

Deep UV Deuterium Light Source

- ASBN-D130 -

Operation Manual





111 Highland Drive - Putnam, CT 06260
Phone 860-928-5834 - Fax 860-928-2676

www.spectralproducts.com

Important Safety Notices

1. Never look directly into the UV light, as this can cause eye damage.
2. Do not remove or modify any installed safety device on this equipment. Doing so will void your warranty and create an unsafe operating environment.
3. Do not use the unit if it is damaged in any way. Contact your dealer for repair or replacement information.

Warranty and Liability

This SP's product is warranted against defects in material and workmanship for one year from the date of shipment. During the warranty period, Spectral Products will, without charge, repair or replace, at its discretion, the defective product, or components/parts.

For warranty service or repair, this product must be returned to a service facility designated by Spectral Products (SP). For products returned under warranty, the Buyer shall prepay shipping charges (including shipping charges, duties, and taxes for products returned to SP from another country), and SP will pay for shipping charges to return the product to the Buyer.

This warranty does not apply in the event of misuse or abuse of the product or as a result of unauthorized alterations, modifications, or repairs if the serial number is altered, defaced, or removed, the improper or inadequate maintenance by the Buyer, Buyer-supplied software or interfacing, or improper site preparation or maintenance. No other warranty is expressed or implied. SP shall not be liable for any consequential damages, including without limitation, damages resulting from loss of use, as permitted by law.

Specification

The following tables provide information on our high-power Deuterium light sources.

Overview

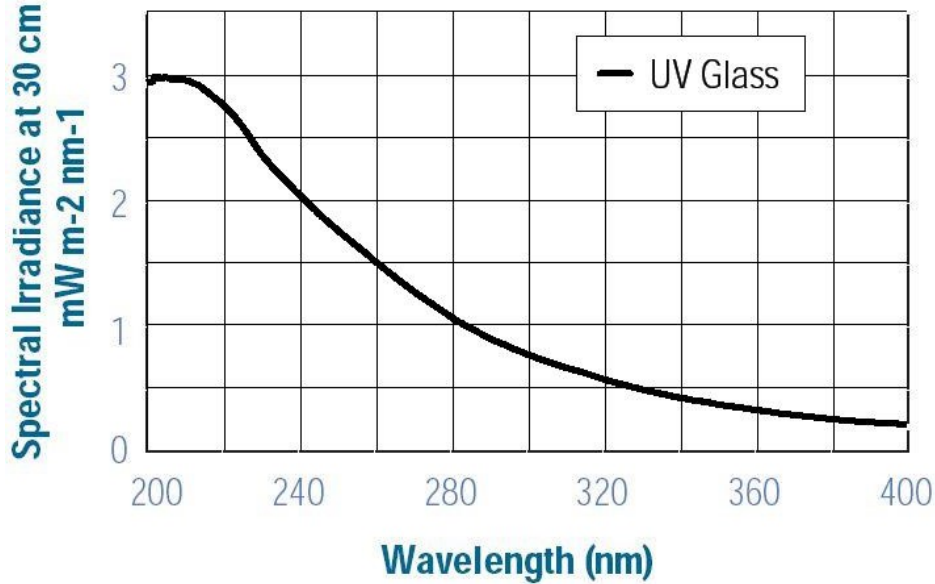
Mount	Tapered flange, adjustable, Post mounting for standalone operation
Housing	Air-cooled w/ two focusable fused silica doublet collection lens sets, 1" size Dimension: 12.6" X 10.7" X 5.6" (6.8" with handle height), housing only without counting the focusing lens assembly attached.
Output type	Monochromator Matching (M): CM110, DK240, or DK480
	Fiber coupling (F): SMA905 or FC

Electric

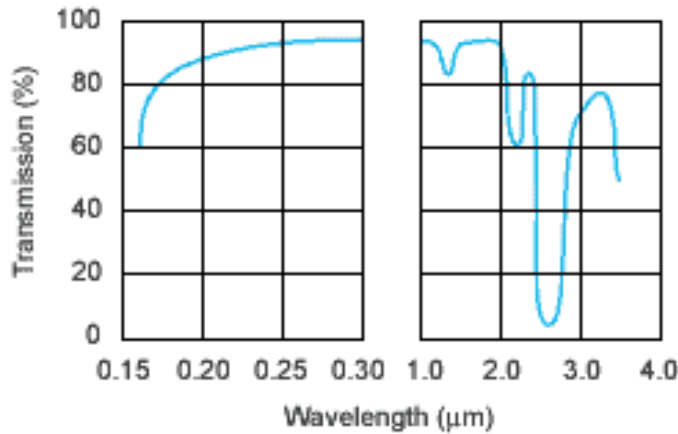
Deuterium	Electric Power Input	Input Voltage: 24 Vdc regulated (<45W), 5Vdc (TTL) disable input Input Current: 2A
	Electric Power Output	Anode: 60-100Vdc / 30 W max Trigger pulse: 600±50 Vpk continuous (Anode Vdc included) Heater Warm-up: ~20-30 seconds Regulation: +/-0.5% typically
	Others	Temperature: 0-40 °C Humidity: ≤95% Cooling: 20 CFM of forced air across the component side

Spectrum

The deuterium (D2) lamp is designed for use in spectroscopic applications where high intensity and stability in the 190 to 400nm band are needed. Above 400nm, some spiky spectra will be detected also.



The envelope of the D2 lamp is made of fused silica. Its transmittance is as follows.



Operation

Front

Back



Component	Description
Power terminal input	Connect power cable to provide voltage to our high-power Deuterium light source.
Power switch	Turn on to supply power to the D2n lamp. The RED light illuminates when this switch is in the On position.
Fuse	Contains the fuse to protect the unit against overload: Fuse type: 5A/250V
Cooling fan	Cools the interior of the light source housing. Note: Although block with a heat shield system, do not look into the light beam through this fan.
Power switch for the 2 nd D2 lamp	For ASBN-D230 only: Turn on/off switch for the 2 nd lamp.

Bulb Replacement

1. Turn off all power.
2. Wait until the lamp cools down.
3. Unscrew the faceplate.
4. Slide out the lamp plate.
5. Take off the (3) deuterium lamp leads on the bottom.
6. Unscrew the (3) button-head set screws on the floor of the plate.



7. Take out the old bulb with finger cots and replace the new one.

NOTE: When adjusting the new deuterium lamp, please be careful not to touch it with a bare hand.



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Technical Support

Toll Free: (877) 928-5834, ext 15

Tel: (860) 928-5834, ext 15

Fax: (860) 928-2676

Website: <http://www.spectralproducts.com>

Email: support@spectralproducts.com / mdrugan@spectralproducts.com