V) 95-0253-02 (230V) |
|--|--|

Replacement Parts

| | |
|---------------------|------------|
| 15-watt tube, 365nm | 34-0009-02 |
| 15-watt tube, 254nm | 34-0008-01 |

C-70 and C-71 Cabinets

The C-70 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.



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



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

Dimensions C-75:

Interior: 17W x 14D x 6H in. (432 x 356 x 152mm)
Exterior: 19.75W x 16.5D x 15.75H in. (502 x 419 x 400mm)
Weight: 18 lb (8 kg)

- The **C-70G** Chromato-Vue Cabinet includes two each of 15-watt shortwave (254nm) and longwave UV
- The **C-71** has four 15-watt, longwave (365nm) 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 applications such as non-destructive testing and document verification
- Chromato-Vue cabinets include a soft rubber viewport and contrast control filter

Ordering Information

| | |
|--|-------------------|
| C-70G Large Viewing Cabinet with 254/365nm UV | 95-0020-04 (115V) |
| | 95-0020-05 (230V) |

| | |
|---|-------------------|
| C-71 Large Viewing Cabinet with 365nm UV | 95-0022-01 (115V) |
| | 95-0022-02 (230V) |

Replacement Parts

| | |
|---------------------|------------|
| 15-watt tube, 365nm | 34-0009-02 |
| 15-watt tube, 254nm | 34-0008-01 |

Dimensions:

Interior: 21W x 13D x 8H in. (533 x 330 x 203mm)
Exterior: 23.4W x 15.8D x 13H in. (594 x 401 x 203mm)
Weight: 22 lb (10.3 kg)

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.

- 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 accommodates the 6-watt Rechargeable Lamps which are excellent for field use applications (see page 6 for Rechargeable Lamps).



Mini Cabinet Dimensions:

Interior: 9L x 10W x 7H in. (229 x 254 x 178mm)
 Exterior: 9L x 10.5W x 12H in. (229 x 267 x 305mm)



C-10E4 Mini UV Cabinet Designed for use with the 4-watt EL Series Lamps (see pages 4 - 5).



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

Ordering Information

| | |
|--|--|
| C-10 Mini Cabinet | 95-0072-01 |
| C-10P Mini Cabinet for 6-watt Portable Rechargeable Lamps | 95-0072-02 |
| C-10E4 Mini Cabinet for 4-watt EL Lamps | 95-0072-08 |
| C-10E6 Mini Cabinet for 6-watt EL Lamps | 95-0072-09 |
| C-15G Mini Cabinet with UVGL-58 UV Lamp | 95-0072-06 (115V) 95-0072-07 (230V) |

Multifunctional UV Cabinet

C-65 Cabinet

C-65 Chromato-Vue Cabinet accommodates one or two EL Series 8-watt lamps ordered separately. For additional lamps, see pages 4 - 5. Use of two lamps illuminates the cabinet's 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

Ordering Information

| | |
|---|--|
| C-65 Mid-Size UV Viewing Cabinet | 95-0257-01 (115V) 95-0257-02 (230V) |
|---|--|

C-65 Dimensions:

Int: 17L x 14W x 6H in. (533 x 330 x 400mm)
 Ext: 19.75L x 16.5W x 15.75H in. (602 x 419 x 400mm)

EL Series eight-watt lamps can be used with the C-65 cabinet or removed for handheld use.

- Lamps are made with a durable, scratch-resistant metal housing
- Lamps include a universal plug, which connects directly to the C-65 Cabinet, plus a supplementary power cord to plug into a line current



C-65 UV Cabinet is designed to accommodate one or two of the EL Series 8-watt Lamps

Ordering Information - EL Lamps

| | |
|---|--|
| UVL-28 365nm/365nm UV | 95-0248-01 (115V) 95-0248-02 (230V) |
| UVM-28 302nm/302nm UV | 95-0250-01 (115V) 95-0250-02 (230V) |
| UVS-28 254nm/254nm UV | 95-0249-01 (115V) 95-0249-02 (230V) |
| UVLM-28 (2UV) 365nm/302nm UV | 95-0251-01 (115V) 95-0251-02 (230V) |
| UVLS-28 (2UV) 365nm/254nm UV | 95-0201-01 (115V) 95-0201-02 (230V) |
| UVLMS-38 (3UV) 365nm/302nm/254nm UV | 95-0252-01 (115V) 95-0252-02 (230V) |

UV INTENSITY METERS

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

UVX Digital Radiometers

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

- Choose from three sensors: UVX-25 shortwave, UVX-32 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 200mW/cm²
- The UVX Radiometer is powered by a 9-volt battery for up to 120 hours
- A port for a chart recorder allows continuous monitoring

Recalibration of meters/sensors is recommended every six months.

Dimensions: 6.2L x 2H x 3.6W in. (157 x 51 x 91 mm)
Sensor Cable Length: 3 feet (0.9 m)
Weight: 9.4 oz (0.3 kg)
Display: 3.5 digit LCD
Operating Environment: Temperature: 0 to 50°C
 Humidity: 5% to 90% Relative Humidity



UVX Radiometer Select from three UV sensors.

Ordering Information

| | |
|---|------------|
| UVX Radiometer | 97-0015-02 |
| Attenuator, 10:1 | 98-0035-01 |
| 9V Battery | 45-0012-01 |
| UVX-25 Sensor Calibration Point: 254nm Bandpass: 250-290nm | 97-0016-01 |
| UVX-31 Sensor Calibration Point: 310nm Bandpass: 280-340nm | 97-0016-04 |
| UVX-36 Sensor Calibration Point: 365nm Bandpass: 335-380nm | 97-0016-02 |

J-Series Analog UV Meters



J-221 and J-225 UV Meters measure UV sources

Ordering Information

| | |
|---------------------------------------|------------|
| J-221 Longwave Meter 365nm UV | 97-0003-01 |
| J-225 Shortwave Meter 254nm UV | 97-0004-01 |

Dimensions:
 3H x 3D x 3W in. (76 x 76 x 76 mm)
 Weight: 9 oz (0.25 kg)

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.

- Self-powered for maximum portability
- Two scales for low and high intensity readings
- A three foot (0.9m) cord connects the sensor to the meter for remote readings
- Infrared filter assures accurate readings when measuring light sources producing infrared radiation
- The 5X attenuation screen can be used for very high intensity lamp measurements
- All meters and sensors are calibrated to meet UVP's published standards and NIST
- **J-221** Meter measures the intensity of 365nm longwave UV. The sensor is sensitive within a range of 300-400nm with a peak sensitivity at 365nm. Intensity readings are 0-1200 μW/cm² (A Scale) and 1000-6000 μW/cm² (B Scale). J-221 Meter complies with MIL STD 45662-A
- **J-225** Meter measures the intensity of 254nm shortwave UV. The sensor is sensitive within a range of 220-280nm with peak sensitivity at 254nm. Intensity readings at 0-2400 μW/cm² (A scale) and 2000-12000 mW/cm² (B Scale)

BLAK-RAY® FLUORESCENT INKS

UVP's Blak-Ray Fluorescent Inks are suited for use on many surfaces including skin, fabric and similar porous or textured surfaces. Select inks are recommended for use for re-admittance at amusement parks and sporting events.

- Simple to use - inks come ready made
- Won't gum up - stamp pads stay cleaner longer
- Economical - use small amounts of ink with stamp pads
- Inks are formulated to fluoresce brightly under UVP's longwave ultraviolet lamps
- Re-admittance type inks are designed for use at social gatherings, amusement parks and sporting events
- All Blak-Ray inks are non-toxic, non-transferable and fast-drying
- Printing ink is ideal for applying onto an already printed surface



Blak-Ray Fluorescent Inks are ready-made and are simple to use.

To fluoresce the inks, choose from the large selection of long-wave (365nm) UV lamps. Portable handheld lamps and stationary UV model are also available. See pages 3 - 10 for lamp information.

| | Part Numbers | Normal Color | Fluorescent Color | Used For | Used On | Applied By | |
|--------------|--|---------------------------|-------------------|---|--|---|------------|
| Readmittance | RI-10 Ink 96-0021-04 Qty: 12 pt./case | Colorless Alcohol Base | Blue | Textile Marking | Skin or Fabric | Felt Pen Stencil Stamp and Pad Brush Automatic Marker Roller | Porous |
| | RI-20 Ink 96-0021-05 Qty: 12 pt./case | Faint Yellow Alcohol Base | Green | Textile Marking | Skin or Fabric | | |
| | A-800 Ink 96-0068-01 Qty: 1 pt. 96-0068-02 Qty: 12 pt./case | Colorless Alcohol Base | Blue | Readmittance Coding Theatrical/ Amusement Inventory Control Advertising | Skin | | |
| | A-801 Ink 96-0067-01 Qty: 1 pt. 96-0067-02 Qty: 12 pt./case | Faint Yellow Alcohol Base | Green | Wood/paper and Other Porous Materials | Skin | | |
| Printing | A-946 Ink 96-0057-04 Qty: 1 pt. | Colorless Solvent Base | Blue | Industrial Coding Theatrical Security Printing Coupons Raffle Tickets Inventory Control Advertising | Aluminum, ABS, Acrylic, Rubber Cellulose Acetate Formica, Nylon Polystyrene Polyethylene | Roller, Felt Pen Stamp and Pad Automatic Marker Flexographic Rotogravure Brush | Non-Porous |

PEN-RAY® LIGHT SOURCES

Rare Gas Lamps

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 provide 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 include:
 - Sterilization
 - Fluorescent inspections
 - Photochemical reactions
 - Interferometry
 - Chromatography
 - Photometric and fluorometric instruments
 - Spectroscopic wavelength calibration
 - Monochromatic sources for optical systems and reference studies

Call UVP for additional models and custom designs



Select Pen-Ray Lamps are available with a choice of lighted length and diameter, phosphor and handle.

Ordering Information - Standard Light Sources

11SC-1 254nm UV 90-0012-01
 Lighted Length/Dia: 2.12/0.256 in. (53.8/6.5mm)
 Volts -Start/Operate: 800V/270V

11SC-1L 365nm UV 90-0019-01
 Lighted Length/Dia: 2.25/0.375 in. (57.2/9.5mm)
 Volts - Start/Operate: 800V/270V

11SC-2 254nm UV 90-0020-01
 Lighted Length/Dia: 0.75/0.256 in. (19.1/6.5mm)
 Volts: Start/Operate: 800V/270V

3SC-9 254nm UV 90-0004-01
 Lighted Length/Dia: 9.0/0.375 in. (228.6/9.0mm)
 Volts: Start/Operate: 640V/56V

Ordering Information - Power Supply

Power Supply 99-0055-01 (115V/60Hz)
 Open Circ. Voltage: 2300 VAC 99-0055-02 (220V/50Hz)
 Max. Pri./Lamp Current:
 400 ma/18 ma (avg)

* Power supply is ordered separately.

