

## TIA568B Fiber Optic FTA410/420 (Backbone)

	850 nm Fixed	1300 nm Fixed	850 nm Loss/km	1300 nm Loss/km	Adapter Loss	Splice Loss	Length	Propagation Delay	Index of Refraction
	Loss	Loss	(in dB)	(in dB)	(in dB)	(in dB)		Delay	Rendetion
	dB	dB	dB	dB	dB	dB	meters	ns	
Cable Type									
Multimode 62.5 µm			3.5	1.5	0.75	0.3	2000		1.4719
Multimode 50 µm			3.5	1.5	0.75	0.3	2000		1.4725

## TIA568B Horizontal Fiber Optic FTA410/420

	850 nm Fixed Loss	1300 nm Fixed Loss	850 nm Loss/km (in dB)	1300 nm Loss/km (in dB)	Adapter Loss (in dB)	Splice Loss (in dB)	Length	Propagation Delay	Index of Refraction
	dB	dB	dB	dB	dB	dB	meters	ns	
Cable Type									
Multimode 62.5 µm	2.0	2.0					90		1.4719
Multimode 50 µm	2.0	2.0					90		1.4725

## TIA568B Inside FTA430

	1310 nm Fixed Loss	1550 nm Fixed Loss	1310 nm Loss/km (in dB)	1550 nm Loss/km (in dB)	Adapter Loss (in dB)	Splice Loss (in dB)	Length	Propagation Delay	Index of Refraction
	dB	dB	dB	dB	dB	dB	meters	ns	
Cable Type									
Singlemode			1.0	1.0	0.75	0.3	5000		1.4719

## TIA568B Outside FTA430

	1310 nm Fixed Loss	1550 nm Fixed Loss	1310 nm Loss/km (in dB)	1550 nm Loss/km (in dB)	Adapter Loss (in dB)	Splice Loss (in dB)	Length	Propagation Delay	Index of Refraction
	dB	dB	dB	dB	dB	dB	meters	ns	
Cable Type									
Singlemode			0.5	0.5	0.75	0.3	5000		1.4719

## ISO 11801 Fiber Optic Link FTA410/20

	850 nm Fixed Loss	1300 nm Fixed Loss	850 nm Loss/km (in dB)	1300 nm Loss/km (in dB)	Adapter Loss (in dB)	Splice Loss (in dB)	Length	Propagation Delay	Index of Refraction
	dB	dB	dB	dB	dB	dB	meters	ns	
Cable Type									
Multimode 62.5 µm			3.5	1.0	0.75	0.3	2000		1.4719
Multimode 50 µm			3.5	1.0	0.75	0.3	2000		1.4725

## ISO 11801 Fiber Optic Link FTA430

	1310 nm Fixed Loss	1550 nm Fixed Loss	1310 nm Loss/km (in dB)	1550 nm Loss/km (in dB)	Adapter Loss (in dB)	Splice Loss (in dB)	Length	Propagation Delay	Index of Refraction
	dB	dB	dB	dB	dB	dB	meters	ns	
Cable Type									
Singlemode			1.0	1.0	0.75	0.3	2000		1.4719



### ISO11801 Fiber Optic Channel FTA410/20

	850 nm Fixed Loss	1300 nm Fixed Loss	850 nm Loss/km (in dB)	1300 nm Loss/km (in dB)	Adapter Loss (in dB)	Splice Loss (in dB)	Length	Propagation Delay	Index of Refraction
	dB	dB	dB	dB	dB	dB	meters	ns	
Cable Type									
OF-300 Multimode 62.5	2.55	1.95					300		1.4719
OF-500 Multimode 62.5	3.25	2.25					500		1.4719
OF-2000 Multimode 62.5	8.50	4.50					2000		1.4719
OF-300 Multimode 50	2.55	1.95					300		1.4725
OF-500 Multimode 50	3.25	2.25					500		1.4725
OF-2000 Multimode 50	8.50	4.50					2000		1.4725

