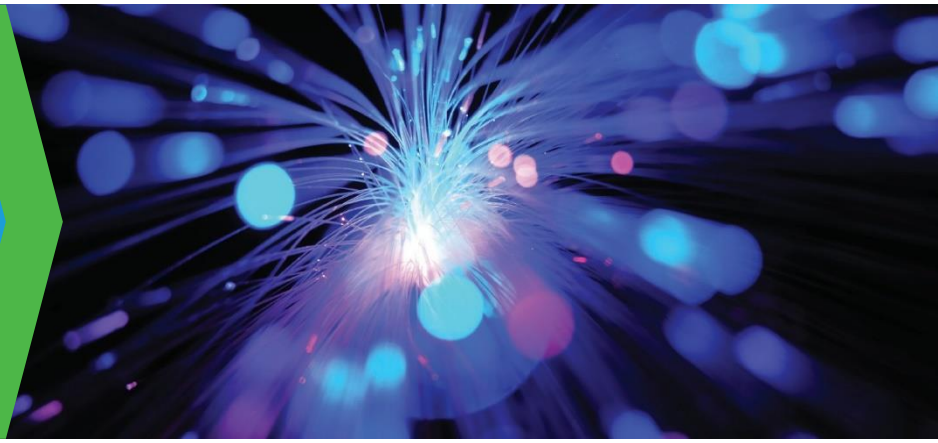
Product Datasheet

Sterlite Tech

ITU-T G.652.D with features of G.657. A1 Fiber - Sterlite® OH LITE® NOVA™ Single Mode Optical Fiber



Product Description

Sterlite® OH-LITE® NOVA™ is Single Mode Optical Fiber with very low bend sensitivity and tighter attenuation which meets and exceeds ITU-T recommendations G.652.D and G.657.A1.

Product Application

Sterlite® OH-LITE® NOVA™ is ideal for use in traditional long distance transmission and Fiber to the Home (FTTH) applications in complete spectrum for transmission.

Product Benefits

Sterlite® OH-LITE® NOVA™ has special characteristics of low bend sensitivity across the O,E,S,C&L bands (1260-1625 nm) in addition to zero water peak in wave length range 1383±3 nm.

Product specifications

Attenuation	≤ 0.33 dB/km at 1310 nm
	≤ 0.31 dB/km at 1383 nm#
	≤ 0.19 dB/km at 1550 nm
	≤ 0.21 dB/km at 1625 nm
Mode field diameter	9.1 ± 0.4 µm at 1310 nm
	10.3 ± 0.5 µm at 1550 nm
Cable cutoff wavelength	≤ 1260 nm
Zero dispersion wavelength	1300 nm to 1324 nm
Zero dispersion slope	≤ 0.092 ps/nm^2.km
Dispersion at 1550nm	≤ 17.5 ps/nm.km
PMD Individual Fiber*	≤ 0.1 ps/√km
PMD LDV	≤ 0.06 ps/√km
Cladding diameter	125.0 ± 0.7 µm
Core-clad concentricity error	≤ 0.5 µm
Cladding non-circularity	≤ 0.7%
Coating diameter(uncolored)	242 ± 5 µm
Coating-cladding concentricity error	≤ 12 µm

* Individual PMD values may change when cabled
# After hydrogen aging according to IEC-60793-2-50 regarding the B1.3 fiber category

Mechanical Characteristics

Proof Test Levels	≥ 100 kpsi (0.7GN/m^2). This is equivalent to1% strain
Coating strip force (Force to mechanically strip the dual coating)	≥ 1.3 N (0.3lbf) and ≤ 5.0 N (1.1lbf)
Fiber curl	≥ 4m

Macro bend loss: The maximum attenuation with bending does not exceed the specified values with the following deployment conditions

Deployment condition	Wavelength	Induced attenuation
1turn,16 mm radius	1550 nm	≤ 0.03 dB
1turn,10 mm radius	1550 nm	≤ 0.5 dB
	1625 nm	≤ 1.5 dB
10 turns,15 mm radius	1550 nm	≤ 0.1 dB
	1625 nm	≤ 0.3 dB

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Environmental characteristics

Temperature dependence Induced attenuation, -60°C to +85°C at 1310,1550,1625 nm	≤ 0.05 dB/km
Temperature humidity cycling Induced attenuation, -10°C to +85°C and 95% relative humidity at 1310,1550,1625 nm	≤ 0.05 dB/km
High temperature and humidity aging 85°C at 85% RH,30 days Induced attenuation at 1310,1550,1625 nm due to aging	≤ 0.05 dB/km
Water immersion, 30 days Induced attenuation due to water immersion at 23 ± 2°C at 1310,1550,1625 nm	≤ 0.05 dB/km
Accelerated aging (Temperature),30 days Induced attenuation due to temperature aging at 85 ± 2°C at 1310,1550,1625 nm	≤ 0.05 dB/km

Other Performance Characteristics*

Effective group index of refraction	1.4670 at 1310 nm 1.4675 at 1550 nm 1.4680 at 1625 nm
Attenuation in the wavelength region from 1285-1330 nm in reference to the attenuation at 1310 nm	≤ 0.03 dB/km
Attenuation in the wavelength region from 1525-1575 nm in reference to the attenuation at 1550 nm	≤ 0.02 dB/km
Point discontinuities at 1310 nm &1550 nm	≤ 0.05 dB
Dynamic fatigue parameter (N_d)	≥ 20

*Typical values

Manufacturing Process

Sterlite® controls every stage of the manufacturing process so that quality is built into every meter offiber, rather than selected out at the end through testing. To ensure the accuracy and precision of the manufacturing process, Sterlite routinely calibrates and recertifies process equipment and measurement benches against internationally traceable standards from NPL/NIST, and follow test methods compliant with EIA/TIA, CEI-IE C and ITU standards.

International Standards

Sterlite® OH-LITE® NOVA™ complies or exceeds the ITU Recommendation G.652.D and G.657.A1 and the IEC 60793-2-50 type B6_a1 Optical Fiber Specification.

Service USP's

- Complete range of optical fiber for terrestrial networks
- World-wide sales support
- Web-based order tracking & customer support
- Specialized technical support

Disclaimer

Sterlite® policy of continuous improvement may result in a change in specifications without prior notice. Any warranty of any nature relating to any Sterlite® product is only contained in the written agreement between Sterlite® Technologies Limited and the direct purchaser of such product(s).

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