# InLC 社製光任意波形発生器（強度＆位相）
# Optical Spectrum Generator

サンインスツルメント株式会社

- OSG10: Programmable Filter
- Tuning of center frequency, bandwidth, and amplitude
- L-Band/ C-Band (up to 384 slices)
- Flexible Grid, Tunable in 12.5 GHz increments
- Extinction ≥ 40 dB
- IL ≤ 4.5 dB (3.5 dB, typ.)

- OSG30: 1x2/2x1 Programmable Filter
- Tuning of center frequency, bandwidth, and amplitude
- L-Band/ C-Band (up to 384 slices)
- Flexible Grid, Tunable in 12.5GHz increments
- Filter Isolation/ Extinction ≥ 40dB
- Port Isolation ≥ 40 dB
- IL ≤ 7.0 dB (6.5 dB, typ.)

- OSG12: High Resolution Programmable Filter
- Tuning of center frequency, bandwidth, amplitude, and phase
- L-Band/ C-Band (up to 768 slices)
- Flexible Grid, Tunable in 6.25 GHz increments
- Extinction ≥ 40 dB
- IL ≤ 4.5 dB (3.5 dB, typ.)

- OSG100: Ultra-High Extinction Programmable Filter
- Tuning of center frequency, bandwidth, and amplitude
- L-Band/ C-Band (up to 384 slices)
- Flexible Grid, Tunable in 12.5GHz increments
- Filter Isolation/ Extinction ≥ 60dB
- IL ≤ 8.0 dB (7.0 dB, typ.)

- OSG20: Twin Programmable Filter
- Tuning of center frequency, bandwidth, and amplitude
- L-Band/ C-Band (up to 384 slices)
- Flexible Grid, Tunable in 12.5 GHz increments
- Filter Isolation/ Extinction ≥ 40 dB
- IL ≤ 4.5 dB (3.5 dB, typ.)

| | Center Frequency Control | Attenuation Control | Bandwidth Control | Phase Control | Dual Filters | Ultra-High Extinction | Port Switching | High Resolution |
|---|---|---|---|---|---|---|---|---|
| OSG10 Programmable Filter | ✓ | ✓ | ✓ | | | | | |
| OSG12 High Resolution Programmable Filter | ✓ | ✓ | ✓ | ✓ | | | | ✓ [1] |
| OSG20 Dual Programmable Filter | ✓ | ✓ | ✓ | | ✓ [2] | | | |
| OSG30 1x2/ 2x1 Programmable Filter | ✓ | ✓ | ✓ | | | | ✓ [3] | |
| OSG100 Ultra-High Extinction Programmable Filter | ✓ | ✓ | ✓ | | | ✓ [4] | | |

**Notes:**

(1) OSG12 model has high resolution filter slices of 6.25 GHz minimum bandwidth. All other OSG models have filter slices 12.5 GHz minimum bandwidth

(2) OSG20 model offers 2 filters in a box. Each filter can be operated and controlled independently

(3) OSG30 model can be ordered as a single input with dual outputs (1x2), or as dual inputs with single output (2x1)

(4) OSG100 model features ultra-high extinction exceeding 60 dB. All other OSG models offer > 40 dB extinction

All OSG models are programmable via RS232 or USB ports using the OSG Control Interface sobware supplied by InLC