

In-Line ATTENUATORS

Single Mode, Fixed



Standard Packages

IPITEK® has been designing and building photonic component solutions for highly demanding applications for over 20 years. Our engineering staff is the most experienced photonics team in the industry and our operation in Carlsbad, California can assist you in developing an attenuator solution that can maximize the performance of any application. Combine this with our high volume, low cost manufacturing capabilities and you have an ideal partner to help your programs and business succeed at any level.

IPITEK in-line attenuators are manufactured using fused biconical tapered (FBT) technology for superior performance and reliability. Built to the highest standards, IPITEK attenuators are 100% tested across the entire operational passband, not just at convenient center points. They are bi-directional with outstanding directivity and very low excess loss. IPITEK attenuators are field-proven and time-tested. Available in various packages, IPITEK attenuators are designed to facilitate a wide range of installation parameters and environmental conditions.

IPITEK attenuators are available in 1 dB standard increments, enabling you to balance your signal

PRODUCT FEATURES

- 1310 and 1550 nm Wavelengths
- Low Return Loss
- Environmentally Stable
- Bi-Directional
- Outstanding Reliability

levels with greater precision. For projects requiring fast deliveries, IPITEK maintains available inventory of standard items.

Superior performance and quality, custom solutions, and reliable deliveries at attractive prices -- IPITEK Fixed In-Line ATTENUATORS provide the best value for your project dollar.

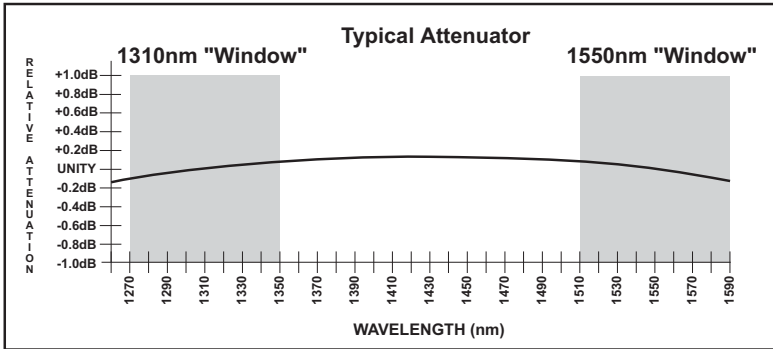


Various Packaging Options

SPECIFICATIONS

In-Line Attenuators

ATTENUATION vs WAVELENGTH



Fiber Type: Single mode Corning SMF 28

Pigtail Length: 1.0m (standard 250µm)
0.5m (900µm loose tube)
0.5m (3mm jacket)

Port Configuration: 1x1

ATTENUATOR ACCURACY

Attenuation	Accuracy (Pigtail)	Attenuation	Accuracy (Pigtail)
1 dB	±0.3 dB	10 dB	±1.0 dB
2 dB	±0.3 dB	11 dB	±1.0 dB
3 dB	±0.5 dB	12 dB	±1.0 dB
4 dB	±0.5 dB	13 dB	±1.0 dB
5 dB	±0.5 dB	14 dB	±1.0 dB
6 dB	±0.5 dB	15 dB	±1.0 dB
7 dB	±0.5 dB	20 dB	±1.5 dB
8 dB	±1.0 dB	25 dB	±1.5 dB
9 dB	±1.0 dB	30 dB	±1.5 dB

*For connectorized attenuators add 0.1 to 0.4 dB insertion loss per connectorized end.

OPTICAL/MECHANICAL PARAMETERS

Grade	Termination	Wavelength	Passband	Return Loss	Polarization Stability	Thermal Stability	Operational Temp.
T	Bare Fiber	1310nm, 1550nm, or 1310 and 1550nm	±40 nm	≤ -55 dB	≤ 0.2 dB over all SOP	±0.1dB over temperature range	-40°C to 85°C

ORDERING INFORMATION

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Wavelength
1 = 1310 nm
2 = 1550 nm
3 = 1310 nm and 1550 nm

Jacket or Buffer Type
S = Standard 250 µm
L = 900 µm loose tube
3 = 3mm kevlar

Attenuation
01 = 1 dB
02 = 2 dB
03 thru 14 (1 dB increments)
15 = 15 dB
20 = 20 dB
25 = 25 dB
30 = 30 dB
*Custom available by request

Package
1 = 60 mm tube
2 = 62 mm tube
R = Ruggedized
C = Splice tray cassette
S = Standard Module
A = Value-added module
L = LGX module
N = 19" 1U high rack mount
T = 23" 1U high rack mount

Inputs/Outputs
P = Pigtails
B = Bulkhead Adapters

Connector
S = SC
F = FC
T = ST
L = LC
E = E-2000

Polish
1 = UPC
2 = SPC
3 = APC
4 = PC

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