Lamp cord length: 16 in. (406mm) with standard connector; different cable lengths and connectors are available.

Power supplies: provide optimum starting and operation of the lamps. Use the recommended power supplies (ordered separately) shown with each lamp.

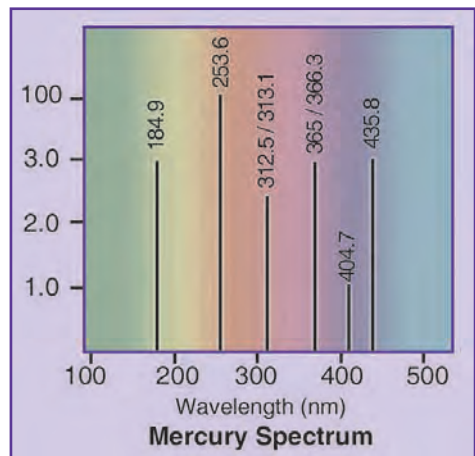
Filter shields (optional): direct or modify the emission output for model 11SC-1:

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

Lamp Spectra

The graph below illustrates the relative emission intensities of the mercury Pen-Ray lamps.

Spectral charts and lamp specifications can be obtained from UVP.



Rare Gas Lamps



Rare gas lamps incorporate the Pen-Ray model 11SC-1 body but replace the Mercury for other reactive ingredients. *Ask about gas combinations and custom designs.*

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

Ordering Information

Argon Fill 90-0013-01
Krypton Fill 90-0014-01
Neon Fill 90-0015-01
Power Supply 99-0057-01 (115V)
 99-0057-02 (230V)

Neon-Mercury 90-0016-01
Power Supply 99-0055-01 (115V)
 99-0055-02 (230V)

Xenon Fill 90-0017-01
Power Supply 99-0056-01 (115V)
 99-0056-02 (230V)

Zinc and Cadmium Lamps



Zinc and cadmium lamps are designed for use with UV absorption cells and detectors and are often used in air pollution monitoring devices. Zinc lamps can substitute for deuterium lamps due to the zinc lamps' superior thermal stability, long life and prominent 214nm energy peak. Electrical leads are available in either side/radial or end/axial configurations.

Use Power supply: 99-0033-01 (115V) or 99-0033-02 (230V)

Dimensions:

Zinc Lamp: 20mm lighted length, 4.33 in. (110mm) total length, 0.67 in. (17mm) quartz dia.

Cadmium Lamp: 24mm lighted length, 4.33 in. (110mm) total length, 0.67 in. (17mm) quartz dia.

Ordering Information

| | |
|----------------------------|------------|
| Zinc Lamps | |
| Radial lead 8 in. (203mm) | 90-0069-05 |
| Axial lead 8 in. (203mm) | 90-0069-06 |
| Radial lead 12 in. (305mm) | 90-0069-07 |

| | |
|----------------------------|------------|
| Cadmium Lamps | |
| Radial lead 8 in. (203mm) | 90-0071-03 |
| Axial lead 8 in. (203mm) | 90-0071-06 |
| Radial lead 12 in. (305mm) | 90-0071-07 |



Pen-Ray Field Packs provide a portable UV light source.

Pen-Ray Fields Packs

Pen-Ray Field Packs combine a light source and a DC power supply (with 9V battery) in a compact, portable package.

- Lightweight and small enough to fit in a pocket
- Field Pack FP-LSD provides two interchangeable light sources (365nm and 254nm)

Stable Ozone Generators

Stable Ozone Generators (SOG) use the photochemical reaction of oxygen and shortwave (185nm) UV to produce a continuous flow of ozone.

- SOG models use a removable Pen-Ray lamp inserted into the generator box
- The power supply included with the lamp feeds stable power to the lamps for uniform ozone generation
- Ozone generators provide a stable source for water purification, oxidant testing and air pollution studies

Ordering Information and Specifications

| | |
|-------------------|--|
| SOG-1 | 97-0066-01 (115V) 97-0066-02 (220V) |
| Ozone Production: | 0.8 ppm @ 0.5 L/min. |
| Lighted Length: | 2.12 in. (53.8mm) |

| | |
|-------------------|--|
| SOG-2 | 97-0067-01 (115V) 97-0067-02 (220V) |
| Ozone Production: | 3.0 ppm @ 1.0 L/min. |
| Lighted Length: | 9 in. (228.6mm) |

Field Pack Ordering Information

| | |
|--------------------|--|
| Lighted Length: | 1.75 in. (44.5mm) |
| Total Length: | 4.25 in. (108mm) |
| Quartz/Handle Dia: | 0.375 in. (9.5mm) |
| Power supply: | 3.75L x 2.38W x 1H in. (95.25 x 60.45 x 25.4mm) |

| | |
|--|------------|
| FP-L 365nm phosphor jacket | 95-0256-01 |
| FP-S 254nm | 95-0256-02 |
| FP-LSD 365nm phosphor jacket, 254nm | 95-0256-03 |

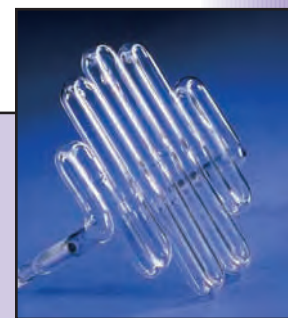
Stable Ozone Generators for calibration of ozone analyzers.

Housing dimensions:
11L x 3.75W x 1.8H in. (279 x 95.25 x 45.7mm)



Specialty/OEM Light Sources

UVP manufactures a wide range of custom light sources to meet specialty custom and OEM lamp specifications. Additional designs include grid lamps, photochemical quartz, miniature calibration lamps and coil lamps. Contact UVP for additional information.



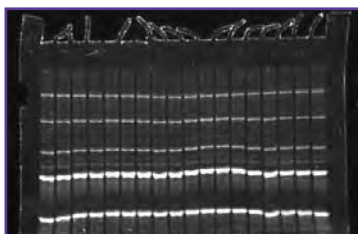
TRANSILLUMINATORS

All UVP transilluminators provide back-illumination of transparent fluorescent materials over the full working surface of the filter area. UV Transilluminators are equipped with an ultraviolet blocking cover to shield the user from UV radiation. The base is painted with a high-quality, scratch-resistant powder coat. Models include a stainless steel top assembly or powder coat paint. Transilluminators carry a two-year warranty.

FirstLight® Uniform UV Illuminator



FirstLight UV Illuminator with its unique design (patent pending) provides uniform UV illumination, which is critical for accurate quantitative analysis



The FirstLight UV Illuminator represents a unique highly uniform 302nm UV excitation source for quantitative fluorescent imaging in a wide range of applications.

- Produces <5% coefficient of variance (CV) across the full filter area
- Exceptionally uniform, edge-to-edge illumination
- Accurate gel to gel comparison
- Uniformity ensures consistent illumination over the imaging surface resulting in high quality images
- Applications range from DNA and protein gel documentation and analysis

Ordering Information

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

Dimensions: 11D x 14W x 5.63H in. (279 x 356 x 143mm)
Height includes UV blocking cover

Achieve accurate and reproducible RNA and DNA protein results. The illuminator emits 302nm 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.

When other wavelengths are required, optional plates convert 302nm for fluorescence of various stains. See page 22 for **converter plates**.

FirstLight and 3UV models are patented and available only from UVP!

Benchtop UV Transilluminators

3UV™ Benchtop Models

UVP's patented 3UV Benchtop Transilluminator allows selection of 8-watt longwave, midrange or shortwave in one compact unit.

- View gels using longwave UV for extended periods of time reducing photonicking damage
- Switch to midrange 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



Unique 3UV benchtop models allow researchers to switch between 254, 302 or 365nm UV wavelengths in one unit.

Replacement Tubes

| | |
|------------------------|------------|
| Tube, 8-watt, 254nm UV | 34-0007-01 |
| Tube, 8-watt, 302nm UV | 34-0042-01 |
| Tube, 8-watt, 365nm UV | 34-0006-01 |

Ordering Information

| | |
|---|--|
| LMS-20 Single Intensity 254/302/365nm UV Filter Size 20 x 20cm Replacement Filter | 95-0417-01 (100-115V) 95-0417-02 (230V) 38-0313-07 |
| LMS-26 Single Intensity 254/302/365nm UV Filter Size 21 x 26cm Replacement Filter | 95-0414-01 (100-115V) 95-0414-02 (230V) 38-0313-08 |

Dimensions: 11D x 14W x 5.4H in. (279 x 356 x 137mm) Height includes UV blocking cover.

2UV™ Benchtop Transilluminators

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

- A single intensity setting and 8-watt 302/365nm UV tubes are standard
- Select from 20x20 or 21x26cm filter areas

Ordering Information

LM-20
Single Intensity 302/365nm UV Filter Size 20 x 20cm
95-0449-01 (100-115V)
95-0449-02 (230V)

LM-26
Single Intensity 302/365nm UV Filter Size 21 x 26cm
95-0459-01 (100-115V)
95-0459-02 (230V)

Dimensions of 2UV, Single and Variable Intensity Models:
11D x 14W x 4.8H in. (279 x 356 x 122mm) Height includes UV blocking cover. Weight: 9.6 lb. (4.4 kg)

Single Intensity and Variable Intensity Benchtop Models

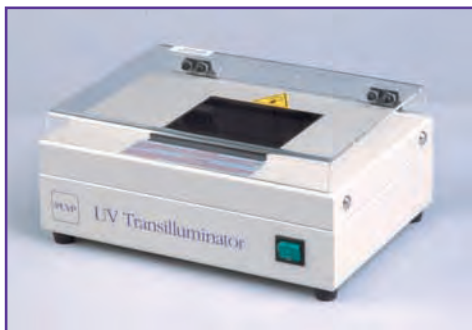


Variable Intensity Models feature adjustable intensity with selection of high, medium and low settings.

