AOTF and AOTF-DUAL systems

Acousto-Optic Tunable Filter systems for Fianium supercontinuum sources

Key Features

- Up to 8 simultaneous tuneable wavelength channels
- Plug-and-Play: no internal alignment required
- Optional single-mode fiber delivery
- Integrated 1" retractable filter holders
- Integrated laser safety interlock
- Easily controllable using a Graphical User Interface and USB connection
- Advanced features: wavelength scanning, channel stacking and fast switching

Applications

- Flow Cytometry
- Fluorescence excitation
- Nanophotonics
- Broadband spectroscopy
- Fluorescence lifetime measurement

AOTF system

The AOTF system is a removable module that enables up to 8 simultaneous tunable wavelength channels to be selected from any Fianium **WhiteLase™** supercontinuum. There is a choice of three AOTF crystals that cover the entire supercontinuum spectrum from 400nm to beyond 2000nm.

Output is a free-space collimated beam or, optionally, coupled to single-mode polarisation maintaining fiber.

AOTF-DUAL system

The AOTF-DUAL system houses two AOTF crystals to provide an even wider tuning range from a single supercontinuum input. The system can be configured with any two of the AOTF crystals; VIS, NIR1 or NIR2.

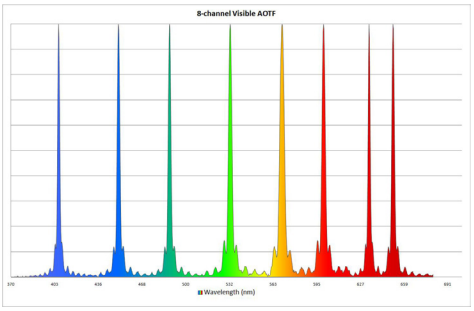
With the addition of a second AOTF controller, both outputs can also be controlled independently and simultaneously using the supplied software.

AOTF-HP High Power System

The new High Power version uses a unique design to avoid the traditional polarisation loss associated with AOTF systems used with supercontinuum lasers. Ideally suited to applications demanding the highest power throughput the AOTF-HP provides over 70% of the full supercontinuum spectral density.

STANDARD SPECIFICATIONS

	AOTF and AOTF-DUAL		
AOTF Crystal	**VIS**	**NIR1**	**NIR2**
Wavelength Range	400 to >650nm	650 to >1100nm	1100 to >2000nm
Channel Bandwidth	≈2-7nm	≈2-5nm	≈4-16nm
Number of Wavelength Channels: AOTF AOTF-DUAL	 Up to 8 Up to 16		
Maximum Diffraction Efficiency	90%		
Supercontinuum Optical Throughput: AOTF & AOTF-DUAL High-Power AOTF-HP	 ≈40% ≈70%		
Polarisation: AOTF & AOTF-DUAL High-Power AOTF-HP	 Linear Unpolarised		
Input	Plug & Play - Any Fianium Supercontinuum		
Output	Free-space collimated or multi-mode fiber delivery or single-mode fiber delivery		
Computer control interface	USB		



Other features

- Fast switching mode (<5µs rise-time)
- Integrated 1" filter holder
- Integrated laser safety interlock
- Graphical User Interface

SPLITTER module

Optional passive filter accessories for Fianium supercontinuum sources

Key Features

- Separates supercontinuum output in to two wavelength ranges
- Choice of transition wavelength: 750nm or 950nm
- High transmission for both visible and Infrared outputs
- Excellent out-of-band supression

Applications

- Flow Cytometry
- Fluorescence excitation
- Nanophotonics
- Broadband spectroscopy
- Fluorescence lifetime measurements

The optional SPLITTER filter is a removable module that splits the full supercontinuum spectrum, providing two separate outputs. The module is compact, plug-and-play and requires no user alignment.

Two different transition wavelengths between output channels are offered.

Standard Specifications

	SPLITTER-750	SPLITTER-950
Wavelength Range: Output 1 Output 2	 400-750nm 750-2000nm	 400-950nm 950-2000nm
SC Optical Throughput	>60%	>60%
Out-of-band suppression	>30dB	>30dB
Transition width	<50nm	<50nm
Polarisation	Unpolarised	Unpolarised
Output	Free-space or fiber	Free-space or fiber

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