



## LABORATORY / LIFE SCIENCES

## ULTRAVIOLET PRODUCTS



- **▶** Crosslinkers
- ► Radiometer Kits
- **▶** UV Light Sources



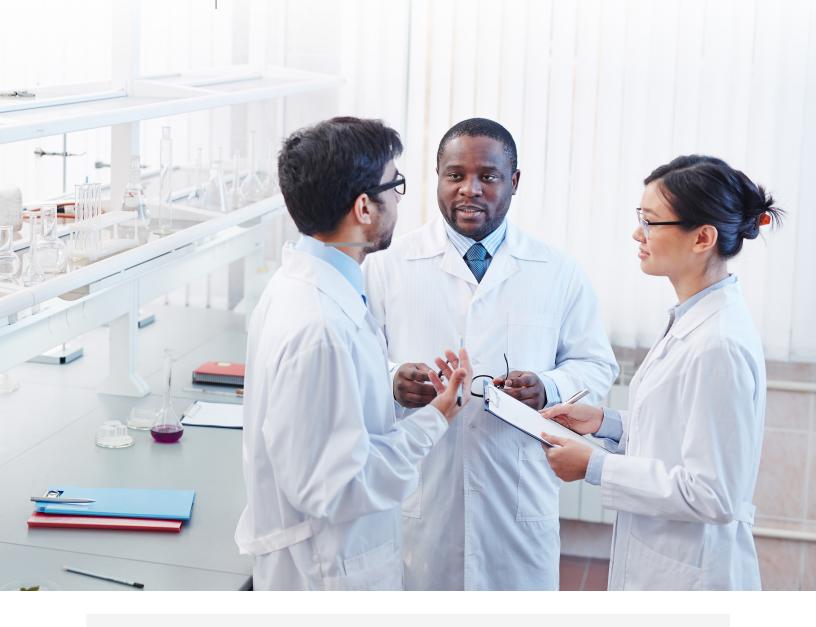






Spectroline® UV laboratory products are built and tested to meet laboratory research and life science applications that require uncompromising quality and reliability.

For researchers, Spectroline® offers a wide range of products, including crosslinkers, UV lamps, digital radiometers, fluorescence analysis viewing cabinets and work stations, in addition to protective eye and face wear.





Spectro-UV's mission is to make the world a safer place with our standard-setting, high-quality products for the world's UV applications.

By inhabiting a culture that attracts and retains creative, talented, and energetic employees, our goal is to maximize our ability to provide innovative and cutting-edge technologies to our global customer base.



## **Q-Series/QZ-Series**

## **UV MAGNIFIER LAMPS**

The Q-Series offers various lamp combinations of long wave UV, short wave UV and white light, giving you the ability to select a unit that's ideal for your specific application.



- Extra-lightweight ballast and housing design for fatigue-free use
- ► Rugged phenolic handle attached
- ▶ UV-A tubes equipped with our unique LONGLIFE™ filter glass
- ▶ Full line of accessories

Model	Wavelength	No. Of Tubes	Power
Q-12	UV-A (365nm)	2	4 Watts
Q-22	UV-A (365nm) / White Light	2/2	4 Watts
QZ-22	UV-A (365nm) / White Light	2/2	4 Watts
QZ-22B	UV-A (365nm)	4	4 Watts

## **UV Crosslinkers**

## MONITOR UV RADIATION AND SELF-ADJUST TO VARIATIONS IN UV INTENSITY

All Spectroline UV crosslinkers feature a "smart" microprocessor controller and unique true UV monitoring circuitry to enable users to get error-free results with speed, accuracy and safety. These units are built specifically to eliminate time-consuming adjustments, unnecessary repetitive programming and unwarranted risk of sample damage.



