

## Passive Optical Networks

### Fibrain Adapter Attenuators



#### INTRODUCTION:

**Fibrain fiber optic adapter attenuators** AOA are characterized by high stability and low deviation from nominal attenuation. Being based on doped attenuating fiber the attenuators feature low ripple in the attenuation spectrum across their range of operation. These passive elements are used for example to limit the transmitted optical power so it does not exceed the receiver damage threshold or to equalize channel powers in DWDM systems. A specific application of zero attenuators is to buffer valuable connectors for example in measuring equipment, where any physical damage or scratching would distort measurement accuracy and would require expensive repair.

#### APPLICATIONS:

- Telecommunications,
- CATV, monitoring,
- FTTX, PON,
- WDM systems,
- Optical amplifiers,
- Measuring equipment.

#### ADVANTAGES AND FEATURES:

- Stability of parameters,
- Broadband attenuation characteristics,
- Strong casing made of high quality materials,
- Available in various versions.

#### TECHNICAL SPECIFICATIONS:

Parameter	Value	
Type	Singlemode 09/125	Multimode
Return loss	SM PC ≥ 55 dB SM APC ≥ 65 dB	
Wavelength	1270-1610 nm	850 nm 1300 nm 850/1300 nm
Attenuation tolerance	0 - 9 dB: ± 0.5 dB 10 - 30 dB: ± 10% (in dB)	0 - 5 dB ± 0.5 dB 6 - 30 dB: ± 10% (in dB)
Mating durability	<0.5 dB for 1000 cycles	
Temp. operating range	-40 to + 85 °C	
Max. power	500 mW	

#### ORDERING INFORMATION:

Series	Quality	Connector type	Attenuation	Type	Wavelength	Casing
AOA	G0/G1	ST – ST/UPC	0X – X attn. value	SM – singlemode 09/125	85 – 850 nm	A – metal
		SC – SC/UPC	00 dB	M5 – multimode 50/125	30 – 1300 nm	B – plastic
		SCA – SC/APC	01 dB	M6 – multimode 62.5/125	83 – 850/1300 nm	
		FC – FC/UPC	02 dB		AB – 1270-1610 nm (all band)	
		FCA – FC/APC	... dB			
		LC – LC/UPC	10 dB			
		LCA – LC/APC	15 dB			
		E2 – E2000/UPC	20 dB			
		E2A – E2000/APC	25 dB			

Ordering example: AOA-G1-SC-20-SM-AB-A – Fibrain adapter attenuators, connector type SC, attenuation 20 dB, single mode, 1270-1610 nm, metal casing.

#### Important notice

Buyer and/or user of this product has to make sure before using this product that it is suitable for the intended use. All questions of liability relating to this product are subject – in accordance with the prevailing – to the Terms of Sale of the selling Fibrain subsidiary.