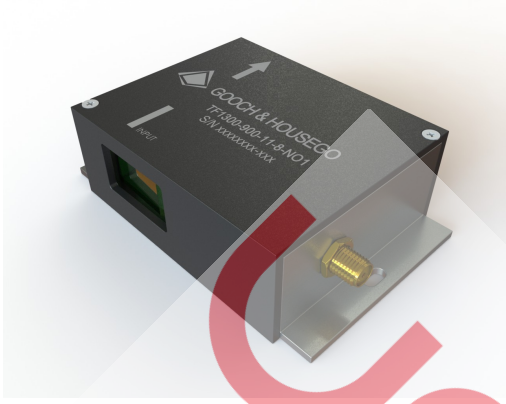
ENABLING PHOTONIC TECHNOLOGIES



900 – 1700nm
Acousto-Optic Tunable Filter

TF1300-800-16-11-NO1A

AO Tunable Filter for NIR imaging spectroscopy.

Combining top grade Tellurium Dioxide with high quality optical finishing and in-house anti-reflection coatings, this large aperture AOTF can deliver diffraction limited imaging performance.

High speed, random access ('band sequential' rather than 'push broom') enables the potential for real-time video rate imaging.

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

Use in conjunction with our frequency synthesised driver, enables independent control of frequency, amplitude and phase of up to sixteen channels, allowing active pass band resolution and profile control, or the creating of multiple separate passbands.

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.

In addition to the standard product shown, custom configurations are available for specialised applications. These include alternative mechanical design, wavelength range, aperture & resolution. We also offer temperature stabilisation or compensation options.

Please contact the sales team for further information.

Key Features:

- 900 – 1700nm
- Large aperture / high étendue
- High speed, random access
- Adaptable resolution
- Solid state technology
- Patented out of band suppression
- Custom configurations available

Application examples:

- Hyperspectral / Multispectral Imaging
- Biomedical
- Environmental
- Pharmaceutical
- Food & agriculture
- Security

Contact: sales@goochandhousego.com www.goochandhousego.com

General Specifications

Interaction material:	Tellurium Dioxide (Anisotropic)
Wavelength range:	900 - 1700nm
Frequency Range:	30 – 65MHz
Resolution (FWHM):	~16nm at 1300nm
Active aperture:	11 x 12mm
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:	< ± 0.01° typical
Field Of View:	± 2°
Beam separation:	≥ 4.5º
RF input impedance:	50Ω
Transmission:	> 95%
Diffraction efficiency:	> 90% (> 95% typical)
Maximum RF Power:	5W
Cooling:	Conduction through base

Ordering Code

Explanation: TF1300-900-8-11-NO1A (AO Tunable Filter, centre wavelength 1300nm, 800nm operating range, 16nm resolution, 11.0mm active aperture, NO1 housing, side lobe suppression).

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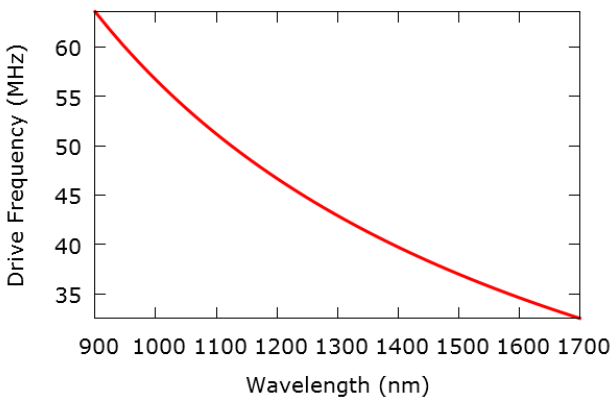
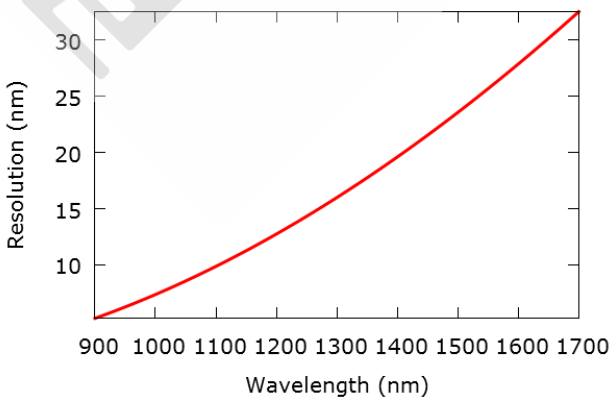
Tuning Relation



Line Width



Mechanical Data