



1250 – 2500nm Acousto-Optic Tunable Filter

TF1875-1250-10-6-GH59A

AO Tunable Filter for NIR spectroscopic applications.

High speed, random access, solid state technology is making AOTF based spectrometers an ideal for on line process control applications.

Gooch & Housego's AOTF capability is extensive. By combining our scientific knowledge, modelling capability and engineering expertise with our renowned manufacturing skill and high quality, our products are aimed at the most discerning customers, in the most demanding applications.

Use in conjunction with our frequency synthesised driver (DDS) enables active wavelength / temperature stabilisation.

Multichannel RF drivers allowing active pass band resolution and profile control are also available – please enquire.

Patented side lobe suppression technology provides excellent out of band suppression.

In addition to the standard product shown, custom configurations are available for specialised applications. These include alternative mechanical design, wavelength range, aperture & resolution.

Please contact us for further information.

Key Features:

1250 – 2500nm
High speed, random access
Adaptable resolution
Solid state technology
Patented out of band suppression
Custom configurations available

Application examples:

Pharmaceutical Environmental Biomedical Food & drink Agriculture Chemical



General Specifications

Interaction material: Tellurium Dioxide (Anisotropic)

Wavelength range: 1250 - 2500nm Frequency range: 39 - 81MHz Resolution (FWHM): ~ 10nm at 1875nm

Active aperture: 6mm

Polarisation: Polarisation sensitive

Incident polarisation:

Linear, vertical with respect to base
Polarisation of diffracted order:

Linear, orthogonal to input (90º rotated)

Pointing stability of diffracted order: $< \pm 0.01$ ° typical

Field Of View: $\pm 3^{\circ}$ Beam separation: $> 6^{\circ}$ RF input impedance: 50Ω Transmission: > 95% Diffraction efficiency: > 90%

RF drive power: < 5W max (Typical 2W at 1550nm)

Cooling: Conduction through base

Ordering Code

Explanation: TF1875-1250-10-6-GH59A (AO Tunable Filter – centre wavelength 1875nm – 1250nm operating range - 10nm resolution - 6.0mm active aperture – GH59 housing, with side lobe suppression).

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