- ► UV crosslinking of DNA and RNA after Northern, Southern, slot or dot blots and colony or plaque lifts
- ▶ PCR decontamination
- ▶ Nicking ethidium bromide-stained DNA in agarose gels
- ▶ Gene mapping for cleavage-inhibiting thymine dimers
- ▶ RecA mutation screening in E. coli. UV sterilization
- ► Continuous UV dosing
- Miscellaneous UV-dosage applications including UV-induced polymerization or drying

## FEATURES OF OUR CROSSLINKERS:

- Covalently binds nucleic acid sequences and hybridization membranes in 30 seconds or less
- ▶ Safeguards your valuable test results from washouts
- ► Ensures optimum nucleic acid membrane binding, even when UV output varies
- ► Provides ultimate ease of use and accuracy with "Smart" microprocessor controller
- Protects users from UV exposure with fully enclosed chamber





## Programmable "Smart" Microprocessor Controller:

- LED-function indicators and color-coded keypad
- ▶ Built-in "help" messages
- Four operation modes
- Auto Repeat function remembers last operation without reprogramming

#### Built-in "help" messages —



- ▶ Bulb: When the UV tubes need to be replaced
- ► Door open: the unit also protects users from accidental UV radiation when the door is opened during a run
- ▶ End: End of cycle confirmed with display and audible beep
- Remaining Time/Energy provides operation status report
- When the operation has been interrupted. The RESET button cancels the latest settings and START button automatically resumes the current operation.

## **Spectrolinker™ Series**

- Rugged, anodized aluminum housing
- Long lasting anodized aluminum chamber prevents rusting
- Available in multiple wavelengths
- Available in Two Sizes: Standard XL-1000 Series, and Large XL-1500 Series



#### STANDARD SIZE

#### Spectrolinker™ XL-1000 Series and

- Overall housing dimensions (W x H x D): 19.5" x 10.5" x 9" (49.5 x 26.7 x 22.9 cm)
- ► Effective inner chamber dimensions (W x H x D): 13.5" x 7.0" x 7.5" (34.3 x 17.8 x 19.1 cm)
- ► Door dimensions (W x H): 12.0" x 6.25" (30.5 x 15.9 cm)
- Viewing window dimensions (W x H): 6.0" x 2.5" (15.2 x 6.4 cm) for XL-series
- ► Net weight: 17.5 lb (7.9 kg)
- Power: 120V-60Hz-2A, 230V-50Hz-2A, 100V-50/60Hz-2A

 Model (Part #)
 WAVELENGTH
 TUBES

 XL-1000
 UV-A (254 nm \*)
 (5) 8W SW, BLE-8T254

#### LARGE SIZE

### Spectrolinker™ XL-1500 Series only

- Overall housing dimensions (W x H x D): 24.0" x 10.5" x 14" (61.0 x 26.7 x 35.6 cm)
- ► Effective inner chamber dimensions (W x H x D): 18.25" x 6.25" x 12.5" (46.4 x 15.9 x 31.8 cm)
- ▶ Door dimensions (W x H): 16.0" x 6.25" (40.6 x 15.9 cm)
- Viewing window dimensions (W x H): 6.0" x 2.5" (15.2 x 6.4 cm)
- ► Net weight: 26 lb (11.8 kg)
- ► Power: 120V-60Hz-3A, 230V-50Hz-3A, 100V-50/60Hz-3A

 Model (Part #)
 WAVELENGTH
 TUBES

 XL-1500
 UV-A (254 nm \*)
 (6) 15W SW, BLE-1T155

<sup>\*</sup>The 254 nm versions provide super-fast DNA and RNA crosslinking to membranes for improved hybridization-signal sensitivity. At peak, these units can process samples in under 30 seconds — that's 240 times faster than vacuum-oven baking!

#### FLUORESCENCE ANALYSIS CABINETS

Spectroline® workstations utilize darkroom cabinets for convenient viewing, analyzing or photographing of fluorescent samples with both epi-illumination and trans-illumination light sources. Our full range of cabinets provides different working sample sizes, options for UV lamps and is useful for numerous applications.

Our portable, space-saving mini-cabinets double as personal darkrooms and UV irradiating units. The CM-10A model comes without a light source but can be outfitted with one of our Spectro-UV E-series UV lamps, available in 4-, 5- and 6-watt versions in combinations of wavelengths.

