

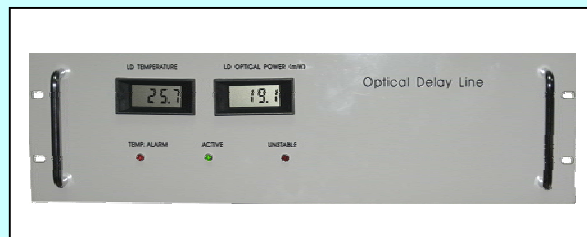
Optical Delay Line

Negoh-Op Technologies Ltd. introduces its optical delay line modules (ODL) which convert RF signals to optical signal and back, performing a desired time delay of input RF signals at 0.1-15 GHz region (20GHz is optional). The RF input signal is converted into an optical modulated signal, which is then transmitted into a single mode fiber, creating a fixed time delay. After passing the fiber, the optical signal is converted back into an electrical RF signal. ODL modules with time delays between 0.01 to 200 μ sec can be provided to customers. The electrical control on the ODL is done automatically by a PC, with no need for any intervention of the operator.

Negoh-Op ODL modules are a turn key solution, which provides superb performances including accurate time delay, no RF attenuation after conversion, -80dBm spurious, and with an ultra silent operation. The ODL modules can be purchased with several predefined time delay values.

Applications:

- *RF applications*
- *Radar systems*
- *Labs*

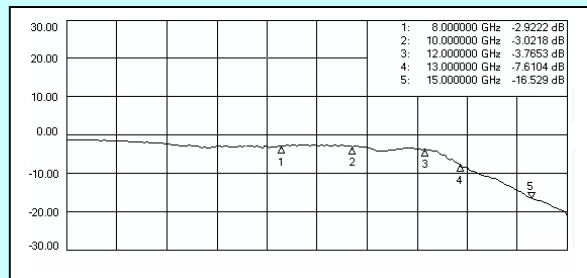


Key features:

- *Delay: 10 ns - 200 μ sec*
- *Frequency Range: 0.1-15 GHz*
- *Delay accuracy: <0.1% of Delay*
- *RF gain: 0 dB*

Options:

- *20 GHz ODL*
- *ODL with up to 8 different delays*



For ODL purchase orders, the customer should order **ODL-F-L**, where F is the requested highest frequency in GHz and L is the requested delay in microseconds. For example *ODL-15-100* is a module for 15 GHz with 100 μ sec delayed output

ODL Specifications:

Described below are ODL module specifications.

Parameter	Specification (typical)	Unit	Notes
Electrical and Optical			
Frequency range ^[1]	0.1-15	GHz	
Delay time ^[2]	0.01 - 200	μsec	
Time delay accuracy	< 5	ns	
Minimum RF pulse width	10	nsec	
System RF gain	0±1	dB	
Spurious free dynamic range	80	dB	
1dB input compression point	> +8	dBm	
Max input RF power	+13	dBm	
Laser diode optical power	20	mW	
Mechanical			
Communication	RS-232		
RF connectors	SMA		Input/output
Main AC supply	220/50	V/Hz	110V is optional
Dimensions	440X450X133	mm ³	
19" Rack mount adaptor	3U	-	Optional
Operating Temperature	0-40	°C	

[1] Negoh-Op ODL at 20 GHz frequency could be purchased (special order).

[2] There is an option for adding a switching system, allowing the customer of choosing a delay of up to 8 predefined values.