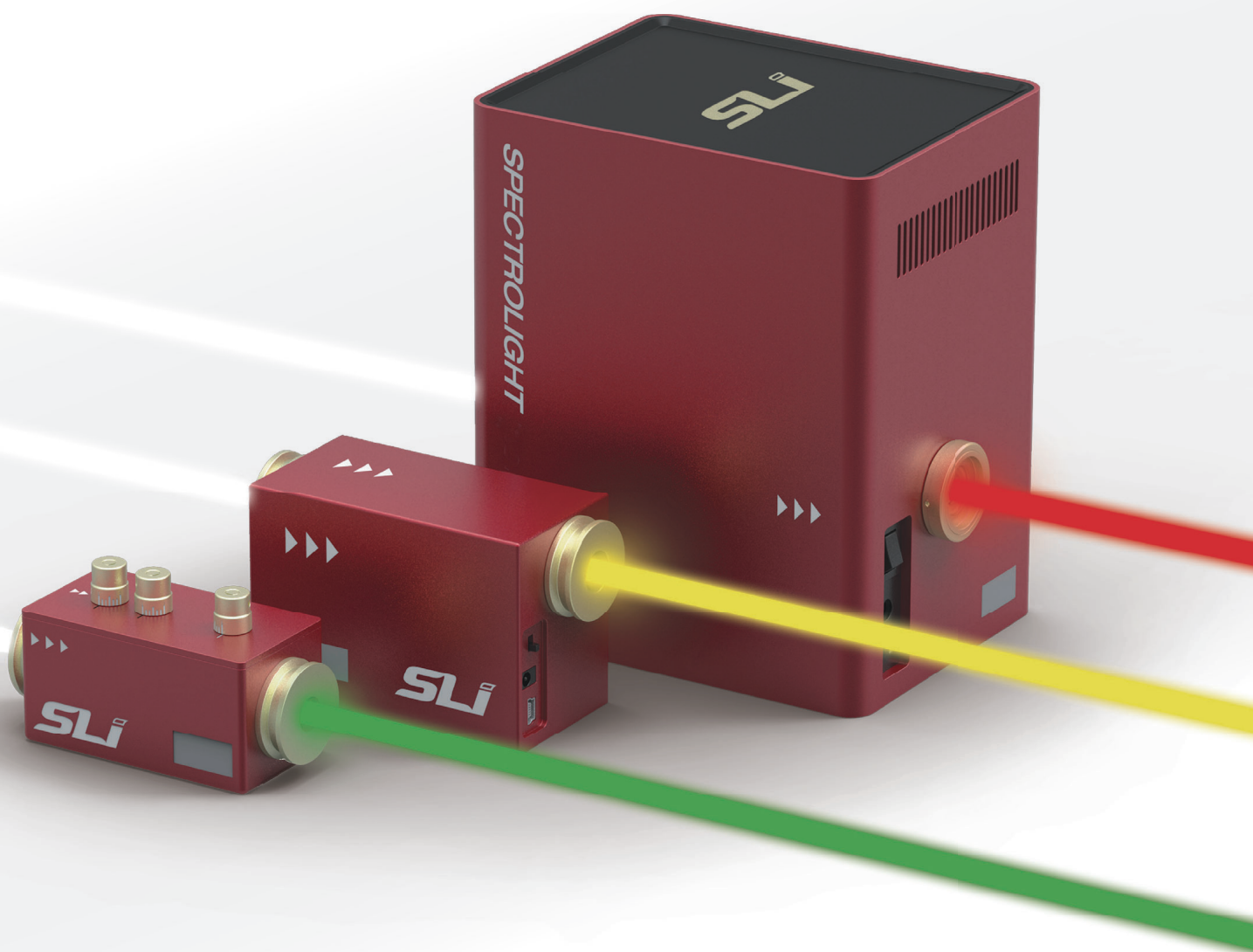


# TUNABLE BANDPASS FILTERS



- Wide wavelength tuning range from 255 to 1700 nm
- Suitable for both Excitation and Emission
- Compatible with all Broadband Light Sources
- Implementing the patented TwinFilm™ technology

[www.spectrolightinc.com](http://www.spectrolightinc.com)

## ***Flexible Wavelength Selector (FWS)***

### ***Tunable bandpass filter for spectroscopy and spectral imaging***

Flexible Wavelength Selector is a unique, compact optomechanical device that utilizes the patented TwinFilm™ technology to deliver precise wavelength tuning and adjustable bandwidth with the imaging advantages of a circular aperture filter.

