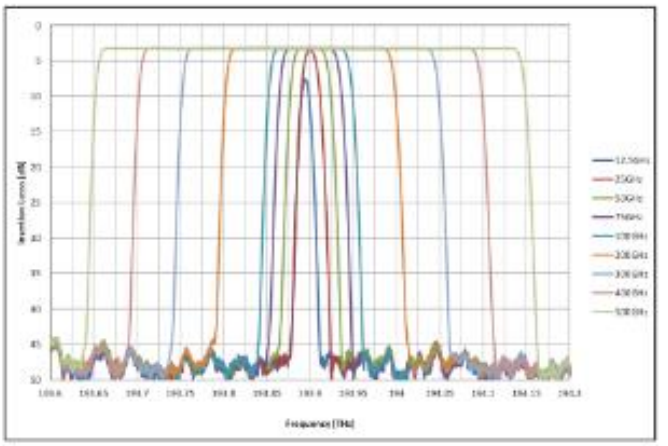
OSG20 Twin Programmable Optical Filters

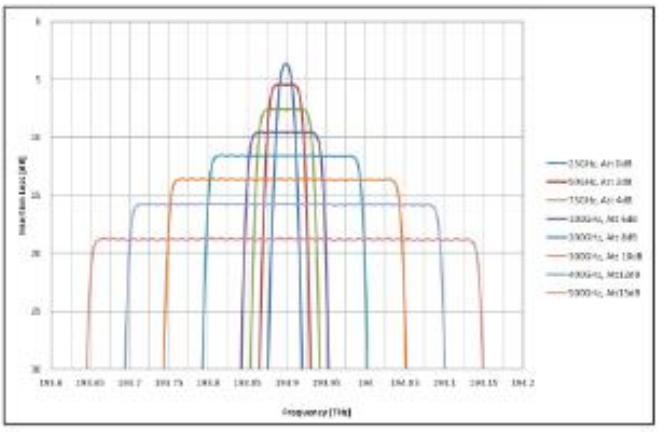
OSG20 Twin Optical Spectrum Generator programmable optical filters feature two independently controlled filters in a single package. All functions of the OSG20 are controlled by a PC via an intuitive user interface.

Dual high performance filters (equivalent to 2x OSG10) in one package

- Available in C or L band
- Low insertion loss: 3 dB typical
- Low PDL: < 0.3 dB
- High channel 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

OSG20 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: 1570.06 to 1608.78 nm, 186.35 THz to 191.0 THz	
Insertion Loss	≤ 4.5 dB, typ. ≤ 4.5 dB, max.	
Bandwidth setting range	C-band: 0.0125 nm to 38 nm, 12.5 GHz to 4800 GHz	
	L-band: 0.0125 nm to 37 nm, 12.5 GHz to 4400 GHz	
Number of addressable filter slices (Filter slices are centered on ITU-T Grid)	C-band: 384	Filter slices are centered on ITU-T Grid and can be combined to make arbitrary filter shapes
	L-band: 352	
Bandwidth of each filter slice	0.1 nm, 12.5 GHz	
Center frequency accuracy of each filter slice	± 0.0125 nm, ± 2.5 GHz	
Dynamic range of attenuation control for each filter slice	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)	≤ 0.15 dB, typ. ≤ 0.3 dB, max. up to 20 dB attenuation	
Reflection	> 40 dB	
Return Loss	> 40 dB	
Fiber Type	SMF-28 or equivalent	
Connector Type	FC/PC Other connector types including FC/APC, SC/PC, 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	247 x 238 x 44 mm	
Power Consumption	< 10 W	

Dimensions and Layout

Dimensions (W x L x H): 247 x 238 x 44 mm

Front View

Rear View

Rackmount version with mounting flanges is also available upon request

Ordering Information

Product Code: OSG20-XX-nn

OSG20 Options	
OSG20-**XX**-nn	SM = Single Mode
	PM = Polarization Maintaining
OSG20-XX-**nn**	01 = C Band
	02 = L Band