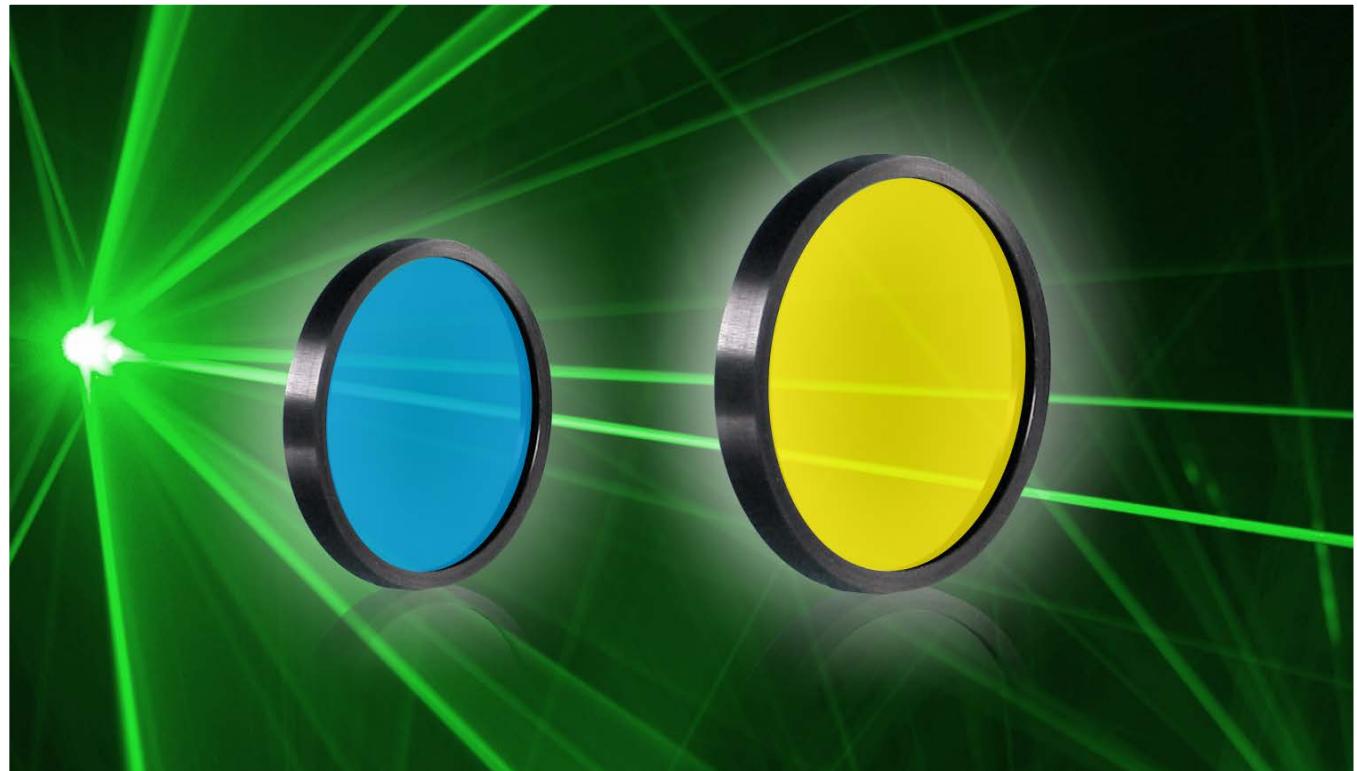




## ULTRA-NARROWBAND FILTERS

For Laser Applications – Pushing the Envelope of Performance



### LARGE FORMAT AND IMPROVED TEMPERATURE STABILITY

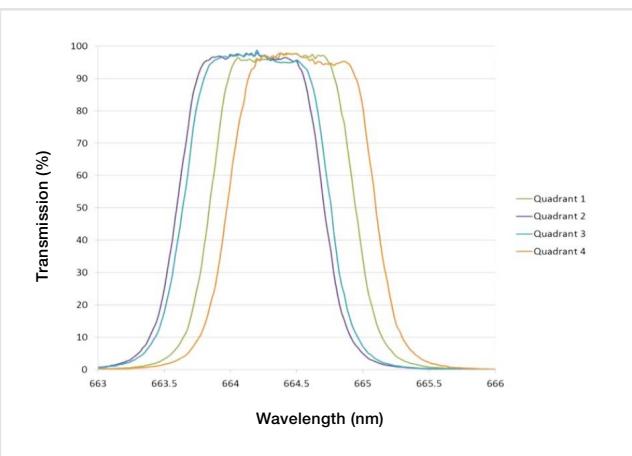
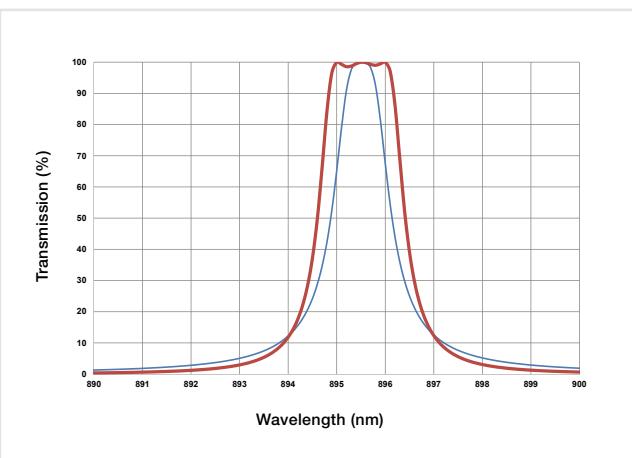
These hard-coated filters with very narrow bandwidth are used in optical systems, like LIDAR (light detection and ranging), Doppler shift detection of plasma velocity, laser clean-up, chemical and gas sensing, as well as for cutting-edge astronomy and instrumentation applications. They are highly resistant to laser damage, which ensures a high level of performance for a long period of time.

### APPLICATIONS

- :: Laser Clean-up
- :: Quantum optics
- :: Spectroscopy
- :: Astronomy
- :: LIDAR
- :: Plasma physics

### OUR PARTNER





| CWL (nm) | FWHM (nm) | FWHM (%) | OD |
|----------|-----------|----------|----|
| 317.5    | 1.5       | 0.472    | 6  |
| 354.717  | 0.15      | 0.042    | 5  |
| 410.3    | 1.1       | 0.268    | 5  |
| 532.079  | 0.17      | 0.032    | 5  |
