

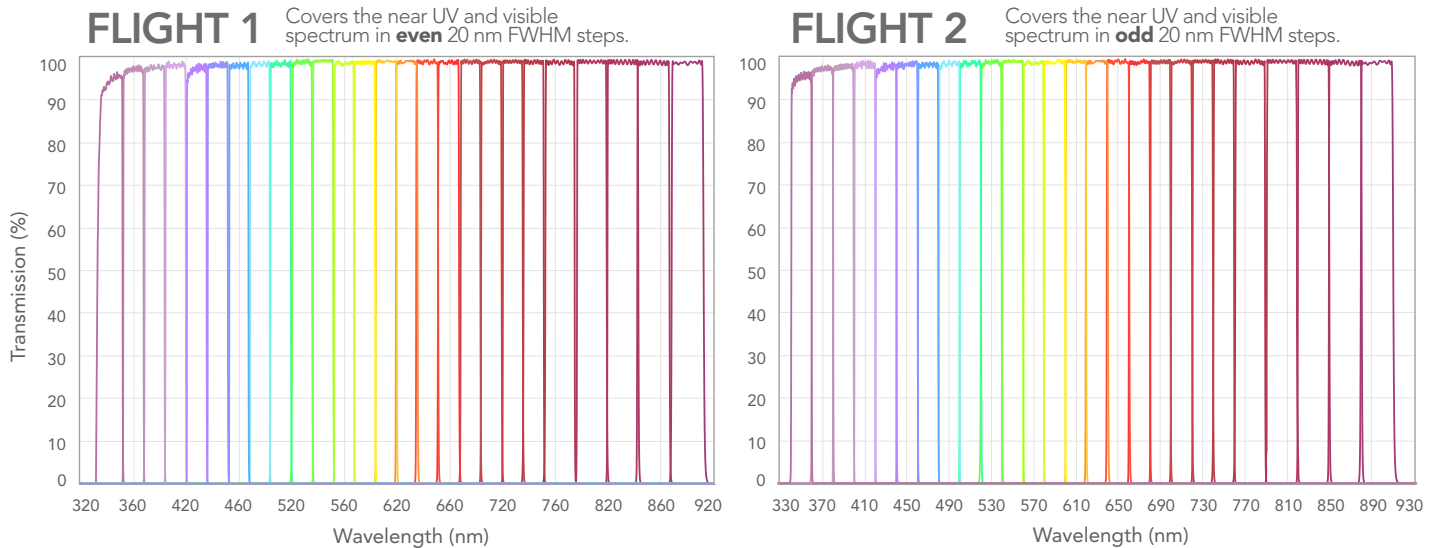
Step through the Spectrum with Nanopede™ Bandpass Optical Filters

Nanopede™ Bandpass Optical Filters

2023

Step Through the Spectrum with Nanopede

NEW IN
2024



52 TOTAL
FILTERS

COST
EFFECTIVE

BREADBOARD
SOLUTION

See Even More Across the Spectrum

Flow cytometry interrogates cells through scattered light measurements and fluorescent markers. In spectral flow cytometry, the fluorescence is collected across the entire spectrum using discrete, back-to-back (spectrally adjacent) optical filters. Then the photons are binned such that spectral unmixing can resolve which fluorescent markers are present in the interrogated cell. As such, spectral flow cytometry requires filters covering the UV, visible, and NIR in discrete steps, which may lead to a desire to balance instrument cost and optical filter performance.

IDEX Health & Science understands these needs, and we are proud to announce our latest Semrock bandpass optical filters: Nanopede™. These essential performance and cost-effective filters cover the near UV and visible spectrum in **even** (Flight 1) and **odd** (Flight 2) 20 nm Full-Width, Half-Max (FWHM) steps. Moving into the NIR, the FWHM increases to 30 nm. The **fifty-two filters** in the Nanopede family have been designed with your application in mind. Both flights are also available as full sets.

While Nanopede was initially designed for flow cytometry and point-based detection applications, these versatile, cost-effective filters can also be used extensively for breadboarding, machine vision, or kept on the shelf for use as needed.

Features:

- › Coverage of the spectrum in discrete steps so you can test several configurations and define the best combinations possible.
- › ODavg > 5 blocking from 330 to 900 nm, so you can optimize for the blocking depth and range you need.
- › ODabs > 5 at key laser wavelengths to assist in reducing light source bleedthrough.
- › Hard coated for consistent performance with Semrock quality for spectral repeatability and proven reliability for your most demanding applications.
- › Availability in 12.5 mm housed standard sized filters with 10 mm clear aperture, providing a compact filter package. (Custom sizing is also available to fit your unique instrument footprint.)
- › Available now to support your immediate prototyping needs through future volume production requirements.

