



Setting the Standards

Fixed Fiber Optic Attenuator



Description

Oxin fixed fiber optic attenuators are built with metal-ion doped optical fiber and are designed to provide consistent attenuation levels as well as maintaining polarization characteristics. Typical application for a fixed fiber optic attenuator is to reduce the amount of optical power by a specific amount as to not saturate a receiver which can limit a system's performance. They also can be used to test the linearity and dynamic range of photo sensors and photo detectors in test and measurement applications.

Features and Benefits

1. Low back reflection, insertion loss
2. Low polarization dependent loss (PDL)
3. Environmentally stable
4. Contaminant and scratch free ferrule
5. Multimode attenuators available upon request
6. Available attenuation from 1 dB to 30 dB
7. %100 tested in factory
8. Manufactured with metal-ion doped optical fiber

Applications

- Receiver padding
- CATV, LAN, telecommunications
- Test and instrument
- Optical power equalization
- WDM and DWDM systems channel balancing
- Optical transmission systems

Certification and Compliance

GR-326-CORE	Generic Requirements for Single Mode Optical Connectors and Jumper Assemblies
GR-910-CORE	Generic Requirements for Fiber Optic Attenuators
GR-63-CORE	Network Equipment – Building System Generic Requirements: Physical Protection
ASTM B117	Standard Practice for Operating Salt Spray (Fog) Apparatus
TIA-604 series	Fiber Optic Connector Intermateability Standard
TIA-455 series	Standard Test Procedure for Fiber Optic Components
IEC 60874-1	Connectors for Optical Fibers and Cables, Generic Standard
IEC 61300 series	Fiber Optic Interconnecting Devices and Passive Components, Basic Test and Measurement Procedures
UL 94	Tests for Flammability of Plastic Material for Parts in Devices and Appliances
RoHS	Directive on Restriction of Hazardous Substances

Fixed Fiber Optic Attenuator



SC female to SC female
UPC single mode
FAT-B1SC2A-XX



LC female to LC female
UPC single mode
FAT-B1LC2A-XX



FC female to FC female
UPC single mode
FAT-B1FC2A-XX



SC female to SC female
APC single mode
FAT-B1SC1A-XX



LC female to LC female
APC single mode
FAT-B1LC1A-XX



FC female to FC female
APC single mode
FAT-B1FC1A-XX



SC male to SC female
UPC single mode
FAT-A1SC2A-XX



LC male to LC female
UPC single mode
FAT-A1LC2A-XX



FC male to FC female
UPC single mode
FAT-A1FC2A-XX



SC male to SC female
APC single mode
FAT-A1SC1A-XX



LC male to LC female
APC single mode
FAT-A1LC1A-XX



FC male to FC female
APC single mode
FAT-A1FC1A-XX

Fixed Fiber Optic Attenuator

Fiber Optic Attenuator
Part Number Builder

FAT - A B CC D E - FF

Type	Fiber type	Interface type	Interface Polish	Wavelength	Attenuation	
A	1	LC	1	A	01	02
Optical Pad attenuator (male to female)	Single mode	LC	APC	Dual 1550/1310 nm (Single mode)	1 dB	2 dB
B	2	SC	2	B	03	04
Bulkhead attenuator (female to female)	50/125µm Multimode	SC	UPC	1300 nm (Multimode)	3 dB	4 dB
	3	ST	3	C	05	06
	62.5/125µm Multimode	ST	PC (multimode)	850 nm (Multimode)	5 dB	6 dB
		FC			07	08
		FC			7 dB	8 dB
					09	10
					9 dB	10 dB
					15	20
					15 dB	20 dB
					25	30
					25 dB	30 dB

Fixed Fiber Optic Attenuator



Ordering Information	Description	Part Number
	Fixed Fiber Optic Attenuator	OXIN-FAT-XXXXXX-XX
Packaging	Description	
	Clear poly bag, 1unit per bag	
Optical Performance	Parameter	Value
	Operating band pass	1250 nm ~ 1625 nm
	Center wavelength	1310 nm and 1550 nm
	Attenuation tolerance	1 ~ 10 dB : ± 0.5 dB 11 ~ 15 dB : ± 5 % of the nominal value
	Return loss UPC	≤ -55 dB
	Return loss APC	≤ -65 dB
	PDL	≤ 0.1 dB
Physical Characteristics	Parameter	Value
	Fiber material	Metal-ion doped optical fiber
	Plastic material	UL 94V-0 ABS high-impact thermoplastic
Mechanical Characteristics	Parameter	Value
	Operating temperature	-40 ~ +75°C
	Storage temperature	-40 ~ +75°C



Setting the Standards

Oxin Group S.A.

Head-office: 5, bd du General Martial Valin,
75736 Paris Cedex 13 - France

Web: www.OxinGroup.net

E-mail: info@oxingroup.net

OXIN-FAT Data Sheet
VER 2.2EN 2017-08-09