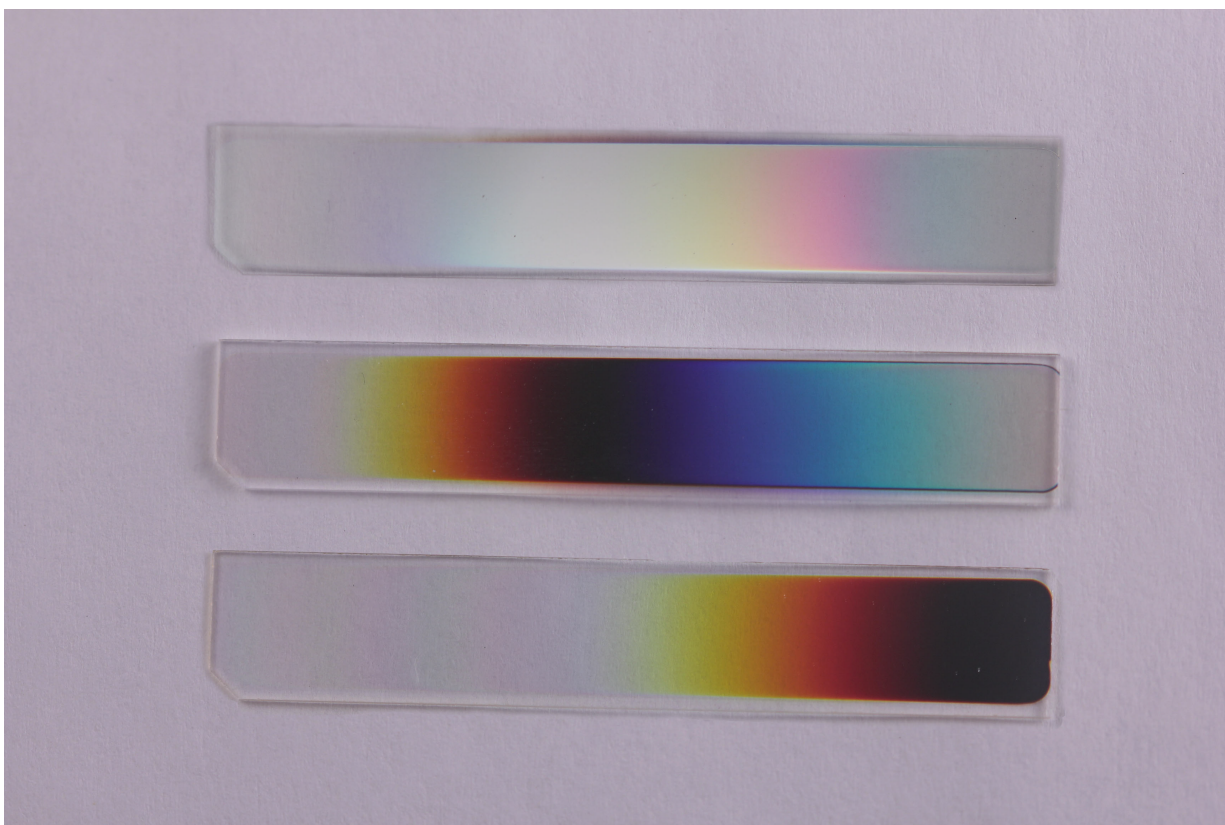


Linear Variable Filter

Bandpass & Edge Filters | VIS, NIR

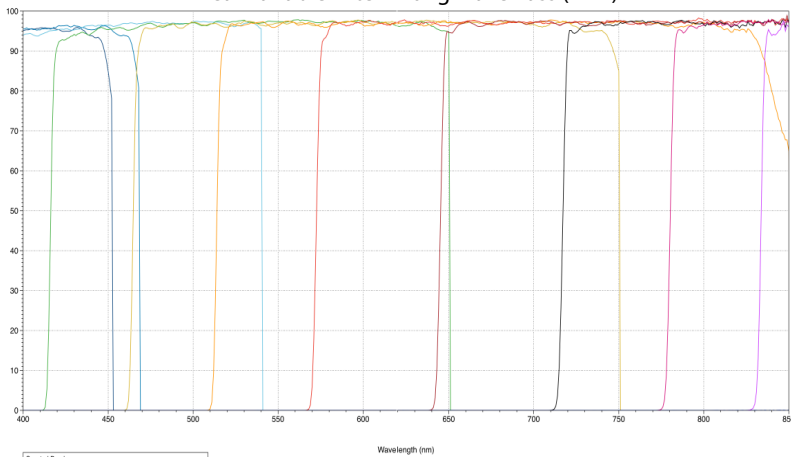


One speciality of Salvo Coatings is Linear Variable Filters (LVF's) and order sorting filters for spectroscopy and hyperspectral imaging. These state-of-the-art filters are scalable with volume and are a compact solution for many of today's optical challenges. By compressing the optical train, LVF's allow users to make spectroscopic devices with a monolithic element (Sensor plus Filter). Mount a linear variable band pass filter to an optical array, and you remove the need for the Czerny-Turner configuration but still maintain resolution consistent with the needs of most applications. Similarly, placing the same linear variable band pass filter onto a two dimensional focal plane array, and you can create a snapshot hyperspectral imager. Place it on a scanning system, and it's a push broom hyperspectral imager with full resolution.