#### ISO11801 Fiber Optic Channel FTA430

	1310 nm Fixed Loss	1550 nm Fixed Loss	1310 nm Loss/km (in dB)	1550 nm Loss/km (in dB)	Adapter Loss (in dB)	Splice Loss (in dB)	Length	Propagation Delay	Index of Refraction
	dB	dB	dB	dB	dB	dB	meters	ns	
Cable Type									
OF-300 Singlemode	1.80	1.80					300		1.4725
OF-500 Singlemode	2.00	2.00					500		1.4725
OF-2000 Singlemode	3.50	3.50					2000		1.4725

## EN50173 Fiber Optic Link FTA410/20

	850 nm Fixed Loss	1300 nm Fixed Loss	850 nm Loss/km (in dB)	1300 nm Loss/km (in dB)	Adapter Loss (in dB)	Splice Loss (in dB)	Length	Propagation Delay	Index of Refraction
	dB	dB	dB	dB	dB	dB	meters	ns	
Cable Type									
Multimode 62.5 µm			3.5	1.0	0.75	0.3	2000		1.4719
Multimode 50 µm			3.5	1.0	0.75	0.3	2000		1.4725

## EN50173 Fiber Optic Link FTA430

	1310 nm Fixed Loss	1550 nm Fixed Loss	1310 nm Loss/km (in dB)	1550 nm Loss/km (in dB)	Adapter Loss (in dB)	Splice Loss (in dB)	Length	Propagation Delay	Index of Refraction
	dB	dB	dB	dB	dB	dB	meters	ns	
Cable Type									
Singlemode			1.0	1.0	0.75	0.3	2000		1.4719

## EN50173 Fiber Optic Channel FTA410/20

	850 nm Fixed Loss	1300 nm Fixed Loss	850 nm Loss/km (in dB)	1300 nm Loss/km (in dB)	Adapter Loss (in dB)	Splice Loss (in dB)	Length	Propagation Delay	Index of Refraction
	dB	dB	dB	dB	dB	dB	meters	ns	
Cable Type									
OF-300 Multimode 62.5	2.55	1.95					300		1.4719
OF-500 Multimode 62.5	3.25	2.25					500		1.4719
OF-2000 Multimode 62.5	8.50	4.50					2000		1.4719
OF-300 Multimode 50	2.55	1.95					300		1.4725
OF-500 Multimode 50	3.25	2.25					500		1.4725
OF-2000 Multimode 50	8.50	4.50					2000		1.4725

## EN50173 Fiber Optic Channel FTA430

	1310 nm Fixed Loss	1550 nm Fixed Loss	1310 nm Loss/km (in dB)	1550 nm Loss/km (in dB)	Adapter Loss (in dB)	Splice Loss (in dB)	Length	Propagation Delay	Index of Refraction
	dB	dB	dB	dB	dB	dB	meters	ns	
Cable Type									
OF-300 Singlemode	1.80	1.80					300		1.4725
OF-500 Singlemode	2.00	2.00					500		1.4725
OF-2000 Singlemode	3.50	3.50					2000		1.4725



## General Fiber Optic FTA410/420

	850 nm Fixed Loss	1300 nm Fixed Loss	1550 nm Fixed Loss	850 nm Loss/km (in dB)	1300 nm Loss/km (in dB)	Adapter Loss (in dB)	Splice Loss (in dB)	Length	Propagation Delay	Index of Refraction
	dB	dB	dB	dB	dB	dB	dB	meters	ns	
Cable Type										
Multimode 62.5 µm	4.5	2.2						1000		1.4719
Multimode 50 µm	4.5	2.2						1000		1.4725
Singlemode FES		3.0	3.0							

## General Fiber Optic FTA430

	1310 nm Fixed Loss	1550 nm Fixed Loss	1310 nm Loss/km (in dB)	1550 nm Loss/km (in dB)	Adapter Loss (in dB)	Splice Loss (in dB)	Length	Propagation Delay	Index of Refraction
	dB	dB	dB	dB	dB	dB	meters	ns	
Cable Type									
Singlemode	5.0	5.0					5000		

