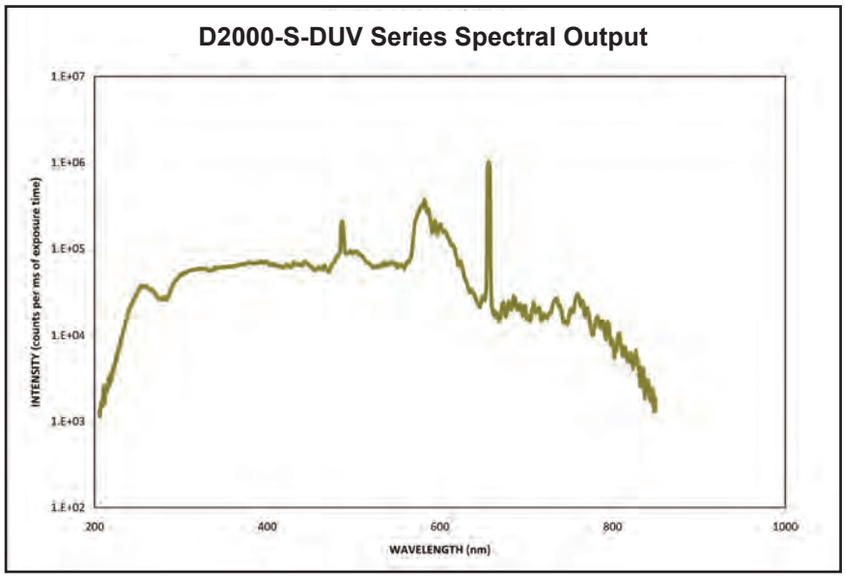
D-2000

Power, Stable Deuterium Source for UV Applications

Deuterium Light Source

The D-2000 Deuterium Light Source delivers robust, even output from 210-400 nm with peak-to-peak stability of less than 0.005% and drift of only +/-0.5% per hour. D-2000 is also available in a Deep-UV configuration that provides you a wavelength range of 190-400 nm.



Measured with HR2000+ Spectrometer with 25 µm Slit and 400 µm Optical Fiber

Options and Accessories

Integrated shutters are also available with the D-2000 and can be driven by a TTL signal. All versions of the D-2000 have an SMA 905 Connector for easy coupling to our spectrometers and fiber optic accessories, a safety shutter for blocking the light when the fiber is not attached, and safety goggles. The 1,000-hour deuterium bulb used in the D-2000 can be replaced easily.

Specifications	
Dimensions:	150 mm x 135 mm x 319 mm
Weight:	5.35 kg (without power cord)
Power consumption:	830 mA @ 230 VDC or 1660 mA @ 115 VDC
Wavelength range:	215-400 nm (standard bulb); 190-400 nm (deep-UV bulb)
Peak-to-peak stability:	<0.005% at 250 nm
Drift:	+/-0.5% per hour at 250 nm
Warm-up time:	40 minutes
Voltage and current:	Ignition 350V/20° operating 85 V/0.3A
Bulb lifetime:	1,000 hours for standard or deep-UV bulb
Operating temperature:	5 °C - 35 °C
Humidity:	5-95% without condensation at 40 °C
Radiation characteristic:	Aperture 0.5 mm, numerical aperture 26° (13°)
Power requirements:	85-264 V 50/60 Hz
Markings:	CE; VDI/VDE 0160; EN 61010
TTL-shutter input:	Up to 5 Hz maximum (shutter versions only)
Shutter speed:	10 ms minimum

Ordering Information	
Item	Description
D2000	Deuterium light source, 215-400 nm
D2000-DUV	D-2000 configured with a Deep-UV deuterium bulb that provides a 190-400 nm wavelength range
D2000-S	D-2000 configured with a shutter (controlled via a TTL signal or switch)
D2000-S-DUV	D-2000 configured with Deep-UV deuterium bulb that provides a 190-400 nm wavelength range and includes a shutter (controlled via a TTL signal or switch)
DH2000-BD	Replacement deuterium bulb for the D-2000 and the D-2000-S
DH2000-DUV-B	Replacement deuterium bulb for the D-2000-DUV and the D-2000-S-DUV

Technical Tip

Ultraviolet radiation below 300 nm degrades transmission in silica fibers, resulting in solarization (increased light absorption in the UV fiber that can invalidate data). For applications using the D-2000 Light Sources, we recommend solarization-resistant assemblies. See Page 135 for details.