

SuperK VARIA

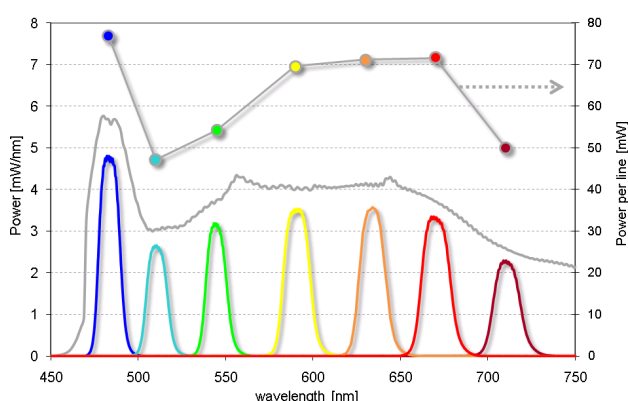
Tunable wavelength & bandwidth filter

- 400-850nm tunable filter
- Variable bandwidth: 4-100nm
- High transmission and No Polarization Loss!
- Effortless Plug'n'Play to SuperK EXTREME
- Full computer control via SuperKontrol GUI
- SuperK Fiber Delivery

The SuperK VARIA is a unique filtering solution which allows not only the tuning of wavelength, but also the variation of bandwidth of the filtered channel.

In contrast to AOTF technology, the VARIA suffers no polarization loss and thus delivers high power throughput. For example, powers of over 50mW per wavelength across the full visible spectrum are easily achieved with the VARIA and the EXTREME EXW-12 using only a 10 nm bandwidth.

The VARIA is computer controlled through the SuperKontrol GUI and the optical output can be free-space collimated beam as standard or single mode fiber delivery via the SuperK Fiber Delivery range. For applications which require a single tunable channel with high power and/or variable bandwidth, the VARIA provides the ideal solution without the need for AOTF based systems.



SuperK VARIA output from a SuperK EXTREME EXW-12. The graph shows the output from the supercontinuum laser, the filtered channel tuned to different wavelengths and the output power per wavelength (right axis).



Parameter	Value
Wavelength tuning range	400 – 850 nm
Minimum bandwidth FWHM	< 4 nm
Maximum bandwidth FWHM	100 nm
Transmission through module ($\Delta\lambda$ > FWHM, standard version)	> 90 % (Un-polarized)
Transmission through module ($\Delta\lambda$ > FWHM, high sup version)	> 85 % (Un-polarized)
Out of band suppression (20nm from center wavelength)	> 25 dB (standard version) > 50 dB (high sup version)
Output Polarization	Un-polarized or P-Polarized (adding output polarizer)
Tuning speed	> 10 nm/s
Repeatability of wavelength position	< 0.1 nm
Wavelength temperature sensitivity	< 0.05nm/deg
Transmission temperature sensitivity	< 0.2 %/deg
Vibration sensitivity	< 1% under influence of 1/2g (QQ)
Electrical interface	Edge PCB connector w. BUS interface, Analog feedback signal
Interlock	Collimator, lead
Output mode	Collimated free-space or SuperK CONNECT with FC-APC

Options / add-ons

- Standard (25dB) or high (50 dB) out-of-band suppression
- SuperK CONNECT fiber delivery
- Output stabilization with active feedback



Specifications are subject to change without notice. May 2011
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