| 656.1    | 1         | 0.152    | 4  |
| 828.007  | 0.5       | 0.060    | 5  |
| 1030.2   | 0.6       | 0.058    | 8  |
| 1064.164 | 0.4       | 0.038    | 5  |

## FROM DESIGN TO SPECIFIC ULTRA-NARROWBAND FILTER (UNBF)

- :: Fully customizable
- :: Example of 895.5/1 nm and 895.5/1.5 UNBF
- :: Transmission > 92 %
- :: Customized out of bandpass blocking  
OD4 / OD6 from 700 – 1100 nm

◀ Example on the left shows two different designs,  
blue curve was realized

## MODERN PLASMA COATINGS

- :: Highly reproducible square top filters with low ripple
- :: Low temperature dependence, e.g. for  
532 nm 2.5 pm / K
- :: Exceptional transmission
- :: Large formats (up to 75 mm) with minimum variation  
(center wavelength 0,06 %, FWHM 0,02 %)

## EXAMPLES OF AVAILABLE UNBF

- :: Ultra-narrowband designs from UV to IR  
with minimum 0.15 nm FWHM
- :: Blocking up to OD 8 over a broad spectral range  
possible
- :: Filter bandwidth cannot be measured with  
commercial available instruments

OUR FILTER TEAM IS HAPPY TO GIVE SUPPORT!



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