Replacement Tubes

Tube, 8-watt, 254nm UV 34-0007-01
Tube, 8-watt, 302nm UV 34-0042-01
Tube, 8-watt, 365nm UV 34-0006-01

Mini Benchtop Transilluminator



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

Dimensions:

7.25D x 10.25W x 4.5H in. (184 x 260 x 114mm) Height includes UV blocking cover. Weight: 7.7 lb. (3.5 kg)



3UV, 2UV, Single UV and Variable Intensity Benchtop models (except Mini) feature increased performance and efficiency with the electronic ballast and cutting-edge construction produce higher UV intensity and uniformity and instant start up.

Benchtop models include the economical, compact single intensity and variable intensity transilluminators which are equipped with 8-watt, 302nm UV tubes. The variable intensity models feature:

- High setting allows UV excitation of fluorophores on gels for routine photography. Also excites gels with low sample concentration.
- The medium intensity 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.

For Gel Tools and Converter Plates, see page 22.

Ordering Information

M-15 Single Intensity 302nm UV, Filter 15 x 15cm
95-0455-01 (100-115V)
95-0455-02 (230V)
Replacement Filter 38-0313-03

M-15V Variable Intensity 302nm UV, Filter 15 x 15cm
95-0456-01 (100-115V)
95-0456-02 (230V)
Replacement Filter 38-0313-09

M-20 Single Intensity 302nm UV, Filter 20 x 20cm
95-0447-01 (100-115V)
95-0447-02 (230V)
Replacement Filter 38-0313-01

M-20V Variable Intensity 302nm UV, Filter 20 x 20cm
95-0452-01 (100-115V)
95-0452-02 (230V)
Replacement Filter 38-0313-07

M-26 Single Intensity 302nm UV, Filter 21 x 26cm
95-0457-01 (100-115V)
95-0457-02 (230V)
Replacement Filter 38-0313-02

M-26V Variable Intensity 302nm UV, Filter 21 x 26cm
95-0458-01 (100-115V)
95-0458-02 (230V)
Replacement Filter 38-0313-08

M-26XV Variable Intensity 302nm UV, Filter 25 x 26cm
95-0413-01 (100-115V)
95-0413-02 (230V)
Replacement Filter 38-0163-04

Ordering Information

M-10E Single Intensity 302nm UV, Filter Size 10 x 10cm
95-0180-01 (115V)
95-0180-02 (230V)
Tube, 6-watt, 302nm 34-0044-01
Replacement Filter 38-0150-01

High Performance UV Transilluminators

Single Wavelength High Performance UV Transilluminators

All High Performance UV Transilluminators include the exclusive 25-watt ultraviolet tubes and provide a total of 100-watts of brilliant UV illumination.

- 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 UVP's UVG long-life filter and uniformity screen
- UV blocking cover, included with each transilluminator, is adjustable for access to the filter surface

Variable Intensity High Performance UV Transilluminators

- Choose a model with shortwave (254nm), midrange (302nm) or longwave (365nm) UV for high fluorescence and sensitivity of stained gels
- Variable intensity settings allow the researcher to select high, medium or low settings

High Performance 2UV Transilluminators

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



Ordering Information

| | |
|-------------------------------|-----------------------|
| TFML-20 | 95-0431-01 (100-115V) |
| Single Intensity 302/365nm UV | 95-0431-02 (230V) |
| Filter Size 20 x 20cm | |
| Replacement Filter | 38-0190-02 |
| TFML-26 | 95-0425-01 (100-115V) |
| Single Intensity 302/365nm UV | 95-0425-02 (230V) |
| Filter Size 21 x 26cm | |
| Replacement Filter | 38-0190-09 |
| TFML-30 | 95-0432-01(100-115V) |
| Single Intensity 302/365nm UV | 95-0432-02 (230V) |
| Filter Size 25 x 30cm | |
| Replacement Filter | 38-0190-12 |
| TFML-40 | 95-0426-01 (100-115V) |
| Single Intensity 302/365nm UV | 95-0426-02 (230V) |
| Filter Size 20 x 40cm | |
| Replacement Filter | 38-0190-04 |



TFM-40V High Performance UV Transilluminator with variable intensity and 20x40cm filter. The hinged UV blocking cover is adjustable to different angles for access to the filter surface.

Replacement Tubes

| | |
|----------------------|------------|
| Tube, 25-watt, 254nm | 34-0073-01 |
| Tube, 25-watt, 302nm | 34-0072-01 |
| Tube, 25-watt, 365nm | 34-0060-01 |

Ordering Information

| | |
|-----------------------------|-----------------------|
| TFM-20V | 95-0423-01 (100-115V) |
| Variable Intensity 302nm UV | 95-0423-02 (230V) |
| Filter Size 20 x 20cm | |
| Replacement Filter | 38-0190-02 |
| TFM-26V | 95-0422-01 (100-115V) |
| Variable Intensity 302nm UV | 95-0422-02 (230V) |
| Filter Size 21 x 26cm | |
| Replacement Filter | 38-0190-09 |
| TFM-30V | 95-0424-01 (100-115V) |
| Variable Intensity 302nm UV | 95-0424-02 (230V) |
| Filter Size 25 x 30cm | |
| Replacement Filter | 38-0190-11 |
| TFM-40V | 95-0421-01 (100-115V) |
| Variable Intensity 302nm UV | 95-0421-02 (230V) |
| Filter Size 20 x 40cm | |
| Replacement Filter | 38-0190-04 |
| TFL-40V | 95-0420-01 (100-115V) |
| Variable Intensity 365nm UV | 95-0420-02 (230V) |
| Filter Size 20 x 40cm | |
| Replacement Filter | 38-0190-10 |
| TFS-20V | 95-0427-01 (100-115V) |
| Variable Intensity 254nm UV | 95-0427-02 (230V) |
| Filter Size 20 x 20cm | |
| Replacement Filter | 38-0190-02 |
| TFS-26V | 95-0428-01 (100-115V) |
| Variable Intensity 254nm UV | 95-0428-02 (230V) |
| Filter Size 21 x 26cm | |
| Replacement Filter | 38-0190-09 |
| TFS-30V | 95-0429-01 (100-115V) |
| Variable Intensity 254nm UV | 95-0429-02 (230V) |
| Filter Size 25 x 30cm | |
| Replacement Filter | 38-0190-11 |
| TFS-40V | 95-0430-01 (100-115V) |
| Variable Intensity 254nm UV | 95-0430-02 (230V) |
| Filter Size 20 x 40cm | |
| Replacement Filter | 38-0190-04 |

Dimensions for all High Performance UV Transilluminators:
 13.25D x 19.13W x 5.63H in. (337 x 486 x 143mm)
 Height includes UV blocking cover.

Visi-Blue™ Transilluminators

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

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



VB-26V Visi-Blue Transilluminator patented design converts UV light to 460-470nm.

Dimensions: Height includes amber cover

VB-26V 11D x 14W x 4.8H in. (279 x 356 x 122mm) Wt: 15 lb. (6.8 kg)

VB-40V 13.25"D x 19.13"W x 5.64"H (337 x 486 x 143mm)

Wt: 21 lb. (9.6 kg)

Ordering Information

| | |
|--|-----------------------|
| VB-26 8-watt Variable Intensity | 95-0461-01 (100-115V) |
| Filter Size 21 x 26cm | 95-0461-02 (230V) |
| Replace. Tube, 365nm BLB | 34-0056-01 |
| Replacement Filter | 38-0313-06 |

| | |
|--|-----------------------|
| VB-40V 25-watt Variable Intensity | 95-0433-01 (100-115V) |
| Filter Size 20 x 40cm | 95-0433-02 (230V) |
| Replace. Tube, 365nm BLB | 34-0060-01 |
| Replacement Filter | 38-0215-01 |

White/UV Transilluminators

White/UV transilluminators have 20 x 20cm white light and UV filter areas side by side. Design improves efficiency and performance.

- 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



White/UV Transilluminator Easily switch between the UV and white light sources.

Ordering Information

| | |
|-----------------------|-----------------------|
| TLW-20 8-watt | 95-0415-01 (100-115V) |
| 365nm UV/White | 95-0415-02 (230V) |
| Filter Size 20 x 20cm | |
| Replacement Filter | 38-0189-08 |

| | |
|-----------------------|-----------------------|
| TMW-20 8-watt | 95-0415-04 (100-115V) |
| 302nm UV/White | 95-0415-05 (230V) |
| Filter Size 20 x 20cm | |
| Replacement Filter | 38-0189-05 |

| | |
|-----------------------|-----------------------|
| LMW-20 8-watt | 95-0418-01 (100-115V) |
| 365/302nm UV/White | 95-0418-02 (230V) |
| Filter Size 20 x 20cm | |
| Replacement Filter | 38-0189-05 |

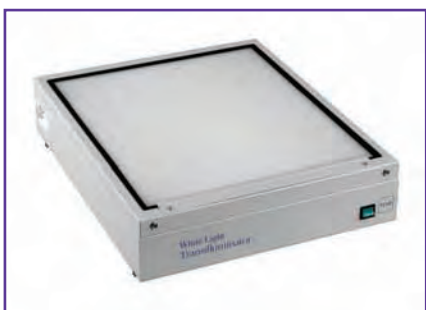
| | |
|-------------------------|------------|
| Replacement Tube, White | 34-0056-01 |
| Replacement Tube, 365nm | 34-0006-01 |
| Replacement Tube, 302nm | 34-0042-01 |

Dimensions: Height include UV blocking cover

13.25D x 19.13W x 5.64H in. (337 x 486 x 143mm)

Weight: 21 lb. (9.6 kg)

White Light Transilluminators



White Light Transilluminators offer uniform light diffusion for autoradiographs, film positives, negatives, X-ray film, microtiter plates and gels.

Plexiglass and glass filter plates are sealed into the unit for durability.

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

Ordering Information

| | |
|-----------------------|-------------------|
| TW-26 8-watt | 95-0208-01 (115V) |
| Filter Size 21 x 26cm | 95-0208-02 (230V) |
| Replacement Tube | 34-0056-01 |
| Replacement Filter | 38-0161-04 |

| | |
|-----------------------|-------------------|
| TW-43 14-watt | 95-0214-01 (115V) |
| Filter Size 36 x 43cm | 95-0214-02 (230V) |
| Replacement Tube | 34-0059-01 |
| Replacement Filter | 38-0165-01 |

Dimensions:

TW-26 9.5D x 13.25W x 4.25H in. (241 x 337 x 108mm)
Wt: 8 lb. (3.8 kg);

TW-43 19.1D x 16W x 4.25H in. (486x406x108mm)
Wt: 19 lb. (8.6 kg)

CONVERTER PLATES

UV/White Converter Plates



**Convert
UV to
White
Light**

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

- The Converter Plate's uniquely phosphored glass assembly (patent pending) converts the UV radiation via a white diffuser
- Handles are placed on two sides of the plate for easy handling

Ordering Information

| | | |
|---|------------|-----------|
| UV to White Light Converter Plates | 38-0191-01 | 21 x 26cm |
| | 38-0191-02 | 20 x 40cm |
| | 38-0191-04 | 25 x 26cm |

UV/Blue and UV/UV Plates



**Visi-Blue™
Converter Plate**
*Scratch resistant
glass surface is
safety fused into
metal frame.*

Visi-Blue Converter Plate includes an amber camera filter when photographing the gels.

