

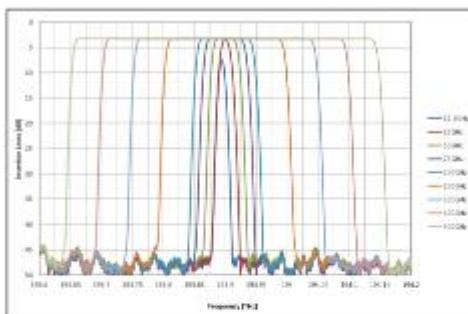
# OSG10/OSG12 Programmable Optical Filters

OSG10 and OSG12 programmable optical filters are versatile test instruments that can be controlled by a PC via an intuitive user interface.

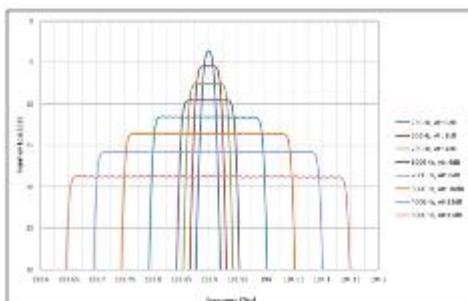


## High performance programmable optical filter

- Available in C or L band
- 6.25 GHz filter slices for OSG12
- 12.5 GHz filter slices for OSG10
- Low insertion loss: 3 dB typical
- Low PDL: < 0.3 dB
- High isolation: > 40 dB
- Wide dynamic range of attenuation control: 0 to 20 dB
- Variable passband width from 12.5 GHz to 4800 GHz



- Seamless bandwidth tuning in increments of 12.5 GHz
- Virtually no insertion loss ripple across filter slices
- High extinction
- Variable passband width from 12.5 GHz to 4800 GHz



- Simultaneous control of amplitude and passband width
- Linear dynamic range of attenuation from 0 to 20 dB
- Variable passband width from 12.5 GHz to 4800 GHz



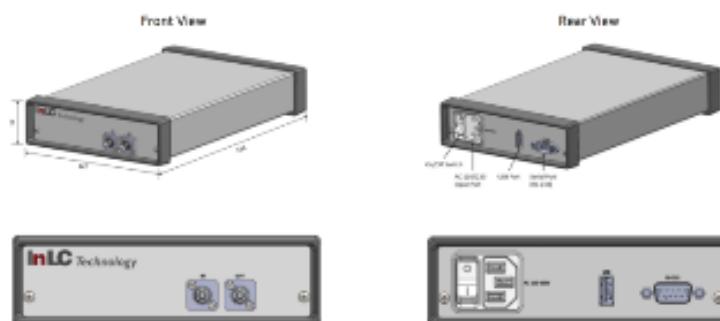
- Intuitive user interface with sliders, buttons, and drop-down menus
- Direct and instantaneous control of filter slices
- User can control each filter slice independently, in contiguous bands, or in arbitrary groups
- Pre-set filter configurations can also be downloaded from a user-generated file

### OSG10/OSG12 Specifications and Characteristics

Parameter	Specification	
Operating Spectral Range	C-band: 1527.60 to 1565.50 nm, 191.50 THz to 196.25 THz L-band: 1572.60 to 1628.76 nm, 186.35 THz to 193.7 THz	
Insertion Loss		≤ 3.5 dB, typ. ≤ 4.5 dB, max.
Bandwidth setting range	C-band: 6.0 nm to 38 nm, 12.5 GHz to 4800 GHz L-band: 6.0 nm to 37 nm, 12.5 GHz to 4400 GHz	
Number of independently addressable filter slices (Filter slices are centered on ITU-T Grid)	OSG10 OSG12	C-band: 384 L-band: 352 C-band: 768 L-band: 704
Bandwidth of each filterslice		0.1 nm, 12.5 GHz
Center frequency accuracy of each filterslice		± 0.02nm, ± 1.5 GHz
Dynamic range of attenuation control for each filterslice		0 to 20 dB
Attenuation step size		0.1 dB
Attenuation accuracy		≤ 0.5 dB or 5% of attenuation, whichever is greater
Polarization Dependent Loss (PDL)		≤ 0.25 dB, typ. ≤ 0.3 dB, max. up to 10 dB attenuation
Extinction		≥ 40 dB
Return Loss		≥ 40 dB
Fiber Type		G.652 single mode fiber
Connector Type		FC/UPC Other connector types including FC/APC, SC/UPC, SC/APC available upon request
Maximum Input Power		≤ 27 dBm
Response Time		≤ 50 ms
Operating Temperature		-15 to 45 °C Extended temperature range available upon request
Dimensions		147 x 238 x 44 mm
Power Consumption		≤ 10 W

### Dimensions and Layout

Dimensions (W x L x H): 147 x 238 x 44 mm



Rackmount version with mounting flanges is also available upon request.

### Ordering Information

Product Code:	OSG10-XX-nn	OSG12-XX-nn	OSG10/OSG12 Options
	OSG10-XX-nn	OSG12-XX-nn	SM = Single Mode
			PM = Polarization Maintaining
	OSG10-XX-nn	OSG12-XX-nn	01 = C Band 02 = L Band