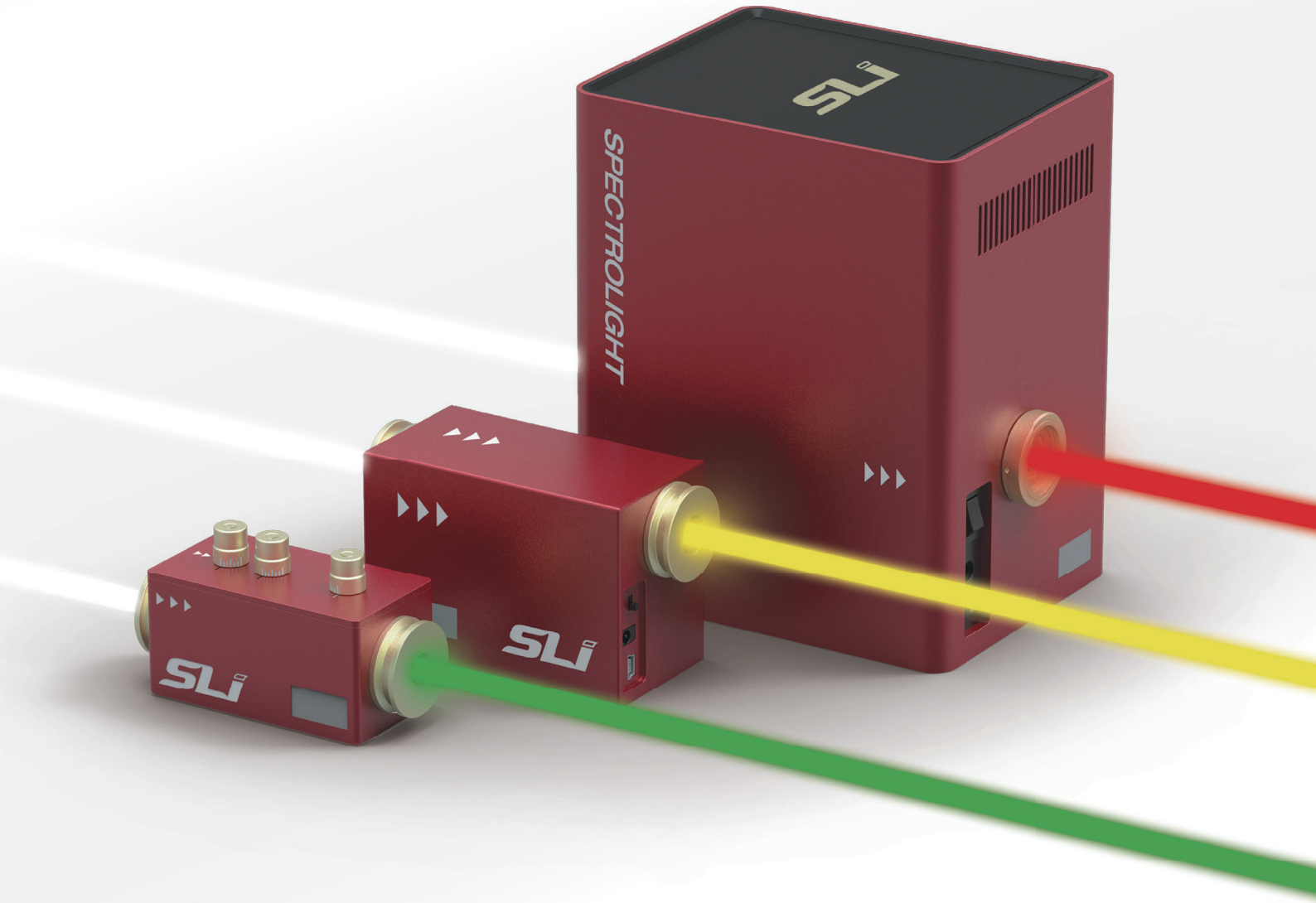
# TUNABLE BANDPASS FILTERS




- 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

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# 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

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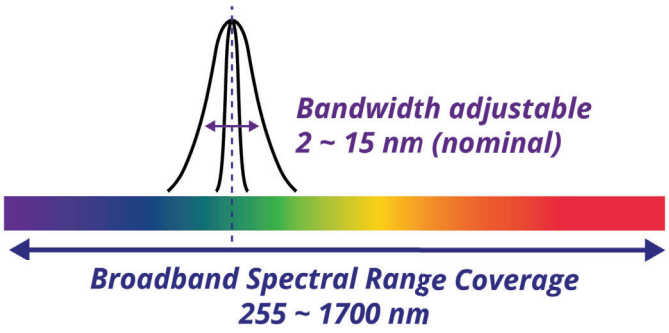
# Custom Wavelength Selector - CWS

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

CWS-A10




** User specified single wavelength and bandwidth*
** CWS can be shipped within 72 hours*

| | | |
|---|---|---|
| CWS-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*

| | CWS-A10 |
|---|---|
| **Spectral range (nm)** | 255 - 1700 nm (single wavelength) |
| **Bandwidth(FWHM) (nm, nominal)** | 2 - 15 nm (single bandwidth) |
| **Aperture size (mm)** | 10 mm |
| **Out of band blocking** [1)] | OD 5 up to 1700 nm |
| **Damage threshold** | Pulse : Peak Fluence < 1.75 joules/cm² (~70 µm spot diam., 10 ns, 10 Hz, 532 nm LASER)<br>CW (Continuous wave) : Intensity < 2 MW/cm² (1064 nm, ~ 90 µm spot diam.) |
| **Transmission efficiency (%, nominal)** [2)] | > 75 % (avg.) |
| **Dimension (L x W x H, mm)** | 40 mm x 76 mm x 40 mm |
| **Weight (kg)** | 0.2 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%.

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