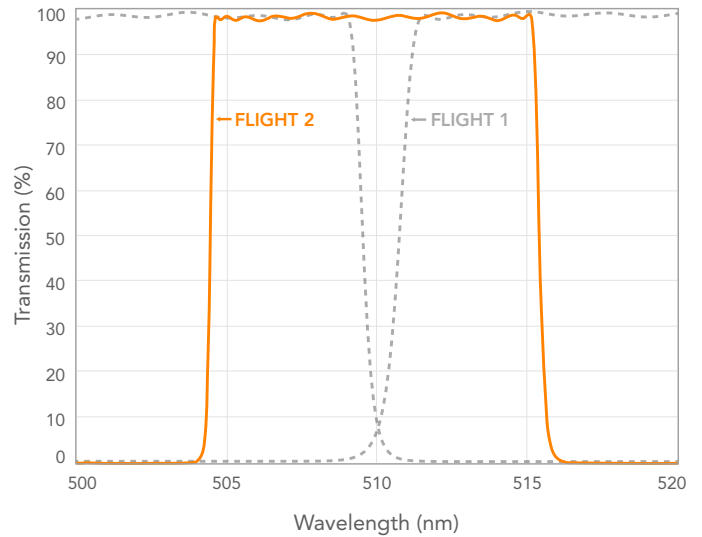


Figure 1: Zoomed-in section depicting the full coverage of Nanopede Flight 1 and Flight 2 filters.

Also available for purchase as a complete set for Flight 1 or 2.

UV / VIS		VIS		NIR	
Flight 1	Flight 2	Flight 1	Flight 2	Flight 1	Flight 2
FBP01-340/17-12.5	FBP01-350/17-12.5	FBP01-520/15-12.5	FBP01-530/15-12.5	FBP01-700/13-12.5	FBP01-710/13-12.5
FBP01-360/16-12.5	FBP01-370/16-12.5	FBP01-540/15-12.5	FBP01-550/15-12.5	FBP01-720/13-12.5	FBP01-730/13-12.5
FBP01-380/16-12.5	FBP01-390/16-12.5	FBP01-560/14-12.5	FBP01-570/14-12.5	FBP01-740/13-12.5	FBP01-750/13-12.5
FBP01-400/16-12.5	FBP01-410/16-12.5	FBP01-580/14-12.5	FBP01-590/14-12.5	FBP01-765/22-12.5	FBP01-775/22-12.5
FBP01-420/16-12.5	FBP01-430/16-12.5	FBP01-600/14-12.5	FBP01-610/14-12.5	FBP01-795/22-12.5	FBP01-805/22-12.5
FBP01-440/16-12.5	FBP01-450/16-12.5	FBP01-620/14-12.5	FBP01-630/14-12.5	FBP01-825/22-12.5	FBP01-835/22-12.5
FBP01-460/15-12.5	FBP01-470/15-12.5	FBP01-640/14-12.5	FBP01-650/14-12.5	FBP01-855/21-12.5	FBP01-865/21-12.5
FBP01-480/15-12.5	FBP01-490/15-12.5	FBP01-660/13-12.5	FBP01-670/13-12.5	FBP01-885/21-12.5	FBP01-895/21-12.5
FBP01-500/15-12.5	FBP01-510/15-12.5	FBP01-680/13-12.5	FBP01-690/13-12.5		

The Nanopede filter family provides a value approach to optical performance for your application and marks the beginning of a new generation of Semrock optical filters to match your needs in a rapidly developing and innovative market.

Our understanding of essential filter performance is why we offer an off the shelf filter family designed for versatility with a contained cost. Learn more about Nanopede at idex-hs.com/nanopede