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

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

Ordering Information

| | | |
|--|------------|-----------|
| Visi-Blue Converter Plates 460-470nm | 38-0200-01 | 21 x 26cm |
| | 38-0200-02 | 20 x 40cm |
| | 38-0200-04 | 25 x 26cm |

| | | |
|--|------------|-----------|
| UV/UV Converter Plate 302 to 365nm | 38-0325-01 | 25 x 26cm |
|--|------------|-----------|

GEL TOOLS

- **Gel-Cutter:** Edge allows for easy cutting and removal of gel material
- **Gel-Scooper:** Made of strong acrylic with a beveled edge and 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 and 302nm ultraviolet wavelengths

Gel-Tools are useful for researchers working with transilluminators as well as gel documentation and imaging systems.



Ordering Information

| | | |
|--|-------------------------------|------------|
| Gel-Trays, Plexiglas | 10.75W x 9D in. (27 x 23cm) | 85-0007-05 |
| | 11.5W x 9D in. (29 x 23cm) | 85-0007-01 |
| | 16.5W x 10.5D in. (42 x 27cm) | 85-0005-01 |
| Gel-Tray, stainless steel/glass | 16.5W x 10.5D in. (42 x 27cm) | 38-0296-03 |
| Gel-Cutter, 20cm | | 85-0002-01 |
| Gel-Ruler, 25cm | | 85-0003-01 |
| Gel-Scooper, 5W x 12L in. (12.7 x 30.5cm) | | 85-0006-01 |

Fluorescent Standard Step Tablet

Place the non-photobleaching Step Tablet (patent pending) 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.

Ordering Information

| | |
|-------------|------------|
| Step Tablet | 33-0014-02 |
|-------------|------------|



UV CROSSLINKERS AND TRANSLINKER

UV Crosslinkers

UVP Crosslinkers assure consistent UV output for many applications including DNA bonding and UV curing. UV crosslinking for attaching nucleic acids to a membrane for example, takes seconds as compared to oven baking. The crosslinkers utilize a microprocessor to control and measure the dose of UV radiation.



CL-1000 Crosslinker is an exposure instrument which uses shortwave UV energy to bond the DNA to a medium.

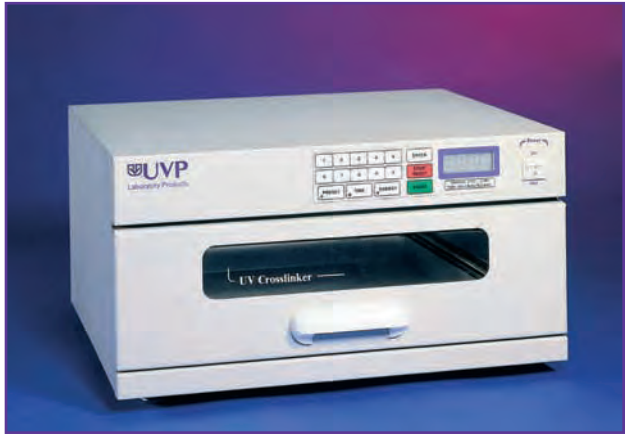
- Preset and manual controls for ultraviolet or time exposures
- Factory presettings deliver 120,000 microjoules or 5 minutes of exposure; maximum UV energy setting of 999,900 microjoules per cm²
- Microprocessor optimizes the use of energy while ensuring consistent, maximum energy efficiency and output
- Large LED display
- Window on the door allows viewing of the process yet blocks the UV radiation
- Five 8-watt ultraviolet tubes emit uniform overhead UV illumination

TL-2000 Translinker

TL-2000 Translinker combines the shortwave UV CL-1000 Crosslinker (specifications above) and the M-20 transilluminator. The transilluminator is built onto the crosslinker cabinet.

- On/Off controls for the transilluminator are located on the crosslinker panel
- The transilluminator uses midrange 302nm UV and a 20x20cm filter

TL-2000 Dimensions:
 13.7D x 19W x 8.75H in. (348 x 483 x 222mm)
 Weight: 36 lb (16.4 kg)



CX-2000 features a pull-out drawer and shortwave UV. The CX-2000 operates with the same functions as the CL-1000 microprocessor controls.

CX-2000 Dimensions: Exterior: 15D x 17.5W x 9.75H in. (445 x 229 x 381mm); Interior: 11.3D x 11.4W x 3.6H in. (290 x 287 x 91mm)

CL-1000 Dimensions: Exterior: 13.7D x 15.6W x 8.75H in. (248 x 396 x 222mm); Interior: 12D x 10W x 5H in. (305 x 254 x 127mm)

Ordering Information

| | |
|---|--|
| CL-1000 Crosslinker 254nm UV Replacement Tube | 95-0174-01 (115V) 95-0174-02 (230V) 34-0007-01 |
| CL-1000L Crosslinker 365nm UV Replacement Tube | 95-0228-01 (115V) 95-0228-02 (230V) 34-0006-01 |
| CL-1000M Crosslinker 302nm UV Replacement Tube | 95-0230-01 (115V) 95-0230-02 (230V) 34-0042-01 |
| CX-2000 Crosslinker 254nm UV Replacement Tube | 95-0339-01 (115V) 95-0339-02 (230V) 34-0007-01 |
| TL-2000 Translinker 254nm Crosslinker/ 302nm Transilluminator with Filter Size of 20x20cm Replacement Tube, 254nm Replacement Tube, 302nm | 95-0300-01 (115V) 95-0300-02 (230V) 34-0007-01 34-0042-01 |

Translinker
 An ultraviolet blocking cover is included with the transilluminator.



HYBRIDIZATION OVENS

Hybridization ovens are rapidly replacing hybridization bags and water baths for procedures involved in Southern, Northern and in situ hybridization. UVP's hybridization ovens provide accurate temperature and rotation speed controls plus variable bottle sizes and offset bottle positioning.

The dynamic mixing capability is ideal for creating the optimum conditions needed for cDNA library screenings, primer synthesis and nucleic acid hybridization. The interior stainless steel construction is easy to clean. The range of models is designed to meet user or laboratory budgets.

Precision heated and multifunctional hybridization ovens

HB-1000 Hybridizer

The **HB-1000** Hybridizer Hybridization Oven provides uniform temperature and rotation controls for thorough mixing of materials.



HB-1000 Hybridizer Hybridization oven features fast heat-up capability. Units are stackable for maximizing laboratory workspace.

- Variable speed control (10 to 15 rpm) of the rotary wheel enables consistent saturation of samples for washing or hybridizing
- Large LED displays the current temperature inside the chamber
- Protective tray is removable to allow easy cleanup of spilled media
- RPM knob adjusts speed control of the rotary wheel for easy removal of samples
- Rotary wheel can hold twenty 35 x 150mm, ten 35 x 300mm bottles or combination
- Rotary wheel design enables off-set bottle positioning for thorough mixing
- Rotary wheel can be removed and replaced with rocker plate (stainless steel 12.5W x 10D in.)

HB-1000 Dimensions:
17.5W x 16H x 15D in. (445 x 406 x 381mm)

HL-2000 HybriLinker™

The **HL-2000** HybriLinker™ Hybridization Oven combines a Hybridization oven *and* UV Crosslinker (254nm UV) in one unit. The Hybridization Oven and Crosslinker operate independently.

HL-2000 HybriLinker Hybridization oven and UV Crosslinker in one unit. The oven has the same features as the HB-1000.

HL-2000 Dimensions:
17.5W x 24H x 15D in.
(445 x 610 x 381mm)

Upper chamber:

- Variable speed control
- Large LED display
- Stainless steel internal construction



Lower chamber (crosslinker - see additional details p. 23):

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

Ordering Information

| | |
|-----------------------------------|-------------------------------------|
| HL-2000 HybriLinker | 95-0031-01 (115V) |
| Hybridization Oven/Crosslinker | 95-0031-02 (230V) |
| Upper Chamber Oven: | |
| Temperature Range: | Ambient 10°C to 99.9°C |
| Heating Element: | 1250 Watts |
| Rotary Wheel Variable Speed: | 10 to 15 rpm |
| Bottle Capacity: | Twenty 35 x 150mm Ten 35 x 300mm |
| Lower Chamber Crosslinker: | |
| UV Light Source: | 254nm UV |

| | |
|------------------------------|-------------------------------------|
| HB-1000 Hybridizer | 95-0030-01 (115V) |
| Hybridization Oven | 95-0030-02 (230V) |
| Temperature Range: | Ambient 10°C to 99.9°C |
| Heating Element: | 1250 Watts |
| Rotary Wheel Variable Speed: | 10 to 15 rpm |
| Bottle Capacity: | Twenty 35 x 150mm Ten 35 x 300mm |

| | |
|--|------------|
| Rocker Tray (for HL-2000, HB-1000, HM-4000) | 98-0067-03 |
|--|------------|

For additional hybridization oven accessories, refer to page 25.

HM-4000 Multidizer™

HM-4000 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.

Lower chamber:

- Variable speed control in lower chamber (10 to 15 rpm) and other features are the same as the HB-1000
- Multiple bottle sizes and off-set bottle positioning

Upper chamber:

- Uses a roller action to operate the shaker tray (included) or optional acrylic carousel or orbital tray
- Shaker tray, for placement of flasks or other containers, operates at 54 - 106 cycles/min.
- Carousel (acrylic) rests on the rollers and rotates at 10 - 20 rpm; carousel holds up to eight 35 x 150mm or four 35 x 300mm bottles or eight 50ml conicals
- Orbital tray motion ranges from 1 - 30 rpm at 0°, 0.5°, or 1.0°

Ordering Information

| | |
|---------------------------|-------------------|
| HM-4000 Hybridizer | 95-0340-01 (115V) |
| Hybridization Oven | 95-0340-02 (230V) |

Upper Chamber

| | |
|--------------------------|----------------------|
| Temperature Range: | Ambient 10°C to 80°C |
| Heating Element: | 500 Watts |
| Shaker Tray Speed: | 54 - 106 cycles/min. |
| Orbital Tray, motorized: | 1 - 30 rpm |
| Carousel: | 12 - 20 rpm |

Lower Chamber

| | |
|------------------------------|---------------------------------------|
| Temperature Range: | Ambient 10°C to 99.9°C |
| Heating Element: | 1250 Watts |
| Rotary Wheel Variable Speed: | 10 - 15 rpm |
| Bottle Capacity: | Twenty 35 x 150 mm Ten 35 x 300 mm |



HM-4000 Multidizer Two compartments operate independently and offer a variety of motion functions - shake, rock, roll and rotate!