## **CM-Series**

# LIGHTWEIGHT, PORTABLE VIEWING DARKROOMS ARE EASILY TRANSPORTED

- ► Flexible, contoured eyepiece with a built-in UV-absorbing window for safe sample viewing
- ► Felt curtain permits easy access to cabinet interior while shielding samples from external light
- Lightweight, durable construction creates easily transportable darkroom



CM-10A

Model	Housing Dimensions	Net Weight
CM-10A	9W X 12L X 6 1/2H (22.8W X 30L X 16.5 cmH)	5 lbs. (2.3kg)
CM-26A	9W X 12L X 6 1/2H (22.8W X 30L X 16.5cmH)	7 lbs. (3.2kg)



**CM-26A** 

#### **BATTERY OPERATED LAMPS**



## **E Series**

# COMPACT, LIGHTWEIGHT MODELS\*

Compact, lightweight models provide ideal combinations of wavelengths, intensities, sizes and wattages.



- ▶ All lamps come standard with attached convenient carrying handle
- ► Four-way power, each with a distinct mode of operation

Model	Wavelength	No. Of Tubes	Power
E-14N	UV-A (365nm)	1	4 Watts
EA-140	UV-A (365nm)	1	4 Watts
EA-160	UV-A (365nm)	1	6 Watts
EN-140	UV-A (365nm)	1	4 Watts
ENF-240C	UV-A (365nm) / UV-C (254nm)	1/1	4 Watts / 4 Watts
ENF-260C	UV-A (365nm) / UV-C (254nm)	1/1	4 Watts / 6 Watts
ENF-280C	UV-A (365nm) / UV-C (254nm)	1/1	8 Watts / 8 Watts
ENF-280/12H	UV-A (365nm) / UV-C (254nm)	1/1	8 Watts / 8 Watts

## UV-4B

## **POCKET SIZED ILLUMINATION**

Small, low-pressure, mercury-vapor discharge lamps made of double-bore material with both electrodes at one end.

- ► Lightweight and portable
- ▶ 4W UV-A (365nm) wavelength tube
- ▶ Dimensions are 6.25 x 2 x 1 in (15.9 x 5.1 x 2.5 cm)
- ▶ Weighs only 7 oz (198g) with batteries
- ▶ Powered by four AA (1.5 volt) alkaline batteries (not included).
- ▶ Provides 4 to 6 hours of use



### BENCH AND DISPLAY LAMPS

## **X-Series**

#### **BENCH AND DISPLAY LAMPS\***

For applications where high-intensity, wide-area UV coverage is required. Constructed of rugged metal with sturdy mounting brackets, these units are available in various combinations of long, medium and/or short wave UV. Ideal for numerous applications requiring a darkened environment.

- ► Choice of 15-watt and 40-watt models
- Available in all UV wavelengths as well as germicidal lamps
- ▶ Single- and double-tube combinations
- ► Filtered and unfiltered UV tube options
- ▶ Offered with or without filter assemblies
- ▶ 15-watt models with anodized aluminum housing
- ▶ 40-watt models with enameled sheet metal housing
- Outfitted with sturdy metal brackets for easy overhead mounting



Model	Wavelength	No. Of Tubes	Power
X-15G	UV-C (254nm)	1	15 Watts
XX-15A	UV-A (365nm)	2	15 Watts
XX-40	UV-A (365nm)	2	40 Watts
XX-15BF	UV-B (312nm) / UV-C (254nm)	1/1	15 Watts

<sup>\*</sup>View all lamp versions and combinations online, or contact your sales representative.

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## **UV Protective Eye and Face Wear**

## FOR LABORATORY APPLICATIONS

- Designed for long wearing comfort and to protect the user against most ultraviolet light sources
- improves contrast between the fluorescent area and the background by eliminating the "blue haze" interference
- Goggles,glasses and face shield meet ANSI Z87.1 specifications and carry a U6 rating that block 99.9% of harmful UV rays.
- Goggles, glasses and face shield comply with OSHA standards.
- UVS-30 spectacles, generally recommended for sporadic, lower intensity UV sources fit easily over eyeglasses.





UVS-20 UV-absorbing Overglass Spectacles



UVS-30 UV-absorbing Spectacles



UVS-40 Fluorescence-enhancing Spectacles





UVF-80 UV-absorbing Face shield

# ACCUMAX™ SERIES FOR LABORATORY

# DIGITAL MICROPROCESSORCONTROLLED METERS

The AccuMAX series is designed to provide accurate readouts for UV irradiance, visible illuminance or luminance light readings. When equipped with an interchangeable sensor detector, the AccuMAX readout unit can be used to perform fluorescent inspection (intensity check through normal operation) and UV dosing (energy check through integration operation).



