

Fiber

Applications Support Matrix

Supportable distances and channel attenuation for optical fiber applications by fiber type*

	Wave Length (nm)	Maximum Supportable Distance (m)			Maximum Channel Attenuation (dB)			
		62.5/125 μm	50/125 μm	Single-mode	62.5/125 μm	50/125 μm	Single-mode	
10BASE-FL (Ethernet)	850	2000	2000	NST ¹	12.5	7.8	NST	
Token Ring 4/16	850	2000	2000	NST	13.0	8.3	NST	
Demand Priority (100VG - Any LAN)	1300	2000	2000	NST	7.0	2.3	NST	
	850	500	500	–	7.5	2.8	–	
10/100BASE-SX	850	300	300	NST	4.0	4.0	NST	
100BASE-FX (Fast Ethernet)	1300	2000	2000	NST	11.0	6.3	NST	
FDDI (Low Cost)	1300	500	500	–	7.0	2.3	–	
FDDI (Original)	1300	2000	2000	40,000	11.0	6.3	10.0-32.0	
ATM	52	1300	3000	3000	15,000	10.0	5.3	7.0-12.0
	155 (LED)	1300	2000	2000	15,000	10.0	5.3	7.0-12.0
	155 (laser)	850	1000	1000	–	7.2	7.2	–
	622 (LED)	1300	500	500	15,000	6.0	1.3	7.0-12.0
	622 (laser)	850	300	300	–	4.0	4.0	–
Fibre Channel	266 (LED)	1300	1500	1500	10,000	6.0	5.5	6.0-14.0
	266 (laser)	850	700	2000	–	12.0	12.0	–
	1062 (LED)	850	300	500	–	4.0	4.0	–
	1062 (laser)	1300	–	–	10,000	–	–	6.0-14.0
1000BASE-SX (Gigabit Ethernet)	850	220	550	–	3.2	3.9	–	
1000BASE-LX (Gigabit Ethernet)	1300	550	550	5,000	4.0	3.5	4.7	
10GBASE-S (10G Ethernet)	850	26	82 ²	NST	2.5	2.3	NST	
10GBASE-L (10G Ethernet)	1310	NST	NST	8,000	NST	NST	6.2	
10GBASE-E (10G Ethernet)	1550	NST	NST	30,000	NST	NST	11.4	
10GBASE-LX4 (10G Ethernet)	1300	300	300	10,000	2.1	2.1	NST	

* Refer to '568-B.1, '568-B.1-3 and applicable applications standards for further details.

¹ NST= Non-standard specified, although media conversion equipment may be available.

² 300m distance support using laser-optimized 50/125μm.