HM-4000 Dimensions:

17.5W x 28.5H x 15D in. (445 x 725 x 381mm)

Hybridization Oven Accessories

| | |
|--|------------|
| Bottle, small, 35 x 150mm | 07-0194-01 |
| Bottle, large, 35 x 300mm | 07-0194-02 |
| Rocker Tray (HM-4000, HL-2000, HB-1000) 12.5W x 10D in. (318 x 254mm) | 98-0067-03 |
| Orbital Tray (HM-4000) | 98-0067-04 |
| Reciprocating Shaker Tray (HM-4000) 10W x 6D in. (254 x 152mm) | 98-0067-02 |
| Carousel, Acrylic (HM-4000) | 76-0089-01 |
| Carousel, Metal for ten 50ml conicals (replaces the rotary wheel in the HB-1000, HL-2000, HM-4000) | 76-0075-01 |
| Carousel Kit for 70 x 300mm bottles | 76-0066-01 |

HB-500 Minidizer™

The **HB-500** Minidizer Hybridization Oven is designed as a personal desktop unit ideal for use in laboratories with low use and space requirements.



HB-500 Minidizer
*Compact and portable,
this unit is designed for
low throughput use.*

HB-500 Dimensions:

9H x 13W x 8D in.
(229 x 330 x 203mm)

- Rotation speed set at 12 rpm
- Chamber interior is stainless steel fabrication with a 3/8" thick β-blocking acrylic cover
- Cover swings open for easy access to the bottle carousel; the carousel pops out of chamber for easy insertion of bottles

Ordering Information

| | |
|-------------------------|-------------------|
| HB-500 Minidizer | 95-0330-01 (115V) |
| Hybridization Oven | 95-0330-02 (230V) |

| | |
|--------------------|---|
| Temperature Range: | Ambient to 80°C |
| Heating Element: | 500 Watts |
| Speed: | 12 rpm |
| Bottle Capacity: | Four 35 x 150 mm or Eight 50 ml or Eight 15 ml |

PCR SYSTEMS

UV PCR Cabinets and Workstations

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

Shortwave 254nm UV and antimicrobial coated stainless steel to control contamination

All PCR equipment include the following features:

- Built-in shortwave (254nm) UV tubes for deactivation of DNA between experiments
- 30-minute timer sterilizes apparatus and chamber with the shortwave UV between experiments
- Safety shut-off switch automatically turns the ultraviolet light off when the door is opened
- Keylock prevents accidental exposure of samples to UV
- Easy-clean antimicrobial coating on the stainless steel 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 for placement of small equipment
- Dual acrylic panels block UV below 400nm



UV PCR Workstation shown. Smaller footprint, UV PCR Cabinet also available.

UV Sterilization. All UVP PCR systems create an ideal environment for PCR preparation by reducing the chance of sample contamination. Control potential PCR contamination with 254nm UV tubes built into the chamber. UV2 models feature both overhead UV and built-in UV air recirculator for continuous sterilization.

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

UV PCR Ordering Information

| UV Sterilizing PCR Cabinet* | UV2 Sterilizing PCR Cabinet* | UV Sterilizing PCR Workstation* | UV2 Sterilizing PCR Workstation* |
|--|--|---|---|
| 95-0437-01 (115V) 95-0437-02 (230V) UK 95-0437-04 (230V) Euro | 95-0436-01 (115V) 95-0436-02 (230V) UK 95-0436-04 (230V) Euro | 95-0367-01 (115V) 95-0367-02 (230V) UK 95-0367-04 (230V) Euro | 95-0439-01 (115V) 95-0439-02 (230V) UK 95-0439-04 (230V) Euro |
| Light Sources 254nm UV: Chamber | Light Sources 254nm UV: Chamber UV/air circulator | Light Sources 254nm UV: Chamber | Light Sources 254nm UV: Chamber UV/air circulator |
| White Light: Chamber | White Light: Chamber | White Light: Chamber | White Light: Chamber |
| Two power outlets Two small shelves UV Timer (≤ 30 min.) Antimicrobial coated stainless steel Acrylic panels block below 400nm | Two power outlets Two small shelves UV Timer (≤ 30 min.) Antimicrobial coated stainless steel Acrylic panels block below 400nm | Four power outlets Two shelves UV Timer (≤ 30 min.) Antimicrobial coated stainless steel Acrylic panels block below 400nm | Four power outlets Two shelves UV Timer (≤ 30 min.) Antimicrobial coated stainless steel Acrylic panels block below 400nm |
| Dimensions HWD: 28.7 x 21.4 x 24 in. (729 x 544 x 610mm) | Dimensions HWD: 28.7 x 21.4 x 24 in. (729 x 544 x 610mm) | Dimensions HWD: 28.7 x 29 x 24 in. (729 x 737 x 610mm) | Dimensions HWD: 28.7 x 29 x 24 in. (729 x 737 x 610mm) |



Optional PCR table features two rigid and two adjustable, locking casters. Antimicrobial coated stainless steel reduces bacterial growth. The table accommodates all UVP PCR cabinets and workstations.

PCR Table
98-0077-01

UV/Air Circulator Module (for 95-0367-xx only) 95-0157-01 115V
95-0157-02 230V

HEPA/UV PCR Cabinets and Workstations

Unique HEPA equipment provides maximum contamination control with filtered and sterilized air treated by the HEPA/UV system which blows into the PCR chamber. The systems feature HEPA filters, three UV sources and antimicrobial coated stainless steel.

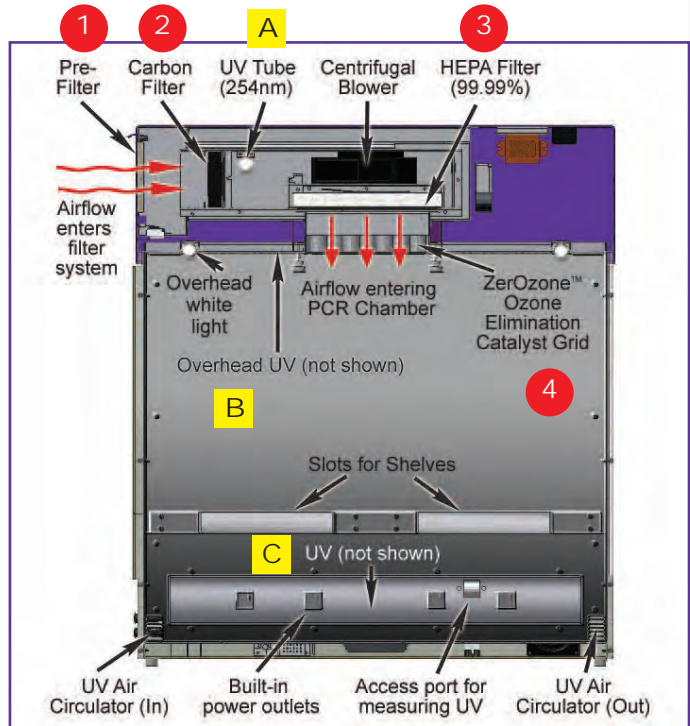
- The UV/HEPA units feature four-stage filters:
 1. Pre-filter helps to preserve the life of other filters by capturing large dust particles
 2. Carbon-filter removes ozone, gases, odor and smoke
 3. HEPA-filter provides a barrier (99.99%) against dust, bacterial and mold down to 0.3 micron particles
 4. ZerOzone ozone catalyst grid reduces significant amounts of ozone, minimizing the degrading effects of ozone on microarray data. The catalyst grid supplies a gentle airflow onto the sample work area. This airflow creates a working environment that helps to block entry of unwanted contaminants onto PCR samples
- HEPA duct features antimicrobial coated stainless steel that resists bacteria growth
- Side access with a slide out design makes changing filters and UV tube easy
- Duct includes a shortwave (254nm) ultraviolet tube for eliminating airborne microbes



UV3 HEPA PCR Systems (workstation shown) feature four stage filters, antimicrobial coated stainless steel and shortwave UV.

The UV3 HEPA PCR drawing below (front cut-out view) demonstrates the air flow through the filter system.

Only UVP provides three UV sources (UV3) which are indicated in the drawing below: filter area (A), chamber (B) and UV/air circulator (C).



UV Intensity Measurements. As UV tubes age, the intensity and germicidal destruction rates decrease. The lower the tube intensity, the longer the tubes must be illuminated to accomplish the same objective. See page 14 for UV intensity meters.

UV/HEPA PCR Ordering Information

UV3 HEPA PCR Cabinet*

95-0434-01 (115V)
95-0434-02 (230V) UK
95-0434-04 (230V) Euro

Light Sources

254nm UV:

Filter area
Chamber
UV/air circulator

White Light:

Chamber

Four stage filters:

Pre-filter
Carbon filter
HEPA filter
ZerOzone catalyst grid

Features include:

Two power outlets
Two small shelves
UV timer (≤ 30 min.)
Antimicrobial coated stainless steel
Acrylic panels block below 400nm

Dimensions HWD:
32.5 x 21.4 x 24 in.
(826 x 544 x 610mm)

UV3 HEPA PCR Workstation*

95-0438-01 (115V)
95-0438-02 (230V) UK
95-0438-04 (230V) Euro

Light Sources

254nm UV:

Filter area
Chamber
UV/air circulator

White Light:

Chamber

Four stage filters:

Pre-filter
Carbon filter
HEPA filter
ZerOzone catalyst grid

Features include:

Four power outlets
Two shelves
UV timer (≤ 30 min.)
Antimicrobial coated stainless steel
Acrylic panels block below 400nm

Dimensions HWD:
32.5 x 29 x 24 in.
(826 x 737 x 610mm)

*Assembly required.