- ► Features two advanced digital, microprocessor-controlled readout units (XF-1000 for fluorescent UV tubes; XR-1000 for HID UV bulbs) specially calibrated to complement a full line of interchangeable AccuMAX series sensor detectors
- ▶ Software-driven functions provide multifaceted light level reading
- ▶ User-selectable, multilingual display settings. Choose from English, French, German, and Spanish
- ► Five user-customized settings and three main operation modes (absolute data/normal, autozeroing and integration) featuring hold, peak and back functions
- ▶ Overall accuracy of better than ±5% with reference to NIST standards

# FEATURES OF OUR RADIOMETER KITS:

- ► Superior bandpass interference filter resists degradation and prevents undesirable radiation readings
- ► Excellent linearity and cosine response
- ► Choice of direct or USB cable connection between sensor detector and readout unit (XCB-50 USB cable included)
- ▶ Large, easy-to-read monochrome LCD screen
- ► Automatic shutoff and user-defined power save features
- ► Powered by two 9-volt alkaline batteries (included)
- ► Readout unit dimensions (W x L x H): 4.25 in x 7.75 in x 1.25 in, 10.8 cm x 19.7 cm x 3.2 cm)
- ► Readout unit weight: 1.1 lb (499 g)





#### **CUSTOMIZING SETTINGS**

The AccuMAX provides users the capability of selecting the default visible unit of measurement in their choice of foot-candles (fc), lux, lm/ft2 or lm/m2. The user can also select and adjust the display contrast, backlight brightness and interval between active and passive operations, which also helps conserve battery power. Unless the meter is at low-battery status, all user-selectable parameters will be saved and used for future meter operations.

#### **ACCESSORIES**

MODEL	SENSORS	SPECTRAL RANGE	RANGE IN UNITS
XS-254	UV-C	230-280nm	0-100 mW/cm2
XTS-254	UV-C	230-280nm	0-3W/cm2
XS-300	UV-B	280-320nm	0-100 mW/cm2
XTS-300	UV-B	280-320nm	0-3W/cm2
XS-365	UV-A	320-420nm	0-100 mW/cm2
XTS-365	UV-A	320-420nm	0-3W/cm2
XS-405	UV-V	395-415nm	0-100 mW/cm2
XTS-405	UV-V	395-415nm	0-3W/cm2
XS-450	Bilirubin	420-480nm	0-100 mW/cm2
XTS-450	Bilirubin	420-480nm	0-3W/cm2
XS-555/I	Visible illuminance	460-675nm	0-5,300 lux, 0-500 fc
XS-555/L	Visible illuminance	460-675nm	0-1,000,000 cd/m2, 0-90,000 cd/ft2, 0-285,000 fL











#### PRODUCT/CUSTOMER SUPPORT & TECHNICAL ASSISTANCE

Product literature, instructions and a full staff of trained customer service representatives and technical service engineers are available for support. Additional product information and support are available on our website.





### Warranty

All equipment is warranted against defects in manufacture. Spectro-UV's obligation under this warranty is limited to repairing or replacing, at the option of Spectro-UV, any part(s) of the product which, if properly installed, used and maintained, proves upon factory examination to have been defective in materials or workmanship within 24 months from the date of delivery to the customer, including LEDs and BLE-LED bulb.

This warranty does not apply to any component which (1) is normally consumed in operation or (2) has a normal life inherently shorter than the warranty stated. For example, bulb, filters and rechargeable batteries are warranted for 30 days. In addition, Spectro-UV does not warrant any instrument that has been subjected to misuse, negligence or accident, or has been repaired or altered by anyone other than Spectro-UV.

This warranty is in place of all other warranties of quality. There are no other warranties either oral, written, express, implied or statutory. IMPLIED WARRANTIES OF FITNESS FOR PURPOSE AND MERCHANTABILITY ARE EXCLUDED. This warranty and your remedies thereunder are solely as stated in this form. In no event shall Spectro-UV be liable for special, indirect, incidental or consequential damages, nor for any damages arising out of delay in shipment or production.





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