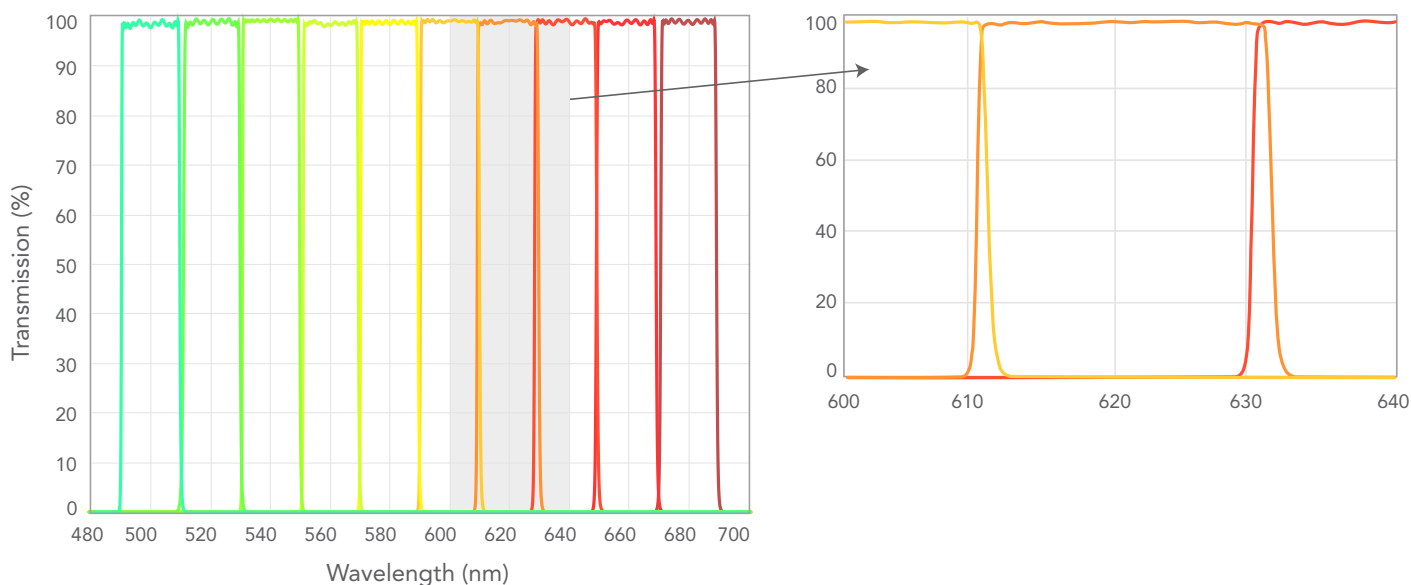


Figure 2: The Nanopede bandpass optical filter family offers $T > 93\%$. A close-up of FBP01-620/14 with its two neighboring filters is on the right.

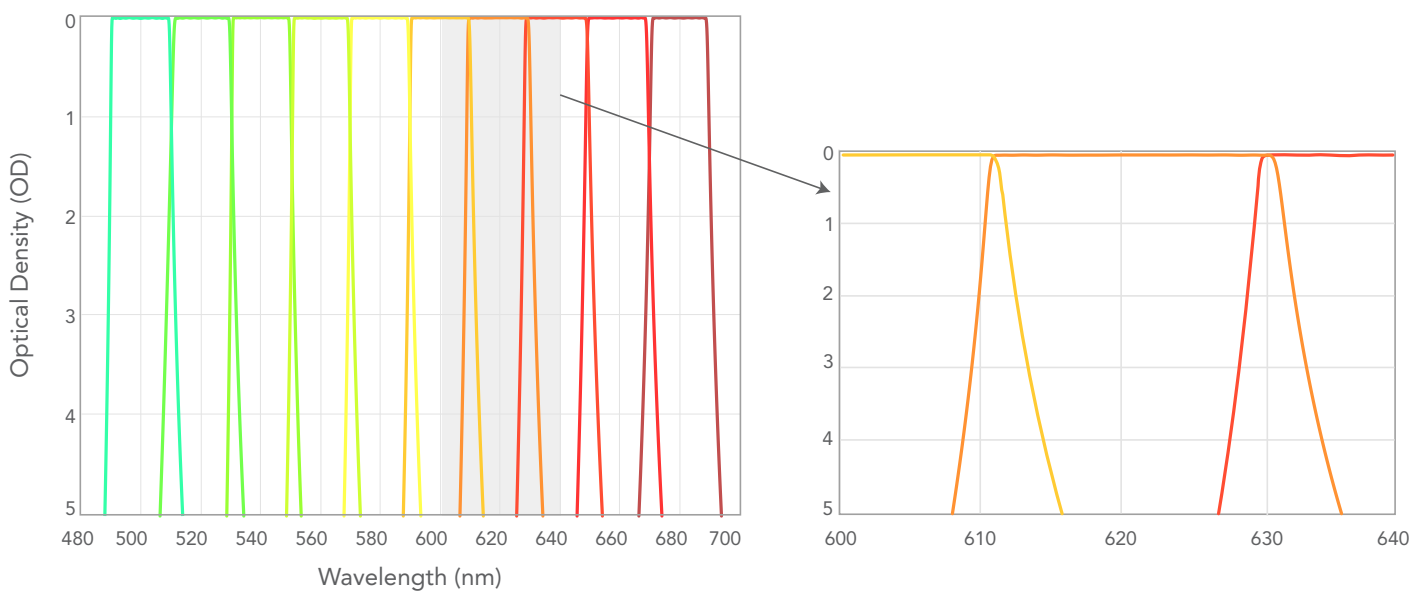


Figure 3: The Nanopede bandpass optical filter family offers OD5 blocking. A close-up of FBP01-620/14 with its two neighboring filters is on the right.

We understand that every life science instrument is unique; partner with us for custom optical filters to meet your specific application needs. For ordering, technical support, and contact information please visit www.idex-hs.com.