



## PRODUCT OVERVIEW

### Optical Delay Lines

#### Other Products

- Wideband RF Fiberoptic Signal Transport
- Wideband Microwave Fiberoptic Signal Transport
- I/F, L-, C-, X-, Ku-Band Fiberoptic Signal Transport
- Frequency Standard Systems
- Timing Systems & Servers
- GPS Synchronized Clocks
- Video, Audio, and Data Fiberoptic Signal Transport
- Video Codecs
- RF and Microwave Optical Components
- Optical Amplifiers
- RF Matrix Switching Systems
- RF Routing and Sensing Redundancy Switches
- RF Line Amplifiers, Splitters, Combiners
- RF Frequency Converters

Fiber optics facilitate smaller physical size and longer delays than those achieved with acoustic wave devices and coaxial delay lines. Emcore's fiber-optic delay lines deliver wide bandwidth, wide dynamic range, immeasurable triple transit, superior temperature stability, and good amplitude and phase tracking between multiple devices for radar testing, signal processing, phased array antennas, and phase noise testing. The rigid yet flexible properties of fiber-optic cable provide repeatable enhanced phase and group delay characteristics. These delay lines take the form of either a passive optical delay or a fully integrated package, with laser diode and photodiode, that requires no user connection to fiber.

		5017 Series	DLS System	355A	356A	356B	357A
Applications	Radar Testing/Calibration	-	-	-	-	-	-
	Signal Processing	-	-	-	-	-	-
	Phased Array Antennas	-	-	-	-	-	-
	Phase Noise Testing	-	-	-	-	-	-
Integrated Fiberoptics		-	-				
Delays	0.1 – 16 $\mu$ sec	-		-	-	-	
	0.1 – 110 $\mu$ sec	-		-			
	20 – 280 $\mu$ sec		-				-
	3 – (>) 2000 $\mu$ sec		-				
Package/Form Factor	Flange Mount	-		-			
	System 10000 Chassis Plug-in				-	-	
	System 10000 Chassis						-
	Variable 19" Chassis		-				
Bandwidth	18 GHz	-	-	-	-	-	-
	40 GHz		-	-	-	-	-

Note: Bandwidth of passive delay lines is dependent on bandwidth of fiberoptic transceiver.

Suggested fiberoptic transmitters, receivers, and transceivers to use with passive optical delays are below.

		5016	35xx/45xx	System 10000	SIRU/SITU	RACK Series
Bandwidth	Wideband 0.05-3 GHz	-	-	-	-	-
	Wideband 0.05-18 GHz	-	-	-	-	-
	Wideband 0.05-40 GHz				-	
Optics	1310 nm	-	-	-	-	
	1550 nm		-	-	-	-
	DWDM				-	
Monitoring Options	RS-232 and/or 10/100 Ethernet	-	-	-	-	-
Mechanical	Flange Mount	-	-		-	
	System 10000 Plug-in			-		
	19" 1RU Chassis					-