



WAVEOPTICS

G.657.B3

Optical Fiber Specifications

**TECHNICAL
INFORMATION**



WAVEOPTICS FIBER (N) G.657.B3

Optical fiber specifications before cabling

CHARACTERISTICS		WAVEOPTICS G.657.B3
Fiber Code		N
Attenuation	1310 nm	≤ 0.40 dB/km
	1383 nm	≤ 0.40 dB/km
	1490 nm	≤ 0.35 dB/km
	1550 nm	≤ 0.30 dB/km
Attenuation vs Wavelength Max. difference of α	1285-1330 nm	≤ 0.05 dB/km
	1525-1575 nm	≤ 0.05 dB/km
Mode field diameter	1310 nm	8.2 - 9.0 μ m
Group refractive index	1310 nm	1.466
PMD link design value		≤ 0.15 ps/ \sqrt km
Max. PMD per fiber		≤ 0.15 ps/ \sqrt km
Point discontinuities	1310 nm	≤ 0.05 dB/km
	1550 nm	≤ 0.05 dB/km
Cutoff wavelength		≤ 1260 nm





Physical Characteristics

CHARACTERISTICS	WAVEOPTICS G.657.B3
Cladding diameter	$125.0 \pm 0.7 \text{ um}$
Core-cladding concentricity error	$\leq 0.5 \text{ um}$
Cladding non-circularity	$\leq 1.0 \%$
Coating diameter	$245.0 \pm 7 \text{ um}$
Coating-cladding concentricity error	$\leq 12 \text{ um}$

Environmental Characteristics

CHARACTERISTICS	CONDITIONS	WAVEOPTICS G.657.B3
Temperature cycling	-60°C to $+85^{\circ}\text{C}$	$\leq 0.05 \text{ dB/km}$
Water immersion	$23^{\circ}\text{C} \pm 2^{\circ}\text{C}$	$\leq 0.05 \text{ dB/km}$
High temperature aging	$85^{\circ}\text{C} \pm 2^{\circ}\text{C}$	$\leq 0.05 \text{ dB/km}$

