



NEX1 Technologies Co., Ltd

## Technical Characteristics of Armor Optical Fiber Cable for Patch Cords

### OPTICAL CHARACTERISTICS:

Attenuation @ 1310 nm / 1550 nm	$\leq 0.34 / 0.22$	dB/km
Fiber cutoff Wavelength	1200 ~ 1300	nm
Cable cutoff Wavelength	$\leq 1260$	nm
Mode Field Diameter	$9.2 \pm 0.5$	um
Dispersion @ 1290 ~ 1330 nm	$\leq 2.85$	ps / (nm*km)
Dispersion @ 1550 nm	$\leq 18$	ps / (nm*km)
Zero Dispersion Wavelength	1300 ~ 1322	nm
Zero Dispersion Slope	$\leq 0.093$	ps / (nm <sup>2</sup> *km)
Polarization Mode Dispersion	$\leq 0.2$	ps / km <sup>1/2</sup>

### BACKSCATTER CHARACTERISTICS:

Attenuation Variation vs. Wavelength 1285 ~ 1330 nm	$\leq 0.05$	dB/km
Attenuation Uniformity (OTDR trace, dB) Point or Step defect	$\leq 0.05$	dB
Attenuation Directional Uniformity	$\leq 0.05$	dB/km



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## PHYSICS CHARACTERISTICS:

Cladding Diameter	$125 \pm 1$	um
Cladding Non-circularity	$\leq 1.0$	%
Mode Field Concentricity	$\leq 0.8$	um
Coating Diameter	$245 \pm 10$	um
Cladding / coating Concentricity Error	$\leq 6$	um
Fiber Curl	$\leq 4$	m
Proof Test	$\geq 100$	kpsi
Bend Inducted Attenuation at 1310 nm 100 Turn Round a Mandrel of 60mm Diameter	$\leq 0.05$	dB

## ENVIRONMENTAL CHARACTERISTICS:

Temperature Dependence at 1310nm and 1550nm Inducted Attenuation –  
60°C to 80°C  $\leq 0.05$  dB/km

Damp Heat Dependence at 1310nm and 1550nm Induced Attenuation 85°C、  
85%R.H. 30 days  $\leq 0.05$  dB/km

Water-soak Dependence at 1310nm and 1550nm Induced Attenuation at 20°C  
for 30 days  $\leq 0.05$  dB/km