UV INCUBATOR

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

- Microprocessor controlled incubation temperature
- Heating element and fan generates uniform temperature throughout the chamber
- Decontaminate the chamber between growth experiments with the overhead shortwave 254nm UV sterilization
- View samples without opening the door
- Two ventilated shelves included or remove the shelves to stack up to 150 10cm plates
- Temperature: 68°C maximum; Accuracy: +1°C
Uniformity: +0.5°C at 37°C

UV Incubator Enables researchers to perform growth experiments prior to colony counting.

Dimensions:
17.5W x 14.75D x 18H in. (445 x 375 x 457mm)

Volume: 0.95 cubic ft. (26.9 liters)



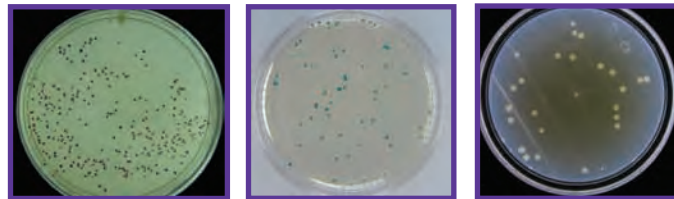
Ordering Information

| | |
|-------------------------------------|-------------------|
| SI-950 UV Benchtop Incubator | 95-0358-01 (115V) |
| | 95-0358-02 (230V) |
| Replace. Tube, 8W, 254nm UV | 34-0007-01 |

BASIC IMAGING SYSTEMS

ColonyDoc-It™ Imaging Station

Accurate and automated colony counting is possible with this compact station. The 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.



Applications including fluids contamination, microbiology and hygiene studies, antibiotic testing and more.

Integrated high resolution **digital color camera** to capture colonies

Ability to insert and select multiple **emission filters**

Alcove to accommodate **33 - 150mm** plate and filter sizes

Compact footprint is designed for small laboratory benches



Easy system set up

Epi white and blue lights

Detachable doors provide a darkroom environment for visualizing GFP

Bright darkfield and white light transillumination

User defined templates and counting parameters such as eight color differentiation

Intuitive software enables users to quickly capture and count colonies. Simply place the colonies in the station, select the optimal light source, capture the colony image, and click a button to automatically count the colonies. Detailed statistics reports can then be generated.

Ordering Information

| | |
|---|-----------------------|
| ColonyDoc-It 110 Imaging Station | 97-0539-01 (100-115V) |
| | 97-0539-02 (230V) |
| Filter, GFP | 38-0340-01 |

Dimensions:

13W x 12.5D x 17.5H in. (343 x 318 x 445mm)

Colony Counting Software loads on the user's computer for camera control, image capture and colony counting.



DigiDoc-It™ Imaging Systems

The DigiDoc-It System connects to the user's computer and is designed as an economical imaging system for image capture and documentation of gels and plates. UVP's exclusive software controls the camera functions and offers many image enhancement and reporting features. Maintain laboratory records with image history tracking capabilities.



DigiDoc-It System with High Performance UV Transilluminator.

- System offers intuitive simple and powerful performance and affordability by combining a high megapixel digital color camera housed in the top of a lightweight hood
- See gels through the UV blocking viewport; for maximum darkness, close the viewport shutter when taking pictures
- Lightweight door opens for access to the transilluminator filter surface
- Exclusive software controls the camera and enables image capture, enhancement, annotation and archiving of digital images
- Quickly see live preview of gel images on the computer monitor
- Select a large format High Performance Transilluminator with a 20x20cm, 21x26cm or 25x30cm filter area; or select a Benchtop Transilluminator and drawer (ordered separately, for transilluminators see pages 18-21)



DigiDoc-It System with the optional drawer (above) and Benchtop Transilluminator

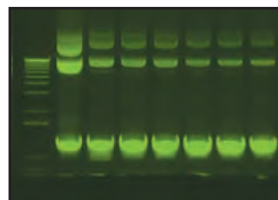
Ordering Information

| | |
|--|--|
| DigiDoc-It 110 Imaging System with TFM-20V Transilluminator | 97-0243-01 (100-115V) 97-0243-02 (230V) |
| DigiDoc-It 110 Imaging System with TFM-26V Transilluminator | 97-0244-01 (100-115V) 97-0244-02 (230V) |
| DigiDoc-It 110 Imaging System with TFM-30V Transilluminator | 97-0246-01 (100-115V) 97-0246-02 (230V) |
| DigiDoc-It 110 Imaging System (No Transilluminator) | 97-0105-01 (100-115V) 97-0105-06 (230V) |
| Drawer (order Benchtop Transilluminator separately) | 98-0068-01 |

Exclusive Capture/Control Software, included with the DigiDoc-It, ChromaDoc-It and the MultiDoc-It Systems, controls camera functions and allows capture of quality, high resolution color images. Software features include:

- Range of image resolutions
- Image noise reduction
- Image enhancement and annotation
- Templates for multiple users/experiments
- User-defined and detailed reports
- Supports compliance with 21 CFR Part 11

Doc-ItLS Analysis Software is also available. Refer to p. 31



Document Low Cost, Archive Quality Prints with the **Digital Thermal Printer** (see page 34 for details)

Hood Dimensions:

17.75W x 12D x 16.6H in. (451 x 305 x 422mm)

Digi Cam 110* Camera Specifications

| | |
|--------------------|--|
| CCD Imager: | High resolution megapixel camera (up to 14.7MP)* |
| Lens: | 4x digital zoom, 5x optical zoom |
| Image Resolution: | 320 x 240 up to 4416 x 3312 |
| Interface: | USB connector |
| Power Supply: | AC Adapter Kit |
| Camera Dimensions: | 4.3W x 3.06H x 1.8D in. (109 x 77.7 x 45.7mm) |

* Camera specifications subject to change without notice. Contact UVP for current camera specifications.

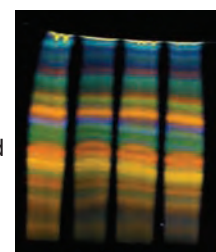
ChromaDoc-It™ Imaging Systems

ChromaDoc-It features a high resolution megapixel digital color camera plus overhead UV for capturing brilliant TLC images. Software loads on the user's computer for image capture,



ChromaDoc-It TLC Imaging System The high resolution megapixel camera is excellent for TLC imaging applications.

Cabinet Dimensions: 19.75W x 16.5D x 15.375H in. (502 x 419 x 391mm)



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

Digi Camera 110* (High Megapixel Digital Color), Cabinet with 254/365nm UV and Camera Mount, TLC filter; Capture/Control Software; Compatibility: Windows XP SP2

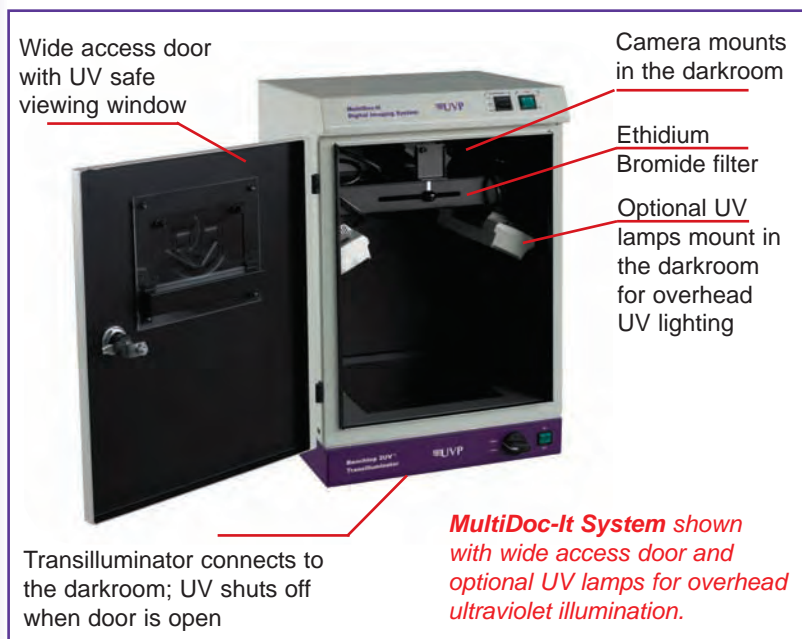
Ordering Information

| | |
|--------------------------------|-------------------|
| ChromaDoc-It 110 System | 97-0109-01 (115V) |
| | 97-0109-02 (230V) |

Thermal Printer is available for low cost prints. See page 34 for details.

MultiDoc-It™ Imaging Systems

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



MultiDoc-It System shown with wide access door and optional UV lamps for overhead ultraviolet illumination.

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

* **Digi Camera 110 Specifications** shown on page 29. To object the most current specifications, contact UVP.
Note: DigiDoc-It, ChromaDoc-It, and MultiDoc-It Systems require a computer for capturing images.

- High resolution megapixel digital color camera for capturing images
- Rugged metal darkroom, with 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 (MultiDoc-It TLC includes two UV lamps)

Digi Camera 110* (High Megapixel Digital Color), Darkroom, Capture/Control Software (Win XP, SP2), EtBr filter

Ordering Information

| | |
|-----------------------------|-------------------|
| MultiDoc-It 110 with | 97-0192-01 (115V) |
| M-20V Transilluminator | 97-0192-02 (230V) |

| | |
|-----------------------------|-------------------|
| MultiDoc-It 110 with | 97-0193-01 (115V) |
| LM-20E Transilluminator | 97-0193-02 (230V) |

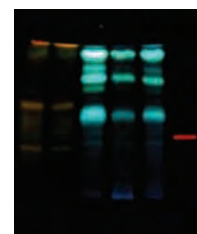
| | |
|-----------------------------|-------------------|
| MultiDoc-It 110 with | 97-0194-01 (115V) |
| M-26V Transilluminator | 97-0194-02 (230V) |

| | |
|-----------------------------|-------------------|
| MultiDoc-It 110 with | 97-0195-01 (115V) |
| LM-26E Transilluminator | 97-0195-02 (230V) |

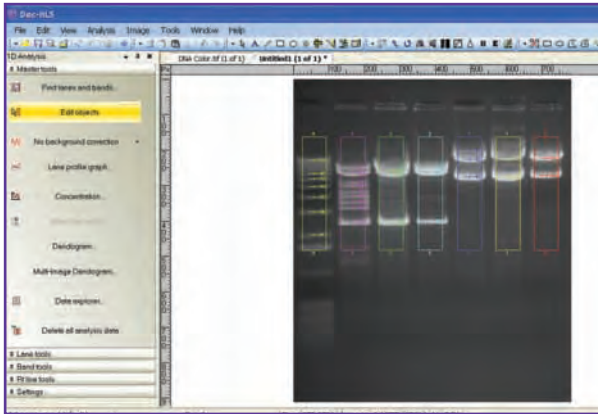
| | |
|----------------------------|-------------------|
| MultiDoc-It 110 TLC | 97-0202-01 (115V) |
| with 2 UVGL-25 UV lamps | 97-0202-02 (230V) |

| | |
|-------------------------|-------------------|
| UVGL-25 UV Lamp, | 95-0021-12 (115V) |
| 254/365nm UV | 95-0021-10 (230V) |

Models available with side access doors.



