

# Plug-Type (Male Female) Attenuators CAA series - Singlemode

## **Description:**

The plug-type singlemode attenuators are used directly on the ends of fiber optic jumpers prior to installation in adapters. These attenuators provide a fixed precise level of attenuation and feature excellent return loss. Low wavelength dependency determines them for using in WDM and DWDM transmission systems. The CAA series attenuators are available with UPC or APC polish for SC, FC, DIN and LC connector types and UPC for ST and MU connectors.



#### **Features:**

- Connector/adapter plug type
- Precise attenuation, High power endurance
- Wide attenuation range, 1 dB step
- Return loss: > UPC 50 dB, > APC 60 dB
- Low ripple broadband design for operation at wavelength 1250 to 1650 nm

## **Specifications:**

Attenuation range	SC, FC, ST, MU: 1 - 20 dB, step 1 dB DIN: 5, 10, 15, 20 dB	
Operational wavelength	1250 to 1650 nm	
Stability1 attenuation range 1 - 4 dB attenuation range 5 - 9 dB attenuation range ≥10 dB	Standard ±0.5 dB ±0.8 dB ±10%	Premium ±0.5 dB ±0.5 dB ±0.5 dB
Return loss UPC polishing APC polishing	Standard ≥ 50 dB ≥ 60 dB	Premium ≥ 55 dB ≥ 65 dB
Side load test (EN 61300-2-24)	< 0.2 dB/1 N (OPTOKON adapter)	
Power durability	250 mW	
Operating temperature	-40 to 80 °C	
Storage temperature	-40 to 80 °C	

Note: 1) -40 to +80°C over 10 cycles

### **Dimensions:**

Туре	Length	Width	Note
FC	28.5 mm	10.0 mm	
sc	32.0 mm	7.5 mm	
ST	35.5 mm	10.0 mm	
DIN	56.0 mm	6.5 mm	
LC-(S)⁴	28.5 mm	6.25 mm	Single latch
LC-K	25.0 mm	6.9 mm	Double latch
MU	30.0 mm	6.1x8.5 mm	



Note: 4) CAA-XX-ULC compatible with all types of LC adapters according to the: ADP\_02-01\_EN-LC\_adapters CAA-XX-ULC-S suitable for both, adapters and transceivers (SFF, SFP, XFP, SFP+, ...) - available on request

## **Samples of Attenuators:**



## **Application:**

- Fiber optic systems
- Receiver padding for optical receiver protection
- Optical power equalization
- Linearity and dynamic range testing in laboratory equipment

## **Ordering code:**

CAA - XX - XXX

**(P)** Premium class (optional)

Attenuation	Connector/A	Connector/Adaptor Type		
01 - 20 dB	UPC	FC/UPC		
	NPC	FC/APC, 2.05 standard		
	NPC215	FC/APC, 2.15 standard (on demand)		
	USL	ST/UPC		
	USC	SC/UPC		
	NSC	SC/APC		
	ULC2	LC/UPC		
	NLC-K3	LC/APC		
	UDIN	DIN/UPC		
	UMU	MU/UPC		