

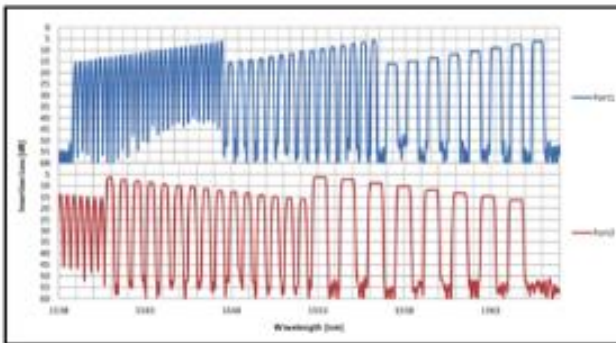
# OSG30 1x2/2x1 Programmable Optical Filters

OSG30 1x2/2x1 programmable optical filters offer the functionality of interleaver configurations and other switching configurations with very high port isolation. OSG30 filters are controlled by a PC via an intuitive user interface.



Switching programmable filter configurable as 1x2 or 2x1

- Available in C or L band
- Programmable for configuration as a 25, 50, or 100GHz interleaver
- High port isolation: > 40 dB
- High extinction: > 40 dB
- Wide dynamic range of attenuation control: 0 to 20 dB
- Variable passband width from 12.5 GHz to 4800 GHz



- Programmable interleaver with variable bandwidth in increments of 12.5 GHz
- Very high extinction: > 40 dB
- Very high port isolation > 40 dB
- Linear dynamic range from 0 to 20 dB



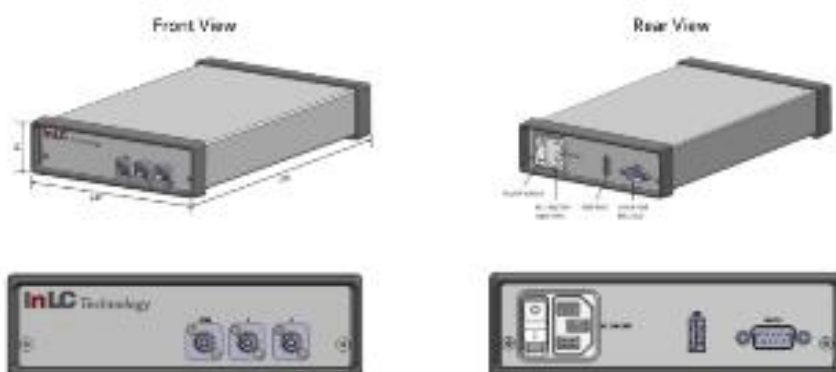
- Intuitive user interface with sliders, buttons, and drop-down menus
- Direct and instantaneous control of filter slices
- User can control each filter slice independently, in contiguous bands, or in arbitrary groups
- Pre-set filter configurations can also be downloaded from a user-generated file

## OSG30 Specifications and Characteristics

Parameter	Specification
Operating Spectral Range	C-band: 1527.80 to 1685.50 nm, 190.90 THz to 198.25 THz
	L-band: 1621.00 to 1688.56 nm, 186.35 THz to 192.7 THz
Insertion Loss	≤ 6.5 dB, typ. ≤ 7.0 dB, max.
Bandwidth setting range	C-band: 5.0 nm to 38 nm, 22.5 GHz to 4800 GHz
	L-band: 8.0 nm to 37 nm, 22.5 GHz to 4400 GHz
Number of addressable filter slices (Filter slices are centered on ITU-T Grid)	C-band: 384
	L-band: 352
Bandwidth of each filter slice	0.1 nm, 12.5 GHz
Center frequency accuracy of each filter slice	± 0.0001, ± 2.5 GHz
Range of attenuation for each filter slice	0 to 30 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 30 dB attenuation
Port Isolation	≥ 40 dB
Extinction	≥ 40 dB
Return Loss	≥ 40 dB
Fiber type	SMP-28 or equivalent
Connector Type	FC/SPC Other connector types including FC/APC, SC/SPC, SC/APC available upon request.
Maximum Input Power	337 dBm
Response Time	50 ns
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 also available upon request

### Ordering Information

Product Code: OSG30-XX-nn

OSG30 Options	
OSG30-XX-nn	S <sub>1</sub> = Single input, dual outputs (2x2) switch
	S <sub>2</sub> = Dual inputs, single output (2x1) switch
	P <sub>1</sub> = PM, Single input, dual outputs (2x2) switch
	P <sub>2</sub> = PM, Dual inputs, single output (2x1) switch
OSG30-XX-nn	00 = C Band
	02 = L Band