#### ***FWS- Auto (Automated type)***



Poly-RED



Poly-BLUE



Mono

#### ***FWS- Manual (Manual type)***



Basic



High Resolution



CenterLine



Customized

#### ***Ideal for***

- Fluorescence microscopy
- Hyperspectral imaging
- Life sciences instrumentation
- Machine vision
- Laboratory research

#### ***Key product advantages***

- Broad wavelength tuning (255 - 1700 nm)
- Adjustable bandwidth (FWHM : 2 - 15 nm, nominal)
- 5 / 10 mm circular aperture
- Compact and light-weight optomechanical device
- No beam deviation or walk-off during tuning

## Flexible Wavelength Selector – High Resolution

Model	CWL (nm)	FWHM (nm)
High Resolution-F00	255 - 290	2 - 15
High Resolution-F01	280 - 310	2 - 15
High Resolution-F02	310 - 350	2 - 15
High Resolution-F03	348 - 390	2 - 15
High Resolution-F04	385 - 435	2 - 15
High Resolution-F05	430 - 490	2 - 15
High Resolution-F06	485 - 550	2 - 15
High Resolution-F07	545 - 620	2 - 15
High Resolution-F08	615 - 700	2 - 15
High Resolution-F09	690 - 790	3 - 15
High Resolution-F10	775 - 890	3 - 15
High Resolution-F11	880 - 1015	5 - 15
High Resolution-F12	1000 - 1150	5 - 15
High Resolution-F13	1140 - 1310	5 - 15
High Resolution-F14	1300 - 1500	5 - 15
High Resolution-F15	1475 - 1700	7 - 13



\* Center Wavelength tuning range can vary by a few nanometers depending on the product.

Minimum step size of center wavelength : 1 nm / Step size of bandwidth (FWHM) : 1 nm

High Resolution-A5	Aperture size: 5 mm	Suitable for lasers with small beam size, such as supercontinuum lasers
High Resolution-A10	Aperture size: 10 mm	Suitable for light sources with large beam size (tungsten-halogen, plasma, LED)

\* For optimal performance input light source must be collimated

\* Manual models require a spectrometer for operation

	High Resolution-A5	High Resolution-A10
Spectral range (nm)	255 - 1700 nm	
Bandwidth(FWHM) (nm, nominal)	2 - 15 nm	
Aperture size (mm)	5 mm	10 mm
Out of band blocking <sup>1)</sup>	OD 10 in tuning range, OD 5 in spectral range up to 1700 nm	
Damage threshold	Pulse : Peak Fluence < 1.75 joules/cm <sup>2</sup> (~70 µm spot diam., 10 ns, 10 Hz, 532 nm LASER) CW (Continuous wave) : Intensity < 2 MW/cm <sup>2</sup> (1064 nm, ~ 90 µm spot diam.)	
Transmission efficiency (% , nominal) <sup>2)</sup>	> 75 % (avg.)	
Dimension (L x W x H, mm)	40 mm X 76 mm X 50 mm	
Weight (kg)	0.3 kg	

1) OD 3.5 up to 600 nm for F00-F02 filters; for blocking beyond this range, dedicated out-of-band blockers such as WS-BL400UV and WS-BL1700SWIR are available.

2) Transmission efficiency values are based on filters with a 10 nm full width at half maximum(FWHM). At wavelengths below 400 nm, efficiency remains ≥50%.