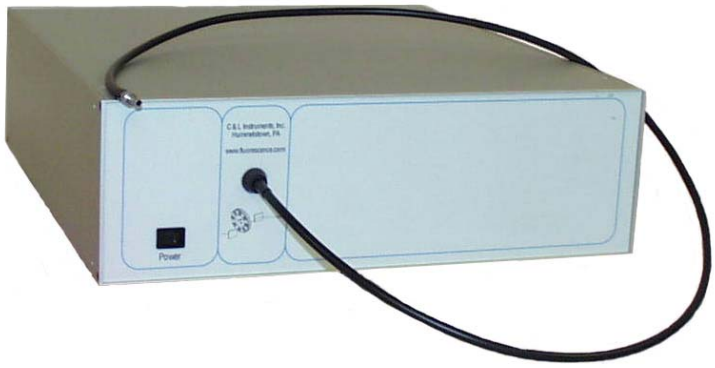
Model S48D Illumination Source



The Model S48D Illumination Source is a compact, computer controlled illuminator for fluorometry and imaging applications. It uses an advanced filter wheel design to provide the rapid wavelength changes and high spectral purity required in multiwavelength applications. The illuminator interfaces seamlessly to fluorescence microscopes or to a cuvette assembly as one component of a complete fluorescence system.

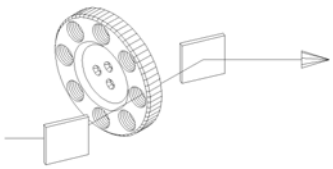
The Model S48D is a fluorescence illumination source, containing a Xenon arc lamp, computer-controlled filter wheel and variable light attenuator. The illuminator incorporates either a four-position filter wheel for 1 inch diameter filters or an eight-position filter wheel for ½ inch diameter filters. Filter wheel positions and light attenuation are directly addressable via software. The filter wheel can be set to spin, hold a specific position or access filter positions in a programmed fashion. The attenuator can control illumination intensity over a 50-fold range. Light output from the illuminator is via a flexible light guide. Custom software drivers can be supplied for user-specific control functions or for OEM applications.

The light guide provides maximum flexibility for interfacing the Model S48D Illumination Source to a fluorescence microscope, a cuvette assembly, a surface fluorescence probe or other custom user-specific devices. The illuminator is controlled via software using the Model PC-DAQ Controller which is housed in a personal computer. Together with Windows®-based software, the illuminator can implement single or multiwavelength illumination schemes. The Model S48D Illumination Source can be purchased as part of a complete fluorometer system or separately to serve as a stand-alone illuminator.

SPECIFICATIONS:*

Power Requirements: 120 VAC or 220 VAC (Specify on order) 50/60 Hz, 9.6 Amps (120 VAC), 5.6 Amps (220 VAC)
Size / Weight: 17 (w) X18.7 (l) X 6 (h) inches, rack mountable, one rack width, 27.5 pounds.
Light Source: 175W Short Arc Xenon, prealigned module for easy replacement (300 Watt also available).
Light Output / Interface: 300-700 nm, 5 mm diameter flexible light guide, 1.5 m long.
Light Attenuation: Gradient filter, computer-controlled.
Shutter: Internal, software controlled.
Filter wheel timing:
- Spinning: 1 msec per filter position maximum speed (1 kHz, 7,500 RPM) using 8 position filter wheel
  2 msec per filter position maximum speed (500 Hz, 7,500 RPM) using 4 position filter wheel
- Jitter (spinning): <0.5% RMS
- Programmed access: <70 msec between any two positions using 8 position filter wheel
  <100 msec between any two positions using 4 position filter wheel

I/O Interface: Two DB-15 connectors, proprietary CMOS logic.
Cooling: Air Cooled (fan forced).



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*Subject to change without notice