

BDS130A

Light Source

Deuterium/Tungsten Light Source



The BDS130A is a turnkey fiber coupled UV/Vis/NIR light source with a spectral output of 190 to > 2500nm. The UV/Vis lamp is a 30W deuterium lamp providing the advantage of low heat generation and efficient power conversion. A tungsten halogen lamp shares the optical path with the deuterium lamp and provides Vis/NIR emission. The UV/Vis and Vis/NIR light sources can be individually turned on and off. An electronic shutter is included to control light output using another switch on the front panel. The BDS130A features an SMA 905 connector for fiber optic light coupling with no fiber alignment needed, making it ideal for spectroscopic applications.

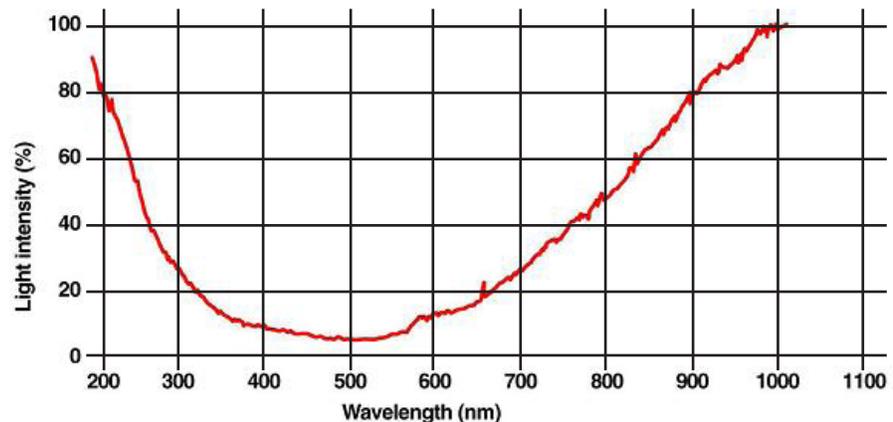
Features:

- Spectral Range 190 to > 2500nm
- Fiber Coupled
- UV/Vis/NIR Single Path
- TTL/Manual Shutter Control
- TTL Lamp Control
- High Stability
- Compact
- Long Life

Applications:

- **Transmission Experiments**
- **Absorption Experiments**

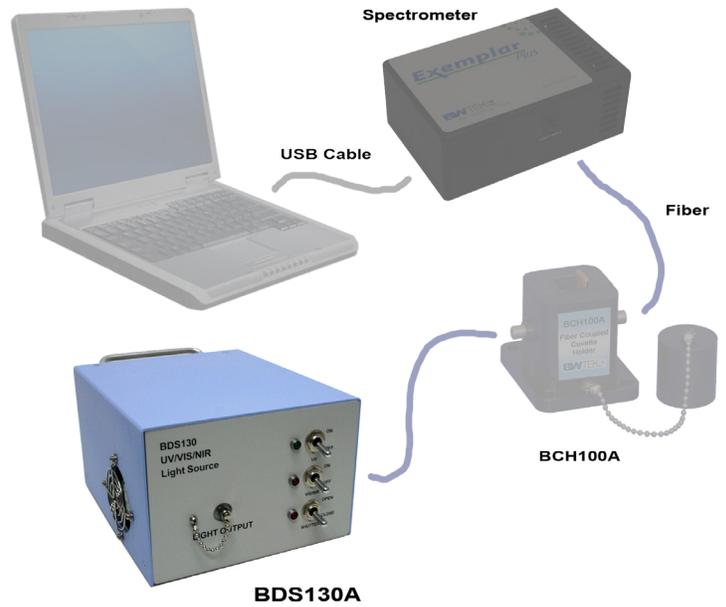
Typical Relative Spectral Distribution



Specifications:

COMPLETE MODULE	
Wavelength Spectral Range	190 to 2500nm
Electrical Power Consumption	70 W with both lamps on
Supply Voltage	100 - 240 VAC 50/60 Hz
Operating Temperature	5 - 35°C
Relative Humidity	Max. 80%, non-condensing
Warm-up Time	20 minutes
Dimensions	8.7 x 7.4 x 5.1 inches (220 x 187 x 130 mm)
Weight	5.5 lb. (~2.45 kg)
Fiber Optic Connector	SMA905
Recommended Fiber Diameter	600µm (min)
Numerical Aperture	0.22
DEUTERIUM LAMP (D2)	
Wavelength Spectral Range	185 to 400nm without spectral lines
Stability	< 2 x 10 ⁻⁵ AU
Ignition Voltage	About 1 kV
Lifetime	> 2000 hours at 250 nm (50% intensity loss)
Lamp Power Rating	30 W
TUNGSTEN LAMP (W)	
Wavelength Spectral Range	400 to 2500nm
Lamp Power Rating	5 W
Lifetime	> 10,000 hours

Transmission / Absorption Experiment Setup:



Dimensions (mm):

