

[OE WTF-500]

Wide Bandwidth Optical Tunable Filter

Features:

- TEM₀₀ beam profile
- Narrow to wide bandwidth
- Wide tuning range
- SM or PM-fibers
- High out-band suppression
- Low PDL and insertion loss variation

Applications:

- Mode-locked lasers
- Optical sensing
- environmental monitoring
- Research
- Multiwavelength filtering

Product description:

O/E Land's new product, **OE WTF-500**, is wide bandwidth tunable filter engineered to cover a broad spectral range, with FWHM bandwidths reaching up to 10 nm and tunability across wavelengths from the ultraviolet (UV) to the visible (VIS), near-infrared (NIR) and mid infrared (MIR) regions.

This versatile filter is ideal for applications requiring adaptable wavelength selection, such as multispectral imaging, optical coherence tomography (OCT), and broadband spectroscopy. Its wide tunability makes it particularly useful for dynamic, multi-wavelength environments, enabling quick adjustments across a wide spectrum.

Additionally, its capability to work in the UV-VIS-NIR-MIR ranges supports applications in telecommunications, biomedical imaging, environmental monitoring, and research, where high flexibility in spectral control is essential for capturing detailed information across various wavelengths. A software user interface allows changing the transmission center wavelength and controlling the operation of the filter.

Product specifications:

Parameter	Unit	Parameters						
Model		OE WTF-500 Wide Bandwidth Tunable Filter						
Type		UV-VIS	850	1060	1310	1550	2000	2750
Operating wavelength range	nm	400-700	700-1000	1020-1100	1280-1390	1480-1620	1620-2200	2700-2800
Tuning range (max)	nm	100	100	120	120	150	250	100
FWHM Bandwidth (max)	nm	~ 10						
Out-of-band suppression	dB	> 30	> 30	> 40	> 40	> 40	> 30	> 25
Insertion loss*	dB	< 5	< 5	< 5	< 5	< 4	< 7	< 7
Optical power (max)	mW	< 500						
Fiber type		SM; PM						
Fiber termination		Fiber pigtail; Fiber connectors: FC; SC; ST						
Control interface		Included, via USB port						

*Depends on the tuning range and CWL.

Ordering number for OE WTF-500:

Model	Wavelength range WL (-)	Tuning Range (TR) (nm)	Fiber type (FT)	Connector (C)	Fiber Length (FL)
OE WTF-500-WL-TR-FT-C-FL	Center wavelength of interest within the range.	Specify, up to max for the range.	SM: single mode PM: Polarization-maintaining	FC/PC C1 FC/APC C2 SC/PC C3 SC/APC C4 LC/PC C5 LC/APC C6	Default: 1 m Custom: specify value
Example:	OE WTF-500-1580-70-SM-C1-1				