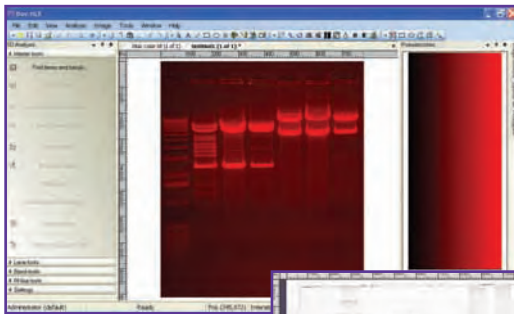
Doc-ItLS Analysis Software is designed as an easy to use software package for analysis of gels, plates and more. The software offers many image enhancement tools, analysis functions, user preference settings, report generation and supports 21 CFR Part 11 compliance.



Doc-ItLS Software provides automatic lane and band finding algorithms for quick, accurate image analysis.

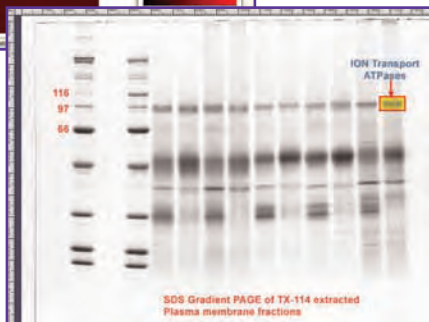
Image Enhancement Capabilities

- Enhance images with adjustments including brightness, contrast, gamma, emboss, invert and pseudo color
- Annotate images with text, lines, arrows, ellipse and highlighter tools
- Reduce image noise with histogram and starfield subtraction



Pseudocolor images highlight specific intensities for analysis purposes.

Annotation allows an overlay of non-destructive annotation or “burns” the annotation into an image for permanent documentation.



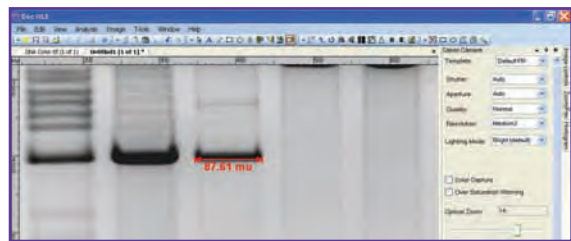
User Preferences

Personalize software workspace by placing tool bar icons along the side or across the top, with or without text. Then save the profiles by user name. Set up user accounts with passwords to protect data. Tool bar layout preferences can be saved for different users.

Create customized templates with specific software setting to aid in automating repeat experiments or use in teaching labs.

Image Analysis Functions

- Generate easy to interpret quantitative data of lanes and bands
- Measure angles, areas and lengths with the Measurement Tool
- Detect straight, curved or slanted lanes and bands automatically or manually
- Create histograms for detailed visual analysis
- Apply one of the multiple background correction curve methods for more accurate analysis
- Calibrate using multiple Molecular Weight (MW) standards
- Save images in various file formats including TIFF, JPEG, BMP and GIF



Measure angles, areas and lengths with the measurement tool.

Report Generation

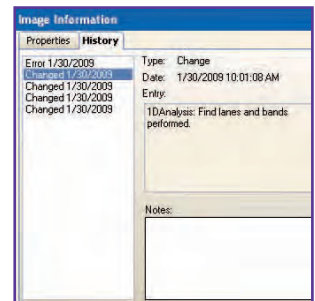
- Create detailed and user-configured reports showing specific analysis results
- Configure the Qwik-Link icon to automatically open any external software program



Personalize images and reports with identifying descriptions on lanes and bands.

Supports 21 CFR Part 11 Compliance

Doc-ItLS Software fully supports image security and change logs to assist with 21 CFR Part 11 compliance. Easily track image and analysis history and show image properties and user notes.



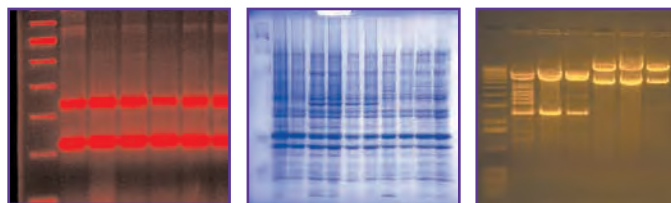
Ordering Information

Doc-ItLS Analysis Software
(compatible with Win XP SP2)

97-0185-02

BioDoc-It™ Imaging Systems

No computer required for this stand-alone system. The system enables simple documentation of fluorescent and non-fluorescent (with optional white light plate) gels with the ability to save images to the USB or network for later quantitative analysis or enhancement for publication.



Large 8" touch screen displays live preview of images; the screen tilts for optimum viewing angle

Save images to the USB drive or connect to network for image transfer to another computer

Unique Viewer window allows visibility of gels without opening the door

Wide access door with safety switch turns UV off when the door is open

Compact design for minimal laboratory bench space

Monochrome 8-bit CCD camera supplies super image quality

Zoom lens (manual) located below the camera is easily accessible for adjustment of aperture, zoom and focus

Ethidium Bromide Filter in easy access slide-out filter tray allows exchange of filter

Epi white light for focusing and illumination of samples

Side access doors (select models) allow gels to be moved or cut while viewing the gel fluorescence through the window

Benchtop or FirstLight UV Transilluminator



Software interface on both the BioDoc-It and VisiDoc-It Systems quickly loads on the screen. All functions are selected directly from the buttons.

- **Live** – See a live preview of the gel
- **Snap** – Capture the image and **Save** the snapped image to TIFF, GIF and JPEG file formats
- **Print** – Connect to an optional printer
- **Time Stamp** – Set the date and time for each image captured
- **Exp Warn** – Set the exposure warning
- **Preferences** – Set user preferences
- **Integration** – Increase or decrease integration times

Dimensions:

External with camera: 30.7H x 14.2W x 13.3D in. (780 x 361 x 338mm)
 Internal: 11.7D x 12W x 12.8H in. (297 x 305 x 325mm)

Optional equipment for use with UVP's Biolmaging Systems:

- Converter Plates - page 22
- Gel Tools - page 22
- Thermal Printer - page 34
- Doc-It@LS Analysis Software - page 31

FluorCam 210* Camera Specifications

| | |
|----------------------|---------------------------------------|
| CCD Imager: | Monochrome 8-bit scientific grade CCD |
| Grayscale: | 0 - 256 |
| Pixel Resolution: | 640 x 480 (VGA) |
| Chip Source: | Sony 1/3" ICX424AL |
| Captured Image Size: | 300 kb @ 8-bit (TIFF format) |
| PC Interface: | USB 2.0 connection |
| Lens: | 5.7 - 34.2mm zoom |

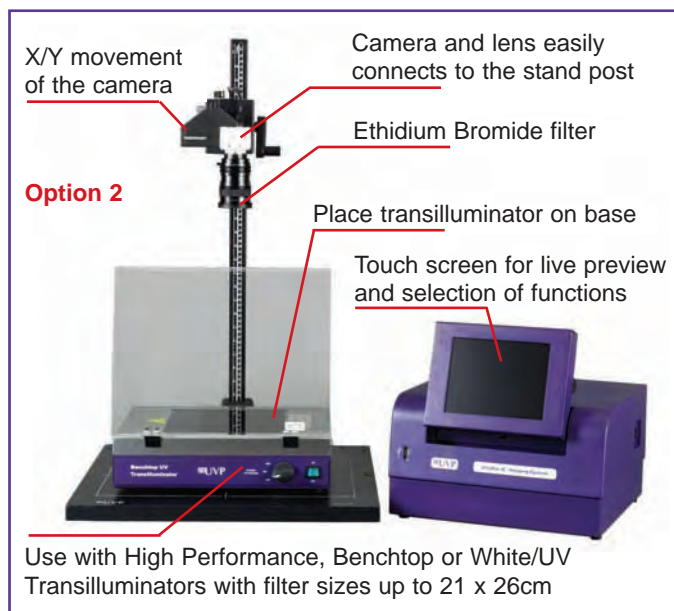
Ordering Information

| BioDoc-It (standard) | | Transilluminator Included the BioDoc-It | BioDoc-It (w/side access) | |
|----------------------|------------|--|---------------------------|------------|
| 115V | 230V | | 115V | 230V |
| 97-0165-01 | 97-0165-02 | with M-20V (20x20cm, 302nm) | 97-0182-01 | 97-0182-02 |
| 97-0166-01 | 97-0166-02 | with LM-20 (20x20cm, 302/365nm) | 97-0174-01 | 97-0174-02 |
| 97-0167-01 | 97-0167-02 | with M-26V (21x26cm, 302nm) | 97-0183-01 | 97-0183-02 |
| 97-0168-01 | 97-0168-02 | with LM-26 (21x26cm, 302/365nm) | 97-0175-01 | 97-0175-02 |
| 97-0170-01 | 97-0170-02 | with LMS-20 (20x20cm, 254/302/365nm) | 97-0176-01 | 97-0176-02 |
| 97-0171-01 | 97-0171-02 | with LMS-26 (21x26cm 254/302/365nm) | 97-0177-01 | 97-0177-02 |
| 97-0172-01 | 97-0172-02 | with M-26XV (25x26cm, 302nm) | 97-0178-01 | 97-0178-02 |
| 97-0188-01 | 97-0188-02 | with FirstLight FI-20 (20x20cm, 302nm) | 97-0190-01 | 97-0190-02 |
| 97-0187-01 | 97-0187-02 | with FirstLight FI-26 (21x26cm, 302nm) | 97-0189-01 | 97-0189-02 |
| 97-0173-01 | 97-0173-02 | with FirstLight FI-26X (25x26cm, 302nm) | 97-0179-01 | 97-0179-02 |

BioDoc-It Systems include: CCD monochrome camera/lens, touch screen/stylus pen, darkroom and USB stick, epi white light and standard door (front access only) or plus side access doors (front and side access), Ethidium Bromide Filter, choice of transilluminator

VisiDoc-It™ Imaging Systems

The VisiDoc-It Imaging Systems with compact processor connect to the camera for fast, easy image capture. These economical systems, available with a hood or a stand, allow users to order the transilluminator separately.



