Product Datasheet

OH LITE® NOVA™

ITU-T G.652.D with features of G.657.A1 Single Mode Optical Fibre

Product Description

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

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

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 1324nm
Zero dispersion slope	≤0.092 ps/nm^2.km
Dispersion at 1550 nm	≤17.5 ps/nm.km
PMD Individual Fibre*	≤0.1 ps/√km
PMD LDV	≤0.06 ps/√km
Cladding diameter	125 ± 0.7 µm
Core-clad concentricity error	≤0.5 µm
Cladding non-circularity	≤0.7 %
Coating diameter	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 B-652D fiber category

Mechanical Characteristics

Proof Test Levels	≥100 kpsi (0.7GN/m2). This is equivalent to 1% strain
Coating strip force(Force to mechanically strip the dual coating)	≥1.3 N (0.3 lbf) and ≤5.0 N (1.1lbf)
Fibre 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
1 turn,16 mm radius	1550 nm	≤0.03 dB
1 turn,10 mm radius	1550 nm 1625 nm	≤0.5 dB ≤1.5 dB
10 turns,15 mm radius	1550 nm 1625 nm	≤0.1 dB ≤0.3 dB

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), 30days 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 (Nd)	≥ 20

*Typical values

Manufacturing Process

STL controls every stage of the manufacturing process so that quality is built in to every meter of fibre, rather than selected out at the end through testing. To ensure the accuracy and precision of the manufacturing process, STL 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-IEC and ITU standards.

International Standards

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

Service USP's

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

Disclaimer

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

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