

General Photonics' manual variable optical delay line provides precision optical path variation of more than 18 cm (600 ps). The compact, rugged design makes the device ideal for integration in network equipment, test instruments, and optical coherence tomography (OCT) systems for precision optical path length or timing alignment.

Specifications:

Operating Wavelength Range ¹	SM: 1260 to 1650 nm	
	PM or double-pass: 1310 ± 50 or 1550 ± 50 nm	
Optical Delay Range ²	0 – 330 ps (single-pass model) 0 – 600 ps (single-pass model) 0 – 1200 ps (double-pass model)	
Readout Scale Resolution	0.05 mm	
Insertion Loss	1.0 dB nominal (single-pass) 1.5 dB nominal (double-pass)	
Insertion Loss Variation	±0.3 dB over entire range for 330 ps model ±0.5 dB over entire range for 600 ps model ±0.7 dB over entire range for 1200 ps model	
Return Loss	50 dB	
Extinction Ratio	> 18 dB for PM model	
Optical Power Handling	300 mW min.	
Operating Temperature	0 to 40 °C	
Storage Temperature	-40 to 60 °C	
Fiber Type	SMF-28, or PM Panda fiber	
Dimensions	330 ps model: 4.2" (L) × 2.1" (W) × 1.0" (H) 600 or 1200 ps models: 6.0" (L) × 2.1" (W) × 1.0" (H)	
	1	

Notes: Values in table are valid over a 1310 ± 50 or 1550 ± 50nm range for a device without connectors

1. Other wavelengths, such as 1064 nm, also available.

2. The 1200 ps model is a double-pass device. Since input and output signals travel on the same pigtail, a circulator or PBS may be necessary to separate input and output signals for some applications.

Features:

- · Space Efficient
- \cdot Highest delay to length ratio
- \cdot Long delay: more than 600 ps
- · Low insertion loss variation
- \cdot Rugged design

Accessories:

NoTail [™] Isolator	p. 91
NoTail [™] Polarizer	p. 90
NoTail [™] Circulator	p. 92

Applications:

- · Optical Coherence Tomography (OCT) systems
- · Passive time division multiplexing
- · TDM bit alignment
- · Fiber interferometers



Timing/Delay Modules Manual Variable Optical Delay Line – VariDelay™ I

Typical Performance Data:

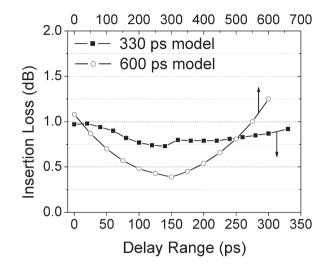
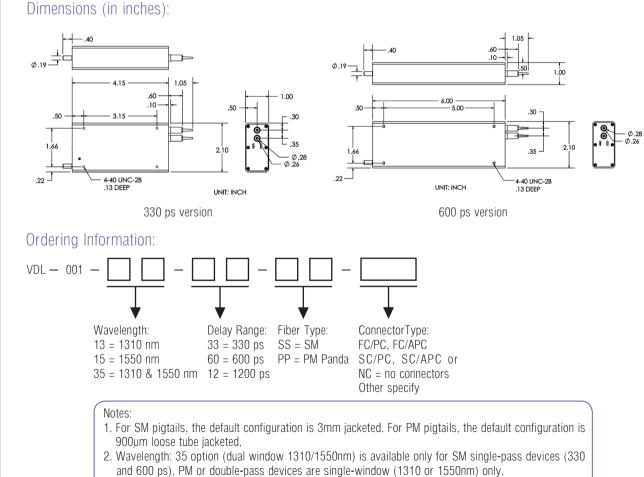


Figure 1. Insertion loss vs. optical delay.



3. Double pass only available with SM fiber.

INSTRUMENTS

MODULES

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