

TIMING/DELAY MANAGEMENT MODULES

Manual Variable Optical Delay Line – VariDelay™ I



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 | 1260 - 1650 nm for SM fiber 1310 or 1550 nm ± 50 nm for PM fiber |
| Optical Delay Range ¹ | 0 ~ 330 ps continuous for 330 ps model 0 ~ 600 ps continuous for 600 ps model |
| Readout Scale Resolution | 0.05 mm |
| Insertion Loss | 1.0 dB (nominal) |
| Insertion Loss Variation | ± 0.3 dB over entire range for 330 ps model ± 0.5 dB over entire range for 600 ps model |
| Return Loss | 50 dB |
| Extinction Ratio | > 18 dB for PM model |
| Optical Power Handling | 300 mW min. |
| Operating Temperature | 0 ~ 40 °C |
| Storage Temperature | -40 ~ 60 °C |
| Fiber Type | Corning SMF-28, or Fujikura PM Panda fiber |
| Dimensions | 1.0" × 2.1" × 4.2" for 330 ps model 1.0" × 2.1" × 6.0" for 600 ps model |

Note: Values are referenced without connectors

1. 1200 ps model available. Contact General Photonics for details.

Features:

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

Applications:

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

Accessories:

| | |
|--------------------|-------|
| NoTail™ Isolator | p. 79 |
| NoTail™ Polarizer | p. 78 |
| NoTail™ Circulator | p. 81 |

Tech Info: p. 152
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Typical Performance Data:

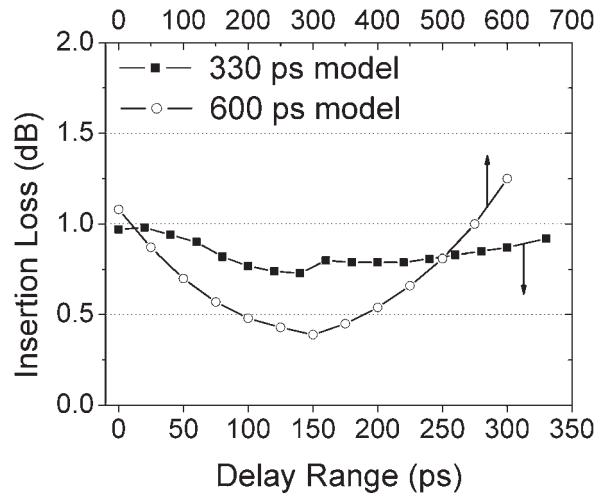
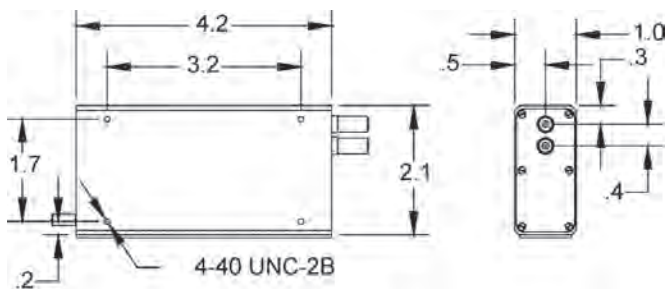
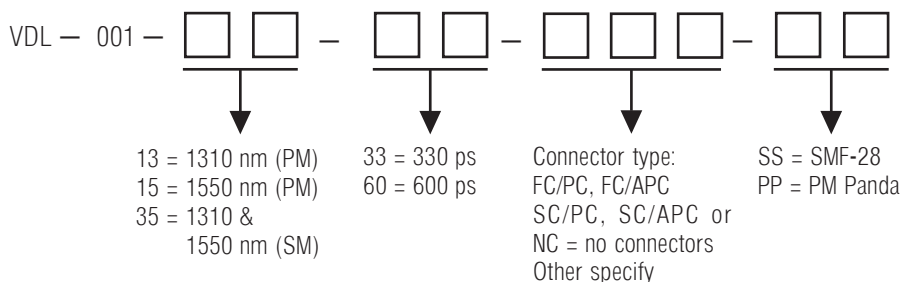


Figure 1. Insertion loss vs. optical delay.

Dimensions:



Ordering Information:



Note: For SM pigtailed, the default configuration is 3mm jacketed. For PM pigtailed, the default configuration is 900µm loose tube jacketed.