

PX-2

Pulsed Xenon Light Source

The PX-2 Pulsed Xenon Lamp is a high flash rate, short-arc xenon lamp for the UV (220-750 nm). It's great for applications requiring absorbance, reflection, fluorescence and phosphorescence measurements, and especially for measuring optically or thermally labile samples. The PX-2 operates at speeds up to 220 Hz, offers excellent pulse-to-pulse stability, and has two trigger modes for software control of the flash rate.

About the PX-2

Any external TTL positive pulse can be used to trigger the PX-2. With the PX-2 coupled to a USB Series spectrometer, you can easily synchronize operation of both the light and detector. The spectrometer sampling can be altered so that a variable number of flashes are observed during each integration period.

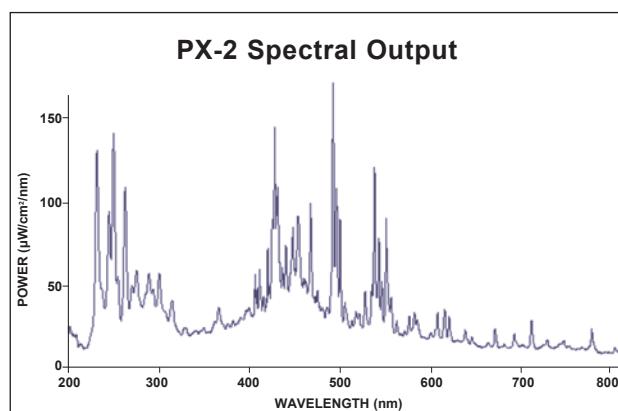
The multiple mode of light source operation is especially useful for absorbance and reflection applications, as it ensures steady, consistent light exposure for each integration period.

In the Single mode of PX-2 operation, a single flash occurs during each integration period. The flash rate is modified by changing the integration period. Because it produces a pulsed signal, the PX-2 is less likely to contribute to polarization in optical fiber assemblies, which can occur when fibers are illuminated with signal <260 nm.



Specifications

Spectral range:	220-750 nm
Approximate dimensions:	140 mm x 105 mm x 40 mm (LWH)
Power input:	1.3 A @ 11V @ 220 Hz 100 mA @ 12V @ 10Hz
Trigger input:	external TTL positive pulse via 15-pin connector
Output:	45 microjoules per pulse maximum 9.9 watts average power from bulb (not the same as power coming out of fiber; see graph at right) 220 Hz pulse rate maximum
Pulse duration:	5 microseconds (at 1/3 height of pulse)
Lifetime:	10 ⁹ pulses (estimated 230 days continuous operation at 50 Hz pulse rate)
Aperture:	3 mm
Connector:	SMA 905
Timing signals available:	Multiple mode: up to 220 Hz (varies with A/D sampling frequency); Single mode: varies with scan rate



Ordering Information

Item	Description
PX-2	Miniature pulsed xenon light source for UV-VIS (220-750 nm)
PX-2-B	Spare bulb for PX-2