

## Single-Mode Fiber Optic In-Line Attenuators

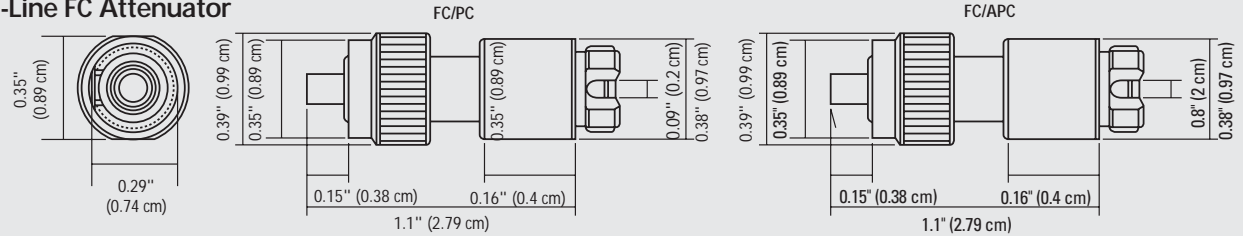


**Eliminate fiber optic signal distortion.**

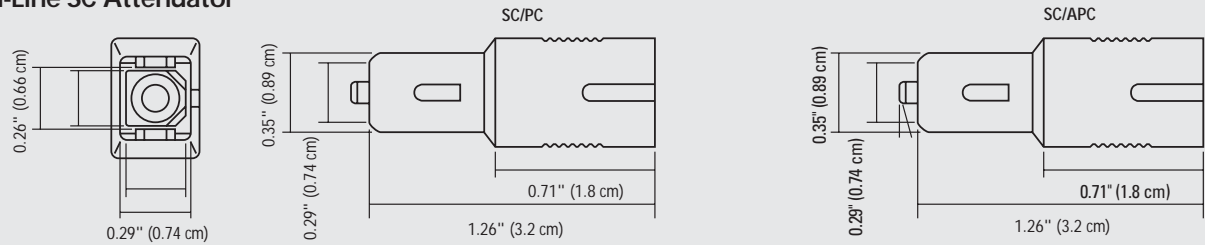
## FEATURES

- Low back reflection.
- Wide wavelength range.
- High-precision doping technology.
- Protect receiver from being overdriven.
- Let you evaluate receiver sensitivity as a function of optical power.
- Precision zirconia alignment sleeve.

### In-Line FC Attenuator



### In-Line SC Attenuator



## OVERVIEW

Use Single-Mode Fiber Optic In-Line Attenuators to accurately match optical power levels to cut down on fiber optic transmission problems.

You can also use the attenuators to verify the operation and configuration of OTDR and optical source/detector test sets.

Optical attenuators have many uses in CATV, LAN, and telecommunications LAN applications.

When a fiber device is very close to another one, the signal is extremely strong. The light signal doesn't have time to attenuate or lose strength as it travels down the fiber, causing light to be reflected back along the cable. This is called receive saturation. It causes signal distortion and dropped data, and can even damage delicate components.

You can solve this problem by using Single-Mode Fiber Optic In-Line Attenuators. They feature a guaranteed return-loss of -55 dB for PC-type contacts and -60 dB for APC-type contacts. To achieve fixed return loss, the attenuators use a doped single-mode fiber compatible with 1310- or 1550-nm wavelengths.

Single-Mode Fiber Optic In-Line Attenuators are available with a wide variety of connectors with attenuation levels ranging from 2 to 20 dB.

All attenuators feature a precision zirconia alignment sleeve in a compact, rugged housing. They install in-line between the fiber optic device and the end of the fiber optic cable.

## TECH SPECS

**Attenuation** — 2, 5, 10, 15, or 20 dB

**Attenuation Tolerances** — FC and SC models: 2 or 5 dB:  $\pm 1.0$  dB; 10 dB:  $\pm 1.5$  dB;

LC models: 2 or 5 dB:  $\pm 1.0$  dB, 10 or 15 dB:  $\pm 1.5$  dB, 20 dB:  $\pm 2.0$  dB

**Cable Type** — Single-mode

**Return Loss** — PC contacts: -55 dB typical; APC contacts: -60 dB typical

**Wavelength** — 1310/1500 nm

**Connectors** — FC, SC, or LC with either PC or APC contacts

Item	Code
<b>Fiber Optic In-Line Attenuators, Single-Mode, Male/Female</b>	
FC/PC, 2-dB	FCPC02-0
FC/PC, 5-dB	FCPC05-2
FC/PC, 10-dB	FCPC10-16
SC/PC, 2-dB	SCPC02-2
SC/PC, 5-dB	SCPC05
SC/PC, 10-dB	SCPC10
FC/APC, 2-dB	FCAPC02
FC/APC, 5-dB	FCAPC05
FC/APC, 10-dB	FCAPC10
SC/APC, 2-dB	SCAPC02
SC/APC, 5-dB	SCAPC05
SC/APC, 10-dB	SCAPC10
LC/PC, 2-dB	LCPC02
LC/PC, 5-dB	LCPC05
LC/PC, 10-dB	LCPC10
LC/PC, 15-dB	LCPC15
LC/PC, 20-dB	LCPC20
LC/APC, 2-dB	LCAPC02
LC/APC, 5-dB	LCAPC05
LC/APC, 10-dB	LCAPC10
LC/APC, 15-dB	LCAPC15
LC/APC, 20-dB	LCAPC20