PHOTONWARES

Fiber Time Delay
(patent pending)

Product Description

The FIDM provides a convenient and low-cost solution for the fiber-based time delay. It selectively routes the input optical signals through several customer-defined fiber coils by a manual knob or via a computer GUI. It advantageously features low optical loss and high delay precision based on Agiltron's unique fiber winding and delays measurement technologies. The module front has a fiber input connector and fiber out connector as well as a manual delay time selection knob. The back panel has a wall power input with an on/off switch and a USB computer interface. Options of PM fiber, high power handling, signal booster, and high-speed reconfiguration are available.

Performance Specifications

FTDM Series Photonic Delay Line	Min	Typical	Max	Unit
Wavelength band	1520	1550	1580	nm
	1280	1310	1340	nm
Insertion Loss[1]		0.2	0.4	dB/km
Electrical Selection Time	0.1	50	10000	µs
Repetition Rate			500	KHz
Delay Time Range	n		m	s
Polarization Dependent Loss		0.25	0.45	dB
Polarization Mode Dispersion		0.1	0.2	ps
Return Loss	50	55		dB
Operating Temperature	0		60	ºC
Optical Power Handling[2]		500		mW
Storage Temperature	-40		85	ºC
Fiber Type	Corning SMF-28			

Note:
[1].Exclude connector coupling losses. Optical switch adds about 0.8dB per switch
[2]. High power version available

Fiber Time Delay

Electrical Driving Requirements

USB or RS232 with PC GUI

Mechanical Dimensions (mm)

- 1U
- 2U
- 3U
- 4U
- 5U
- 6U

*Product dimensions may change without notice. This is sometimes required for non-standard specifications.

Ordering Information

FTDM	☐☐	☐	☐	☐	☐	1	0	☐
	Coil Number	Wavelength	Switch Speed	Electrical Control Option	Signal Amplifier Option	Fiber Type	Delay Range	Connector
	01 02 03 ... 99	1550=5 1310=3 Special=0	10ms= 1 50μs = 2 100ns =3	No =1 Yes =2	No =1 Yes =2	SMF-28= 1 Special=0	Custom	None=1 FC/PC=2 FC/APC=3 SC/PC=4 SC/APC=5 ST/PC=6 LC=7 Special=0