## General Fiber Optic FTA440

	850 nm Fixed Loss	1310 nm Fixed Loss	850 nm Loss/km (in dB)	1300 nm Loss/km (in dB)	Adapter Loss (in dB)	Splice Loss (in dB)	Length	Propagation Delay	Index of Refraction
	dB	dB	dB	dB	dB	dB	meters	ns	
Cable Type									
Multimode 62.5 µm	4.5	2.2					1000		1.4719
Multimode 50 µm	4.5	2.2					1000		1.4725

#### Laser Multimode FTA440

	850 nm Fixed Loss	1310 nm Fixed Loss	1310 nm Fixed Loss	1550 nm Fixed Loss	850 nm Loss/km (in dB)	1310 nm Loss/km (in dB)	Adapter Loss (in dB)	Splice Loss (in dB)	Length	Index of Refraction
	dB	dB	dB	dB	dB	dB	dB	dB	meters	
Cable Type										
Multimode 62.5 $\mu$ m MBW = 160					3.5	1.5	0.75	0.3	220	1.4719
Multimode 62.5 μm MBW = 200					3.5	1.5	0.75	0.3	275	1.4719
Multimode 62.5 $\mu$ m MBW = 220					3.5	1.5	0.75	0.3	300	1.4719
Multimode 50 $\mu$ m MBW = 500					3.5	1.5	0.75	0.3	550	1.4725

#### DSP-FTK / DSP-FOM

	850 nm Fixed Loss	1300 nm Fixed Loss	1550 nm Fixed Loss	850 nm Loss/km (in dB)	1300 nm Loss/km (in dB)	Adapter Loss (in dB)	Splice Loss (in dB)	Length	Propagation Delay	Index of Refraction
	dB	dB	dB	dB	dB	dB	dB	meters	ns	
Cable Type										
Multimode 62.5 µm	4.5	3.0								
Multimode 50 µm	4.5	3.0								
Singlemode		3.0	3.0							



### 1000BASE-SX MM - FTA440

	850 nm Fixed Loss	1310 nm Fixed Loss	1310 nm Fixed Loss	1550 nm Fixed Loss	850 nm Loss/km (in dB)	1310 nm Loss/km (in dB)	Adapter Loss (in dB)	Splice Loss (in dB)	Length	Index of Refraction
	dB	dB	dB	dB	dB	dB	dB	dB	meters	
Cable Type										
Multimode 62.5 μm MBW = 160	2.38								220	1.4719
Multimode 62.5 $\mu$ m MBW = 200	2.60								275	1.4719
Multimode 50 μm MBW = 400	3.37								500	1.4725
Multimode 50 μm MBW = 500	3.56								550	1.4725

#### 1000BASE-LX MM - FTA440

	850 nm Fixed Loss	1310 nm Fixed Loss	850 nm Loss/km (in dB)	1310 nm Loss/km (in dB)	Adapter Loss (in dB)	Splice Loss (in dB)	Length	Propagation Delay	Index of Refraction
	dB	dB	dB	dB	dB	dB	meters	ns	
Cable Type									
Multimode 62.5 μm MBW = 500		2.35					550		1.4719
Multimode 50 $\mu$ m MBW = 400		2.35					550		1.4725
Multimode 50 $\mu$ m MBW = 500		2.35					550		1.4725

## Gigabit over MM - FTA440

	850 nm Fixed Loss	1310 nm Fixed Loss	850 nm Loss/km (in dB)	1310 nm Loss/km (in dB)	Adapter Loss (in dB)	Splice Loss (in dB)	Length	Propagation Delay	Index of Refraction
	dB	dB	dB	dB	dB	dB	meters	ns	
Cable Type									
Multimode 62.5 μm MBW = 160	2.38	NA					220		1.4719
Multimode 62.5 μm MBW = 200	2.60	NA					275		1.4719
Multimode 62.5 μm MBW = 500	NA	2.35					500		1.4719
Multimode 50 μm MBW = 400	3.37	2.35					500*		1.4725
Multimode 50 μm MBW = 500	3.56	2.35					550		1.4725

\* Note: The length is set at the lower, 1000Base-SX limit (500 meters), as this is a combined 1000Base-LX (550 meters) and 1000Base-SX (500 meters) test for the modal bandwidth = 400. If the correct test limit is needed run the LX and SX tests individually.

