

SPECTRA X light engine®

Power, Speed and Flexibility



Integrated Array of Six Powerful Solid-State Light Sources Independent sources with 10 microsecond electronic switching

Lumencor's light engines are unique, solid state illuminators, ideally suited for fluorescence microscopes and bioanalytical instruments. SPECTRA X light engines enhance overall microscope performance and reduce illumination cost compared to traditional lamps and lasers. SPECTRA X is the best lighting product in today's life science marketplace for fast, live cell imaging.

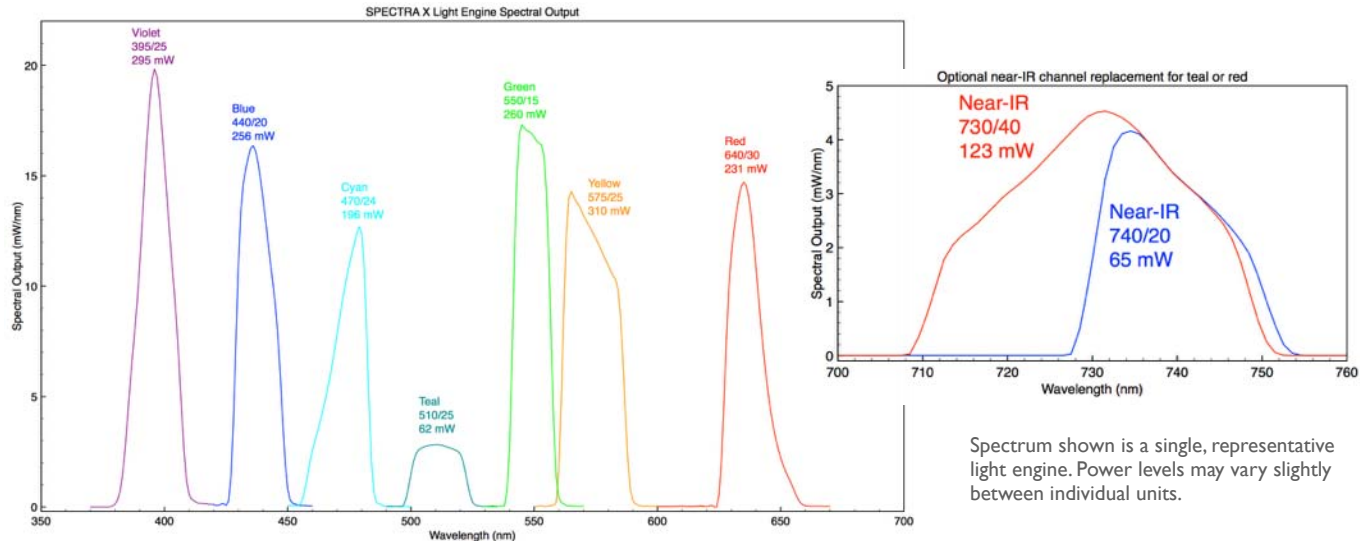
The SPECTRA X light engine incorporates six, bright, independently operable sources that span 380-680 nm. A suite of seven filters, one for each visible color (violet, blue, cyan, teal, green + yellow and red) is included in the purchase. Near infrared is an optional substitution for teal or red. Additional filter paddles and filters may be purchased to modify the bandpass of any of the sources. Exchangeable filters means any light engine user can tailor the output spectra with numerous filters to accommodate single band or multi band experimental designs. The range of available bandpass filters is available at: lumencor.com/products/spectra-x-light-engine

High performance electronics allow for independent control of each source. Automated on/off, color switching and intensity control of each color may be accomplished via a touchpad controller, a Lumencor GUI or any of a number of third party software drivers. Fast electronics, on the order of tens of microseconds, make switching colors with this light engine orders of magnitude faster than a standard filter wheel, where mechanical constraints limit switching times to on the order of 100 milliseconds.

SPECTRA X light engines are compatible with all major brand microscopes via liquid light guide or optical fiber connections for the highest intensity performance. SPECTRA X light engines require no maintenance, no bulbs, no alignment and like all Lumencor products, contain no mercury. Units ship with a 36 month warranty.

For more information on the SPECTRA X light engine please contact us at Lumencor, Inc. at info@lumencor.com.

SPECTRA X light engine® >20,000 Hours of Bright, Visible, Well-Controlled Light



The power of source selection combined with the selection of source power

High performance, stable, robust lighting with easy operation at an affordable price

Features	Details
Sources	Six solid state sources operating independently, UV and NIR options
Wavelength Range	380 - 680 nm (380 - 780 nm with optional NIR source)
Output Power	~50-500 mW power per color band through a 3 mm dia LLG ~20-200 mW power per color band through a 1 mm dia optical fiber
Bandpass Filters	7 bandpass filters installed in user-exchangeable paddles
Light Delivery	Liquid light guide, optical fiber and microscope collimator sold separately
Easy to Install	Pre-aligned, simple to operate with touchpad or 3 rd party software, no maintenance
Lifetime	> 20,000 hours, 36 month warranty to end user
Control Interface	TTL fast source selection, Serial (RS232) source selection and intensity control
Power Requirements	220 W, 28 VDC, 7.9 A
Dimensions (W x L x H)	28 cm x 19 cm x 11 cm
Weight	4.5 kg
Package Contents	SPECTRA X light engine® with 7 bandpass filters, power supply and cord