

# SPECTRA X light engine®

POWER, SPEED AND FLEXIBILITY



## Tunable Color Bands With Exchangeable Filters

Bright light with spectral and temporal control

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.

SPECTRA X ships with six, bright independent 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. NIR is an optional substitution for teal or red. Additional filter paddles and filters may be purchased to tune the bandpass of any of the sources. Exchangeable filters mean Lumencor can offer numerous different bandpasses for use in single band or multiband experimental designs.

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 10s 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.

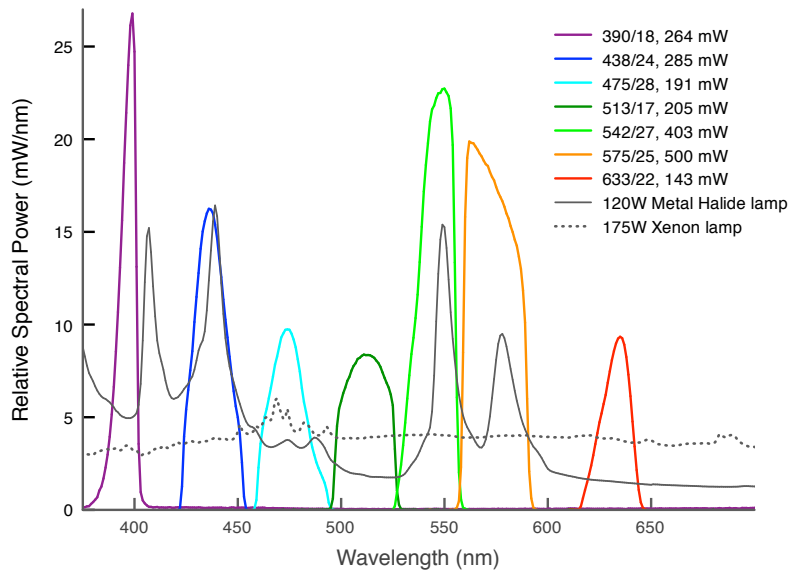
SPECTRA X light engines are compatible with all major brand microscopes via liquid light guide connection or optical fiber, for the highest intensity performance. Light engines require no maintenance, no bulbs, no alignment and like all Lumencor products, are mercury free and RoHS compliant. Units ship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

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For more information on SPECTRA X light engine please contact us at Lumencor, Inc. at [info@lumencor.com](mailto:info@lumencor.com).



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



**Fast, powerful, visible color bands with no harmful wavelengths**

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

Features	Details
Sources	Multiple solid state sources operating independently, NIR options
Wavelength Range	380 - 680 nm, customizations for UV and NIR wavelengths upon request
Power and Intensity f(λ and bandpass)	~ 50-400 mW power & ~ 1-6 W/cm ~ 25-300 mW power & ~ 3-14 W/cm
Warmup Time	1 Second
Light Delivery	Liquid light guide, optical fiber and microscope collimator sold separately
Easy to Install	Pre-aligned, simple to operate with touchpad or 3rd party software, no maintenance
Lifetime	> 20,000 hours, 36 month warranty to end user
Control Interface	On/Off switch, TTL, RS232
Power Requirements	220 W, 28 VDC, 5 A
Dimensions (W x L x H)	9 x 18 x 23 cm
Weight	4.8 kg
Package Contents	SPECTRA X light engine



**GET IN TOUCH**

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