#### 1000BASE-LX SM - FTA430

	1310 nm Fixed Loss	1550 nm Fixed Loss	1310 nm Loss/km (in dB)	1550 nm Loss/km (in dB)	Adapter Loss (in dB)	Splice Loss (in dB)	Length	Propagation Delay	Index of Refraction
	dB	dB	dB	dB	dB	dB	meters	ns	
Cable Type									
Singlemode	4.7						5000		1.4725



## 1000BASE-SX - FTA410/420

	850 nm Fixed Loss	1300 nm Fixed Loss	850 nm Loss/km (in dB)	1300 nm Loss/km (in dB)	Adapter Loss (in dB)	Splice Loss (in dB)	Length	Propagation Delay	Index of Refraction
	dB	dB	dB	dB	dB	dB	meters	ns	
Cable Type									
Multimode 62.5 µm	2.38						220		1.4719
Multimode 50 µm	3.56						550		1.4725

#### 1000BASE-LX - FTA410/420

	850 nm Fixed Loss	1300 nm Fixed Loss	850 nm Loss/km (in dB)	1300 nm Loss/km (in dB)	Adapter Loss (in dB)	Splice Loss (in dB)	Length	Propagation Delay	Index of Refraction
	dB	dB	dB	dB	dB	dB	meters	ns	
Cable Type									
Multimode 62.5 µm		2.35					550		1.4719
Multimode 50 μm		2.35					550		1.4725
Singlemode FES		4.57							

## 100BASE-FX - FTA410/420

	850 nm Fixed Loss	1300 nm Fixed Loss	850 nm Loss/km (in dB)	1300 nm Loss/km (in dB)	Adapter Loss (in dB)	Splice Loss (in dB)	Length	Propagation Delay	Index of Refraction
	dB	dB	dB	dB	dB	dB	meters	ns	
Cable Type									
Multimode 62.5 µm		11.0					2000		1.4719
Multimode 50 µm		11.0					2000		1.4725

#### 10BASE-FL - FTA410/420

	850 nm Fixed Loss	1300 nm Fixed Loss	850 nm Loss/km (in dB)	1300 nm Loss/km (in dB)	Adapter Loss (in dB)	Splice Loss (in dB)	Length	Propagation Delay	Index of Refraction
	dB	dB	dB	dB	dB	dB	meters	ns	
Cable Type									
Multimode 62.5 µm	12.5						2000		1.4719
Multimode 50 µm	12.5						2000		1.4725

## 10/100BASE-SX FTA410/420

	850 nm Fixed Loss	1300 nm Fixed Loss	850 nm Loss/km (in dB)	1300 nm Loss/km (in dB)	Adapter Loss (in dB)	Splice Loss (in dB)	Length	Propagation Delay	Index of Refraction
	dB	dB	dB	dB	dB	dB	meters	ns	
Cable Type									
Multimode 62.5 µm	4.0						300		1.4719
Multimode 50 µm	4.0						300		1.4725

## FDDI - FTA410/420

	850 nm Fixed Loss	1300 nm Fixed Loss	1550 nm Fixed Loss	850 nm Loss/km (in dB)	1300 nm Loss/km (in dB)	Adapter Loss (in dB)	Splice Loss (in dB)	Length	Propagation Delay	Index of Refraction
	dB	dB	dB	dB	dB	dB	dB	meters	ns	
Cable Type										
Multimode 62.5 µm		11.0						2000		1.4719
Multimode 50 µm		11.0						2000		1.4725
Singlemode FES		10.0	10.0							



