

Compact Time Delay Coil

TDC Series



Winding a large fiber spool is easy, but making compact, low loss fiber coils requires attention, precision, and skill. Using specially designed computerized machinery and a proprietary manufacturing process, General Photonics can produce extremely low insertion loss fiber coils to fit your budget and space requirements. You no longer have to choose between large fiber spools that occupy your precious space and small, high loss coils. Our optical fiber coil fills a longstanding vacuum in the photonics market, where large time delay and small size are essential. Each coil is ruggedly packaged to withstand various environments in field applications. Bare coils are also available for OEM applications.

Specifications:

Insertion Loss	< 0.3 dB/km typical, < 0.5 dB/km max. (above intrinsic loss)
Fiber Length	10 m to 4 km
Optical Delay	Nanoseconds to microseconds depending on fiber length and type
Operating Wavelength	1260 to 1650 nm standard, other specify
Fiber Type	SMF-28 standard, other specify
Operating Temperature	-40 to 85 °C
Storage Temperature	-40 to 85 °C
Dimensions	3.5" (I.D.) standard Enclosure: 6.00" (L) × 6.00" (W) × 1.59" (H)

Note: Values are referenced without connectors.

Features:

- Compact for easy integration into modules
- Low insertion loss
- Customized delay length
- Rugged construction
- Variety of fiber types
- Wide spectral response range
- Plug and play for easy use

Applications:

- Optical buffer for optical networks
- Radar calibration and instrument calibration
- Laser spectroscopic measurement
- Time delay for opto-electronics oscillators
- Nonlinear fiber loop
- Optical network testing and analysis
- Optical packet switching, buffering, routing and input/output synchronization