VisiDoc-It image processor connects to the camera and Hood (left) or Stand (above) for low cost gel documentation (order transilluminator separately).

- Both versions use the same processor with touch screen and stylus pen, USB drive, capture software and camera/lens as the BioDoc-It Imaging Systems
- **Option 1:** The lightweight hood fits on top of any transilluminator with filter sizes up to 21x26cm
- **Option 2:** The camera connects to the stand which positions the camera above a transilluminator placed on the stand base (transilluminators optional). The stand allows three-axis movement of the camera

Dimensions:

Processor: 5H x 14.1W x 12.7D in. (127 x 358 x 323mm)
 Hood: 16H x 12.4W x 9.4D in. (406 x 315 x 239mm)
 Stand: 18.5D x 19.8W x 32.5H in. (470 x 503 x 826mm)

Ordering Information

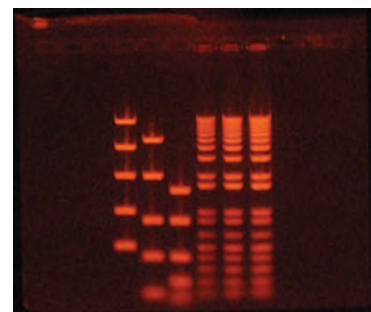
VisiDoc-It System with Hood 97-0191-01 (115V)
 97-0191-02 (230V)

VisiDoc-It System with Stand 97-0191-04 (115V)
 97-0191-05 (230V)

VisiDoc-It Systems include: CCD monochrome camera and lens, touch screen and stylus pen, processor, hood or stand, Ethidium Bromide Filter, USB stick

PhotoDoc-It™ Imaging Systems

Compact system combines a digital color camera, hood, transilluminator and a color printer for low cost prints. The optional LCD monitor mounts to the front of the hood for preview and capture of gels.



High resolution digital color camera to capture gel images

Ethidium Bromide filter located inside the hood

Lightweight hood, with handles for portability, fits over transilluminators with filter sizes up to 21x26cm

Optional color LCD monitor allows preview of images

System can be configured with choice of **UV transilluminator**

Quickly generate **4 x 6" color prints** (108 prints)

The PhotoDoc-It is designed to **replace instant Polaroid photodoc systems**

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

PhotoDoc-It Systems include: Digi Camera 55 (camera specifications subject to change without notice), Hood Enclosure, EtBr Filter, Combination Lock, Color Printer and Choice of Benchtop UV Transilluminator

Ordering Information

| | |
|---|--|
| PhotoDoc-It 55 with color printer and M-20 Transilluminator | 97-0274-04 (100-115V) 97-0274-05 (230V) |
| PhotoDoc-It 55 with color printer and LM-20 Transilluminator | 97-0274-07 (100-115V) 97-0274-08 (230V) |
| PhotoDoc-It 55 with color printer and M-26 Transilluminator | 97-0274-10 (100-115V) 97-0274-11 (230V) |
| PhotoDoc-It 55 with color printer and LM-26 Transilluminator | 97-0274-13 (100-115V) 97-0274-14 (230V) |
| LCD Screen (optional) 6.4" TFT Video Monitor; 12 VDC Power | 98-0093-01 |

PhotoDoc-It Specifications

| | |
|---------------------------------|--|
| Digi Camera 55: | Megapixel resolution color camera* with USB connectivity, 4X optical zoom lens |
| Hood: | Compact design of metal construction Handles for portability Fits up to 21x26cm filters |
| Transilluminator (choose from): | M-20: 302nm UV, 20x20cm filter LM-20: 302/365nm UV, 20x20cm filter M-26: 302nm UV, 21x26cm filter LM-26: 302/365nm UV, 21x26cm filter |
| Filter: | 50mm Sq. Ethidium Bromide |
| Printer: | Color, with 300x300 resolution 4x6" prints (108 prints/ink included) and USB connectivity Dim: 7 x 5 x 2.5 in. (178 x 127 x 64mm) |
| Combination Lock: | 3 digit resettable combination lock |

THERMAL PRINTER

Document gels, films and membranes with a high quality thermal printer. Easily connects for use with UVP's imaging systems (except PhotoDoc-It). Process low cost prints in seconds. Replacement paper rolls install easily.



Digital Thermal Printer for archive quality prints in seconds.

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

- Compact printer size takes up minimal lab space
- Supplies 256-gray scale for high resolution, archive-quality thermal film prints

Ordering Information

| | |
|---|--|
| Digital Thermal Printer Mitsubishi | 89-0069-06 (115V) 89-0069-07 (230V) |
| Digital Thermal Printer Sony (for Europe) | 89-0357-01 (230V) |
| Thermal Paper, Mitsubishi 4 rolls (800 prints) | 89-0038-01 |
| Thermal Paper, Sony super glossy UPP110HG 5 rolls (1000 prints) | 89-0174-01 |
| Thermal Paper, Sony glossy UPP110HA 5 Rolls (1000 prints) | 89-0031-01 |

ADVANCED IMAGING SYSTEMS

BioSpectrum® Imaging Systems



One powerful system for multiple applications including chemiluminescent, fluorescent bioluminescent, and colorimetric imaging. Research is automated with one-touch, pre-set or user-defined controls. Generate accurate, repeatable imaging and analysis. The BioSpectrum is faster than film for Western blot imaging; no film required.

- Choose from an assortment of CCD cameras including deeply cooled cameras and motorized optics
- VisionWorksLS software with templates for automating repeat experiments; extensive image enhancement, analysis and reports
- Five-position emission filter array
- Light tight darkroom creates optimum imaging conditions
- Choice of transilluminator is accessed on the roll-out tray
- Built-in epi white light and UV
- Uniform LED white light plate
- Chemi tray for placement of blots

ChemiDoc-It™ Imaging Systems



Compact and dedicated for chemiluminescent and bioluminescent imaging applications.

- Select from several high resolution, high sensitivity cooled CCD cameras to optimize chemiluminescent imaging including Western blots
- No film required when capturing chemiluminescent images
- Light tight darkroom creates optimum imaging conditions for chemiluminescent applications
- Sample platform is height adjustable and non-reflective to minimize light scattering and accommodates blots up to 21 x 26cm

GelDoc-It™ Imaging Systems



Maximize gel documentation capabilities with the modular GelDoc-It Imaging System for high resolution fluorescent gel imaging.

- Industry leading high resolution CCD camera
- Modular design: add filters, add epi UV modules or converter plates
- Four position filter array includes an EtBr filter; add emission filters as required
- Optional uniform white light LED plate for colorimetric imaging
- VisionWorksLS enables image enhancement, analysis, reporting
- System is designed to be used with a separate computer and monitor



The GelDoc-It TS (left) features an integrated design with touch technology, built-in computer and a user-friendly interface for high resolution fluorescent gel imaging. Add a uniform white light plate for colorimetric imaging. This system offers a modular design, high resolution CCD camera and single position filter tray with an EtBr filter. Save images to the front mounted USB port or transfer images via network or FTP.

iBox® Small Animal Imaging Systems



iBox Small Animal Imaging Systems for in vivo imaging enables researchers to visualize and capture multispectral fluorescently labeled cells.

- Real time, non-invasive capabilities speed up basic and preclinical research studies in tumors, oncology, heart diseases and more
- High resolution and low light sensitivity allows detection of fluorescent markers deep within the animal
- Wide spectral range emission filters for visible, IR (up to 800nm) UV excitation
- Easy to use software automates research with templates for consistent, reproducible results
- Anesthesia unit is available to produce a state of immobilization that allows for acquisition of repeatable and reliable data

For Advanced Imaging Systems information, contact UVP or go to UVP.com.

ULTRAVIOLET APPLICATIONS

For additional application information, contact UVP or go to UVP.com.

UVA Longwave UV - 365nm: **Laboratory/Research:** Bacterial Identification * Specimen Staining * Gel Electrophoresis * Chlorination * Fluorochemistry * Pesticide Analysis * Fluorescence Photography * Titration Processes * TLC * Nucleic Acid Visualization * Genetic Experiments * Virology * **Sanitation:** Aflatoxin Detection * Rodent Contamination and Lice Detection * Detection of Food Contamination * Milkstone Inspection * E-Coli Water Testing * Culture Fluorescence * **Medical:** Medical Diagnosis * Dermatology * Cosmetology * **Education:** Fluorescence Demonstration and Analysis * **Industrial:** Non-Destructive Testing * UV Curing * Magnetic Particle Inspection * Inspection of Conformal Coatings * Leak Detection * **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 * **Miscellaneous:** Examination of Fine Art * Archaeology * Entomology * Photoresist Exposure * Philately * Re-Admission Control * Mineralogy * **Automotive:** Leak Detection * Windshield Repair

UVB Midrange UV - 302nm: **Research:** Gel Electrophoresis * Gel Viewing * Optical Lab Measurements * **Industrial:** UV Curing * Gradient Sampling * Solar Experimentation * **Medical:** Phototherapy * Dermatological * **Miscellaneous:** Mineralogy * Art and Museum Inspection

UVC Shortwave UV - 254nm: **Criminology:** Document Examination * Field Clue * Arson Investigation * Toxicology * **Education:** Fluorescence Demonstration/Analysis * **Laboratory/Research:** Fluorochemistry * Mercury Detectors * Optical Alignment * Pesticide Analysis * Polymer Curing * Sterilization * DNA Analysis * Biochemical Testing * Electrophoresis * TLC * Mutation * Mycology * Nucleic Acid Visualization * Photochemistry * Photo Disassociation * **Miscellaneous:** Air Pollution * E-Coli Testing * Alumina Testing * Archaeology * Fluorescence Photography * Mineralogy * Philately

WORLDWIDE DEALER SALES AND SUPPORT

UVP is represented by the finest world-wide network of dealers and distribution partners who offer sales, service and support to You, Our Customers. For a list of UVP's dealers, go to:

UVP.com/dealers.html

Additionally, UVP offices offer customer and technical support for all of our products. Contact the Upland office by phone at (800) 452-6788 or (909) 946-3197 or by email at info@uvp.com; Cambridge UK at +44(0)1223-420022 or uvp@uvp.co.uk



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