## Token Ring 4 - FTA410/420

	850 nm Fixed Loss	1300 nm Fixed Loss	850 nm Loss/km (in dB)	1300 nm Loss/km (in dB)	Adapter Loss (in dB)	Splice Loss (in dB)	Length	Propagation Delay	Index of Refraction
	dB	dB	dB	dB	dB	dB	meters	ns	
Cable Type									
Multimode 62.5 µm	13.0						2000		1.4719
Multimode 50 µm	13.0						2000		1.4725

#### ATM52 Fiber FTA410/420

	850 nm Fixed Loss	1300 nm Fixed Loss	1550 nm Fixed Loss	850 nm Loss/km (in dB)	1300 nm Loss/km (in dB)	Adapter Loss (in dB)	Splice Loss (in dB)	Length	Propagation Delay	Index of Refraction
	dB	dB	dB	dB	dB	dB	dB	meters	ns	
Cable Type										
Multimode 62.5 µm		10.0						3000		1.4719
Multimode 50 µm		10.0						3000		1.4725
Singlemode FES		7.0	7.0							

## ATM155 Fiber FTA410/420

	850 nm Fixed Loss	1300 nm Fixed Loss	1550 nm Fixed Loss	850 nm Loss/km (in dB)	1300 nm Loss/km (in dB)	Adapter Loss (in dB)	Splice Loss (in dB)	Length	Propagation Delay	Index of Refraction
	dB	dB	dB	dB	dB	dB	dB	meters	ns	
Cable Type										
Multimode 62.5 µm		10.0						2000		1.4719
Multimode 50 μm		10.0						2000		1.4725
Singlemode FES		7.0	7.0							

#### ATM155SWL Fiber FTA410/420

	850 nm Fixed Loss	1300 nm Fixed Loss	850 nm Loss/km (in dB)	1300 nm Loss/km (in dB)	Adapter Loss (in dB)	Splice Loss (in dB)	Length	Propagation Delay	Index of Refraction
	dB	dB	dB	dB	dB	dB	meters	ns	
Cable Type									
Multimode 62.5 µm	7.2						1000		1.4719
Multimode 50 µm	7.2						1000		1.4725

#### ATM622 Fiber FTA410/420

	850 nm Fixed Loss	1300 nm Fixed Loss	1550 nm Fixed Loss	850 nm Loss/km (in dB)	1300 nm Loss/km (in dB)	Adapter Loss (in dB)	Splice Loss (in dB)	Length	Propagation Delay	Index of Refraction
	dB	dB	dB	dB	dB	dB	dB	meters	ns	
Cable Type										
Multimode 62.5 µm		6.0						500		1.4719
Multimode 50 µm		6.0						500		1.4725
Singlemode FES		7.0	7.0							

## ATM622SWL Fiber FTA410/420

	850 nm Fixed Loss	1300 nm Fixed Loss	850 nm Loss/km (in dB)	1300 nm Loss/km (in dB)	Adapter Loss (in dB)	Splice Loss (in dB)	Length	Propagation Delay	Index of Refraction
	dB	dB	dB	dB	dB	dB	meters	ns	
Cable Type									
Multimode 62.5 µm	4.0						300		1.4719
Multimode 50 µm	4.0						300		1.4725



## Fiber Channel 133 FTA410/420

	850 nm Fixed Loss	1300 nm Fixed Loss	850 nm Loss/km (in dB)	1300 nm Loss/km (in dB)	Adapter Loss (in dB)	Splice Loss (in dB)	Length	Propagation Delay	Index of Refraction
	dB	dB	dB	dB	dB	dB	meters	ns	
Cable Type									
Multimode 62.5 µm		6.0					1500		1.4719
Multimode 50 µm		6.0					1500		1.4725