Salvo is currently a market leader in UV/VIS, VIS/NIR, and SWIR LVF's. Meeting some of the most challenging requirements, nominal bandwidths of 1% (FWHM) of center wavelength, peak transmission of 70% and linearity of $\pm 0.5\%$. In addition extremely high gradients are achievable $>200\text{nm/mm}$. These filters can be deposited on a variety of substrates and optical glasses. In addition, Salvo Coatings sister company EOITech (<https://eoitech.com/>) is able to take commercially available sensors, remove the cover glass if needed, and mount the LVF filters directly to the sensors.

This combined service makes Salvo the go-to choice in LVF production and implementation.

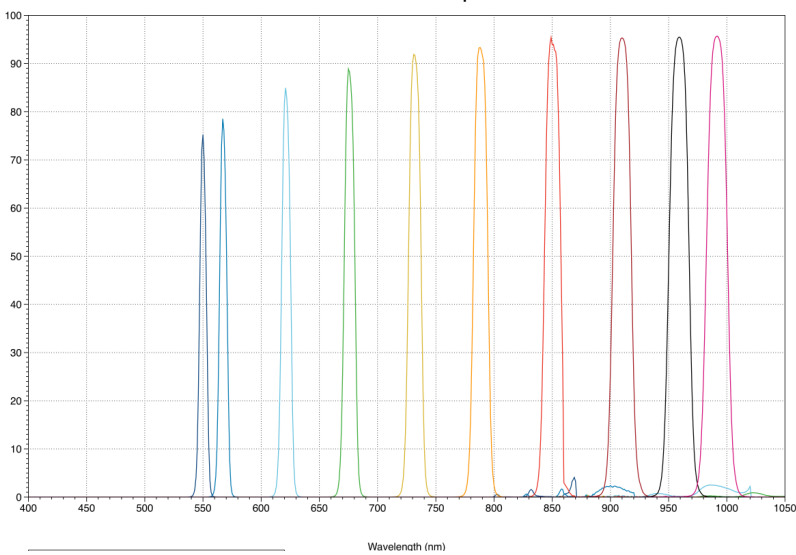
Linear Variable Filter - Long Wave Pass (LWP)



Spectral Bands

- Filter @ 1mm
- Filter @ 2mm
- Filter @ 6.76mm
- Filter @ 12.57mm
- Filter @ 18.38mm
- Filter @ 24.19mm
- Filter @ 30mm
- Filter @ 35.81mm
- Filter @ 41.62mm
- Filter @ 47.43mm
- Filter @ 53.24mm
- Filter @ 58mm

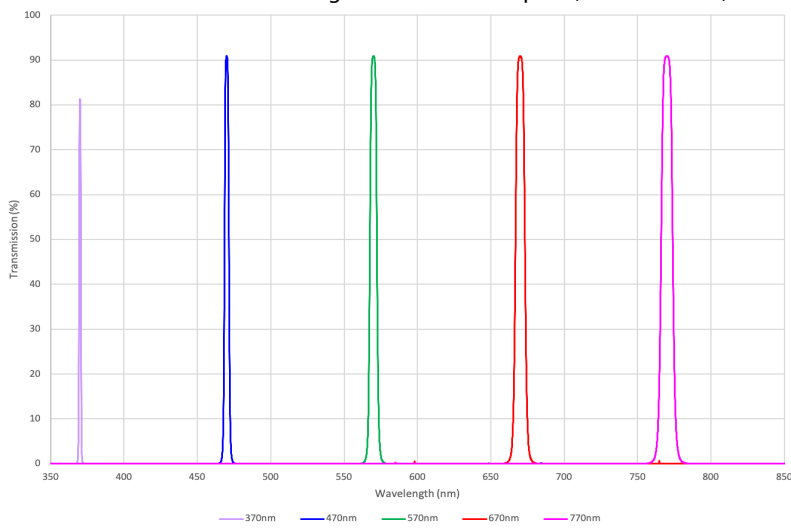
Linea Variable Filter - Bandpass (BP)



Spectral Bands

- Filter 10 @ 5mm
- Filter 10 @ 6.76mm
- Filter 10 @ 12.57mm
- Filter 10 @ 18.38mm
- Filter 10 @ 24.19mm
- Filter 10 @ 30mm
- Filter 10 @ 35.81mm
- Filter 10 @ 41.62mm
- Filter 10 @ 47.43mm
- Filter 10 @ 53.24mm

Linear Variable Filter - High Resolution Bandpass (200 + nm/mm)



Benefits

- Continuously variable wavelength selection in one filter
- UV (230-500nm), VIS (400-700nm) and NIR (550-1000nm) versions
- Enable instrument design versatility & range
- Scalable to high volume OEM production

Applications

- VIS and NIR spectroscopy
- Biomedical instruments
- Fluorescence measurement
- Remote sensing
- Air & water quality
- Order sorting filters
- Monochromators
- Flexible prototyping

Contact an Application Engineer to discuss your specific application.

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