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Deuterium Lamps

Deuterium lamps are sources of high intensity ultraviolet radiation down to 160 nm (for some models). Visible and infrared emission is negligible. This makes deuterium lamps ideal sources for UV spectroscopy, and as UV spectral irradiance standards.

- High UV output with minimal VIS and IR
- High uniformity, high irradiance or Ozone free
- Small 0.5 and 1.0 mm arc sizes

[See All Features](#)

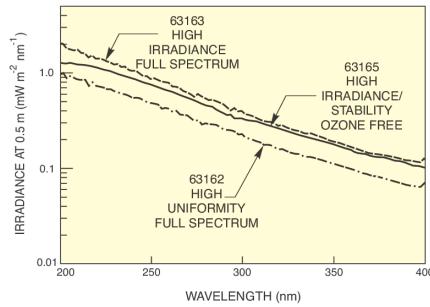
Compare	Model	Availability	Pr
	63162 Deuterium Lamp, 30W, High Uniformity, 1 mm Arc Diameter, Full Spectrum	Show	\$717
	63163 Deuterium Lamp, 30W, High Irradiance, 0.5 mm Arc, Full Spectrum	Show	\$686
	63165 Deuterium Lamp, 30W, High Irradiance & Stability, 0.5 mm Arc, Ozone Free	In Stock	\$7

Features

Three Lamp Choices

Choose a lamp first by the shortest wavelength you need. If you aren't working below 180 nm, choose an ozone free lamp. The high irradiance lamps have a very small, 0.5 mm, arc for producing both the highest irradiance and highest radiance, but they are also more expensive than the high uniformity lamps.

- 63162 : Very uniform beam distribution from 1 mm arc diameter with output down to 160 nm.
- 63163 : Small 0.5 mm arc diameter with high intensity output down to 160 nm.
- 63165 : Ozone free with small 0.5 mm arc diameter with uniform beam distribution and output down to 180 nm.



Series Q Lamp Housings

Deuterium lamps can be operated in a Series Q Lamp Housing. The housing requires a condensing lens assembly that collects and collimates the lamp's radiation. Output is a 1.3 inch (33 mm) diameter beam. An optional rear reflector can be installed to increase light output.



Deuterium Lamp Construction

Deuterium lamps are arc lamps filled with deuterium, at low pressure. Deuterium lamps emit only from one side and in one direction, unlike arc lamps, which radiate in all directions. Collection is therefore easy and efficient. The window material determines the DUV output of the lamp. Ozone free models use UV Glass, which does not transmit below 180 nm.



Safety Considerations

Deuterium lamps emit high intensity ultraviolet radiation. Always use Ultraviolet Safety Equipment like protective eyewear, clothing, and gloves when working in the vicinity of these lamps.

Accessories

Compatible Components

Compare	Description	Drawings, CAD & Specs	Avail.	Price
	60000 Lamp Housing, Q Series, Adjustable Reflectors & Up to 4 Condensers		In Stock	\$2,394 U:

Compare	Description	Drawings, CAD & Specs	Avail.	Price
	60005 Reflector Assembly, Adjustable, Q Series Lamp Housing	  	2 Weeks	\$420 US
	60008 Condensing Lens Assembly, Q Series Lamp Housing, F/0.85 Asphere	  	1 Week	\$654 US
	67017 Condensing Lens Assembly, Q Series Lamp Housing, F/1 Asphere	  	1 Week	\$1,257.60 US
	60076 Condensing Lens Assembly, Q Series Lamp Housing, F/1 Plano-Convex	  	1 Week	\$837.60 US
	60006 Condensing Lens Assembly, Q Series Lamp Housing, F/1.5 Plano-Convex	  	2 Weeks	\$477.60 US
	60093 Interface Kit, Q Series Housing to Power Supply, Deuterium Lamps	  	1 Week	\$597.60 US
	68942 Power Supply, Deuterium Lamps, 30 Watts	  	1 Week	\$1,917.60 US
	70050 Power Supply Cable, 6 ft., Xe, Hg(Xe), QTH, Deuterium Lamps, IR Emitters	  	In Stock	\$190.80 US

Safety Equipment

Compare	Description	Drawings, CAD & Specs	Avail.	Price
	49121 Ultraviolet Protective Gloves, Size 10, Black Neoprene, Set of 3	  	In Stock	\$72 US
	49126 Safety Goggles, UV Light Sources, Flexible Frame	  	In Stock	\$82.80 US
	49123 UV Protective Gloves, Size 8, Black Neoprene, Set of 3	  	In Stock	\$76.80 US
	66087 Ozone Eater™, 110/220 VAC, 50/60 Hz	  	1 Week	\$1,437.60 US

Frequently Asked Questions

Q: Are Newport's Deuterium Lamps compliant with EN 62471, Photobiological Safety of Lamps and Lamp Systems?

A: Yes, the lamps are compliant with EN 62471. They belong to Risk Group 3, High Risk. Direct or indirect UV radiation can damage skin.

Q: Does the customer need to register a Newport Deuterium Lamp with the FDA-CDRH, (Food and Drug Administration - Center for Devices and Radiological Health), similar to when laser products are registered and reported?

A: No, lamp registration with the FDA-CDRH is not required.