#### Fiber Channel 266 FTA410/420

	850 nm Fixed Loss	1300 nm Fixed Loss	1550 nm Fixed Loss	850 nm Loss/km (in dB)	1300 nm Loss/km (in dB)	Adapter Loss (in dB)	Splice Loss (in dB)	Length	Propagation Delay	Index of Refraction
	dB	dB	dB	dB	dB	dB	dB	meters	ns	
Cable Type										
Multimode 62.5 µm		6.0						1500		1.4719
Multimode 50 µm		5.5						1500		1.4725
Singlemode FES		6.0	6.0							

# Fiber Channel 266SWL FTA410/420

	850 nm Fixed Loss	1300 nm Fixed Loss	850 nm Loss/km (in dB)	1300 nm Loss/km (in dB)	Adapter Loss (in dB)	Splice Loss (in dB)	Length	Propagation Delay	Index of Refraction
	dB	dB	dB	dB	dB	dB	meters	ns	
Cable Type									
Multimode 62.5 µm	12.0						700		1.4719
Multimode 50 µm	12.0						2000		1.4725

#### 10GBASE-S FTA410/420/440

	850 nm Fixed Loss	1300 nm Fixed Loss	850 nm Loss/km (in dB)	1300 nm Loss/km (in dB)	Adapter Loss (in dB)	Splice Loss (in dB)	Length	Propagation Delay	Index of Refraction
	dB	dB	dB	dB	dB	dB	meters	ns	
Cable Type									
Multimode 62.5 μm MBW = 160	2.6						26		1.4719
Multimode 62.5 μm MBW = 200	2.5						33		1.4719
Multimode 50 $\mu$ m MBW = 400	2.2						66		1.4725
Multimode 50 μm MBW = 500	2.3						82		1.4725
Multimode 50 μm MBW =2000	2.6						300		1.4725



## 10GBASE-LX4 FTA410/420/440

	850 nm Fixed Loss	1300 nm Fixed Loss	850 nm Loss/km (in dB)	1300 nm Loss/km (in dB)	Adapter Loss (in dB)	Splice Loss (in dB)	Length	Propagation Delay	Index of Refraction
	dB	dB	dB	dB	dB	dB	meters	ns	-
Cable Type									
Multimode 62.5 μm MBW = 500		2.5					300		1.4719
Multimode 50 μm MBW = 400		2.0					240		1.4725
Multimode 50 μm MBW = 500		2.0					300		1.4725
Multimode 50 μm MBW =2000		2.0					300		1.4725

#### 10GBASE-LX4 SM - FTA430

	1310nm	1550nm	1310 nm	1550 nm	Adapter	Splice	Length	Propagation	Index of
	Fixed	Fixed	Loss/km	Loss/km	Loss	Loss		Delay	Refraction
	Loss	Loss	(in dB)	(in dB)	(in dB)	(in dB)			
	dB	dB	dB	dB	dB	dB	meters	ns	
Cable Type									
Singlemode 9 µm	6.3						5000*		1.4725

#### 10GBASE-L SM - FTA430

	1310nm	1550nm	1310 nm	1550 nm	Adapter	Splice	Length	Propagation	Index of
	Fixed	Fixed	Loss/km	Loss/km	Loss	Loss		Delay	Refraction
	Loss	Loss	(in dB)	(in dB)	(in dB)	(in dB)			
	dB	dB	dB	dB	dB	dB	meters	ns	
Cable Type									
Singlemode 9 µm	6.2						5000*		1.4725

## 10GBASE-E SM - FTA430

	1310nm Fixed	1550nm Fixed	1310 nm Loss/km	1550 nm Loss/km	Adapter Loss	Splice Loss	Length	Propagation Delay	Index of Refraction
	Loss	Loss	(in dB)	(in dB)	(in dB)	(in dB)			
	dB	dB	dB	dB	dB	dB	meters	ns	
Cable Type									
Singlemode 9 µm		11.4					5000*		1.4725

\*Standard permits 10,000 meters.