InLC Technology

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OSG10 and OSG20 Programmable Filters

OSG10 and OSG20 programmable optical filters are versatile test instruments that can be controlled by a PC via an intuitive user interface to create arbitrary filter shapes.

OSG10 Programmable Optical Filters have one input port and one output port

OSG20 Dual Programmable Filters feature two independently addressable filters in one package, the equivalent of 2x OSG10
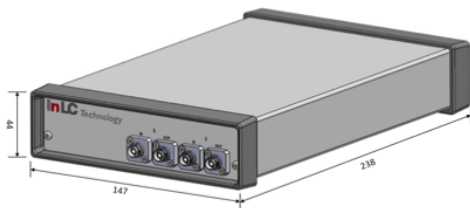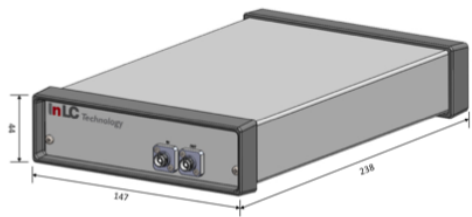
OSG10 and OSG20 Specifications and Characteristics

Specifications are identical for OSG10 Single Flexible Grid Programmable Filter and OSG20 Dual Flexible Grid Programmable Filter. In the case of OSG20 the specifications apply for each input/output pair.

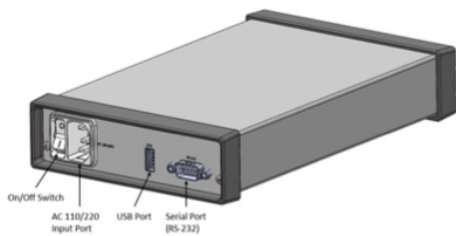| Parameter	Specification	
Operating Spectral Range	C-band: 1527.60 to 1565.50 nm, 191.50 THz to 196.25 THz	
	L-band: 1572.06 to 1608.76 nm, 186.35 THz to 190.7 THz	
Insertion Loss	≤ 3.5 dB, typ. ≤ 4.5 dB, max.	
Bandwidth setting range	C-band: ≤ 0.1 nm to 38 nm, 12.5 GHz to 4800 GHz	
	L-band: ≤ 0.1 nm 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	± 0.02nm, ± 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 10 dB attenuation	
Extinction	≥ 40 dB	
Return Loss	≥ 40 dB	
Fiber Type	G.652 single mode fiber	
Connector Type	FC/SPC Other connector types including FC/APC, SC/SPC, 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	

Dimensions and Layout

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

OSG10 Front View

OSG20 Front View

OSG10 and OSG20 Rear View

Rackmount version with mounting flanges is also available upon request

Ordering Information

Product Code: OSG10-XX-nn

                 OSG20-XX-nn

OSG10 Options	
OSG10-**XX**-nn	SM = Single Mode
OSG20-**XX**-nn	PM = Polarization Maintaining
OSG10-XX-**nn**	01 = C Band
OSG20-XX-**nn**	02 = L Band
	03...99 = Custom options

All OSG units are configured with FC/SPC connectors by default. Other connectors including FC/APC, SC/SPC, and SC/APC are available upon request.

Ordering Examples:

1. OSG10-SM-01 = Single Programmable Filter, Single Mode, C-band spectral range
2. OSG10-PM-02 = Single Programmable Filter, Polarization maintaining, L-band spectral range
3. OSG20-SM-01 = Dual Programmable Filter, Single Mode, C-band spectral range

All units are shipped with the OSG Control Interface software and a User Manual

Please contact us regarding orders and inquiries

InLC offers best-in-class WSS Modules, Optical Components, and Test & Measurement Instruments based on LC and LCoS technology.