

Dual Wavelength Optical Pulse Generator

Negoh-Op Technologies Ltd. introduces its dual wavelength optical pulse/signal generator modules (WDMOPG) with bandwidth of more than 100 MHz, peak power of output signal larger than 20mW and pulse width from 10ns to CW at 1064nm and 1550nm wavelengths. The two sources are DFB or FP diode lasers which are stabilized in its frequency and output power, where the operator can choose to operate both diodes simultaneously or one of them. The WDMOPG modules are a turn key solution, which provides superb performances in stability quality through one single mode fiber output, and could be purchased with different polarization states, including a 2mW SLD non-coherent version.

Applications:

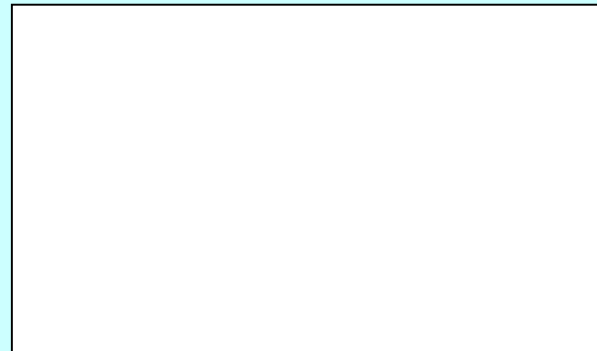
- *Testing Equipment for sensors and receivers*
- *Labs*

Key features:

- *Wavelengths: 1064nm and 1550nm*
- *Peak power: 20 mW*
- *Bandwidth: >100 MHz*
- *Pulsewidth: 10 ns up to CW*
- *Output: fiber-coupled*
- *Any pulse shape*

Options:

- *Linearly polarized output (EXR>25dB)*
- *Random polarized output*
- *Depolarized output (DOP<5%)*
- *Non-coherent output (SLD source)*



For WDMOPG purchase orders with specific wavelength and polarization state, the customer should order **WDMOPG-WL1-WL2-P**, where WL1 and WL2 are the two wavelengths and P is the requested Polarization state. (P=Polarized, R=Random, D=Depolarized, N=Non-coherent).

For example *WDMOPG-980-1560-P* is a module at 980nm and 1560nm with Polarized output.

WDMOPG Specifications:

Described below are Negoh-Op WDMOPG module specifications at 1064nm and 1550nm.

Other WDMOPG modules at wavelengths between 980nm to 1600nm are also available, and have similar optical, electrical and mechanical specifications.

Parameter	Specification (typical)	Unit	Notes
Optical			
Central wavelengths	1064 and 1550 (± 5)	nm	Other wavelengths between 980nm to 1600nm are available
Maximum output power	20	mW	
Pulse width	10 to CW	ns	
Output Polarization	≥ 25 - ≤ 5 20	dB - % μm	<ul style="list-style-type: none"> ▪ Linearly polarization ▪ Random polarization ▪ Depolarized ▪ Non-coherent (2mW SLD)
Modulation signal frequency	DC to 100	MHz	
Power between pulses	-80	dB	At 0V input
Modulation dynamic range	> 20	dB	
Time drift (WL)	≤ 0.1	nm	For DFB source
Temperature drift (WL)	≤ 0.1	nm	For DFB source
Output power stability	2	%	Within 2 hours
Rise time/ fall time	≤ 3	nsec	
Electrical			
Modulation Input Voltage	0-5	V	Optional different voltage range
Modulation input impedance	50	ohm	
Modulation signal	Arbitrary	-	
Main AC supply	220/50	V/Hz	110V is optional
Mechanical			
Output optical interface	One single mode FC/PC		Other connectors are optional
Modulation input connector	BNC		
Dimensions	380X280X95	mm ³	Optional smaller dimensions
19" Rack mount adaptor	2U	-	Optional
Operating Temperature	-20 to +50	⁰ C	

OPG Stability

