

MaxBand® WideBand OM5 Bending Insensitive Multimode Fibre

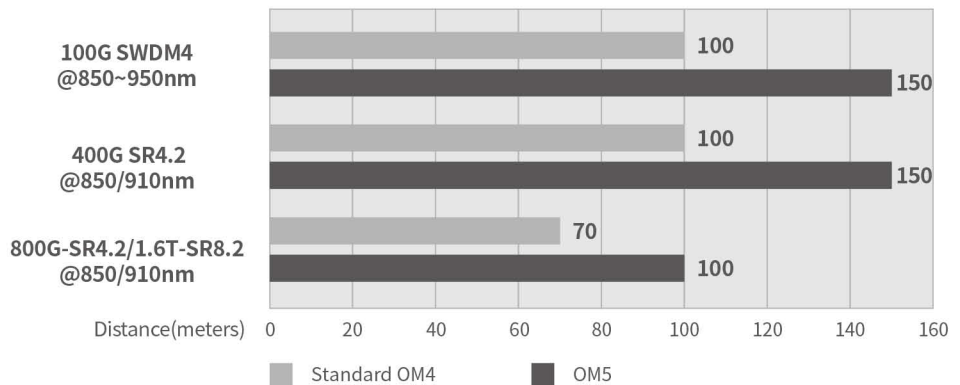
Yangtze Optical Fibre and Cable Joint Stock Limited Company

YOFC MaxBand® WideBand OM5 Bending Insensitive Multimode Fibre is a 50µm laser-optimized multimode fibre designed for short wavelength division multiplexing (SWDM) applications. Unlike legacy OM4 multimode fibre with high bandwidth at 850nm, YOFC MaxBand® OM5 Bending Insensitive Multimode Fibre has high bandwidth in the 850-950nm window and maintaining backward compatibility with legacy OM4 fibre. WideBand OM5 and multi-wavelength transceivers are a viable solution for 100Gb/s and 400Gb/s multi-wavelength systems.

YOFC MaxBand® WideBand OM5 Bending Insensitive Multimode Fibre complies with or exceeds ISO/IEC 11801-1 OM5 specification, IEC 60793-2-10 A1-OM5 specification, and TIA-492AAAF A1-OM5 specification.

| Features | Benefits and Applications |
|--|--|
| <ul style="list-style-type: none"> Designed for multi-wavelength systems High bandwidth in the wavelength range of 850-950nm Backward compatibility with legacy OM4 fibre | <ul style="list-style-type: none"> Support single-wavelength and multi-wavelength transmission system from 40Gb/s to 400Gb/s |
| <ul style="list-style-type: none"> Superior geometry uniformity Low attenuation High bandwidth Low differential mode delay (DMD) | <ul style="list-style-type: none"> Data centers Office centers Data storage networks Local area networks (LAN) High-performance computing centers a |
| <ul style="list-style-type: none"> Very low macro-bending sensitivity | <ul style="list-style-type: none"> Supports the use and installation of optical cables with a small bending radius |
| <ul style="list-style-type: none"> Coated with YOFC's proprietary dual layer UV curable acrylate | <ul style="list-style-type: none"> High resistance to micro-bending Optimized performance in tight-buffer cable applications Stable performance over a wide range of environmental conditions |

System Link Length



| Characteristics | Conditions | Specified Values | | Units |
|--|-----------------------------------|---|---------|----------------------------|
| Geometry Characteristics | | | | |
| Core Diameter | -- | 50±2.5 | | [µm] |
| Core Non-Circularity | -- | ≤5.0 | | [%] |
| Cladding Diameter | -- | 125.0±1.0 | | [µm] |
| Cladding Non-Circularity | -- | ≤0.6 | | [%] |
| Coating Diameter | -- | 245±7 | | [µm] |
| Coating/Cladding Concentricity Error | -- | ≤10.0 | | [µm] |
| Coating Non-Circularity | -- | ≤6.0 | | [%] |
| Core/Cladding Concentricity Error | -- | ≤1.0 | | [µm] |
| Delivery Length | -- | up to 17.6 | | [km/reel] |
| Optical Characteristics | | | | |
| Attenuation | 850nm | ≤2.4 | | [dB/km] |
| | 953nm | ≤1.7 | | [dB/km] |
| | 1300nm | ≤0.6 | | [dB/km] |
| Overfilled Modal Bandwidth | 850nm | ≥3500 | | [MHz·km] |
| | 953nm | ≥1850 | | [MHz·km] |
| | 1300nm | ≥500 | | [MHz·km] |
| Effective Modal Bandwidth | 850nm | ≥4700 | | [MHz·km] |
| | 953nm | ≥2470 | | [MHz·km] |
| Application support distance on | -- | -- | | -- |
| 1.6T-SR8.2 | 850/910nm | 100 | | [m] |
| 800G-SR4.2 | 850/910nm | 100 | | [m] |
| 400GBASE-SR4.2 | 850/910nm | 150 | | [m] |
| 100Gb/s WDM ¹ | 850-950nm | 150 | | [m] |
| Numerical Aperture | -- | 0.200±0.015 | | -- |
| Group Refractive Index | 850nm | 1.482 | | -- |
| | 1300nm | 1.477 | | -- |
| Zero Dispersion Wavelength, λ_0 | -- | 1297-1328 | | [nm] |
| Zero Dispersion Slope, S_0 | -- | $\leq 4 \cdot (-103) / (840 (\lambda_0/840)^4)$ | | [ps/(nm ² ·km)] |
| Macrobending Loss ² | -- | @850nm | @1300nm | -- |
| 2 Turns @ 15 mm Radius | -- | ≤0.1 | ≤0.3 | [dB] |
| 2 Turns @ 7.5 mm Radius | -- | ≤0.2 | ≤0.5 | [dB] |
| Backscatter Characteristics 850nm & 1300nm | | | | |
| Step (Mean of Bidirectional Measurement) | -- | ≤0.10 | | [dB] |
| Irregularities Over Fibre Length and Point Discontinuity | -- | ≤0.10 | | [dB] |
| Attenuation Uniformity | -- | ≤0.08 | | [dB/km] |
| Environmental Characteristics 850nm & 1300nm | | | | |
| Temperature Cycling | at -60°C to 85°C | ≤0.10 | | [dB/km] |
| Temperature-Humidity Cycling | at -10°C to 85°C and 4% to 98% RH | ≤0.10 | | [dB/km] |
| Water Immersion | at 23°C for 30 days | ≤0.10 | | [dB/km] |
| Dry Heat | at 85°C for 30 days | ≤0.10 | | [dB/km] |
| Damp Heat | at 85°C and 85% RH for 30 days | ≤0.10 | | [dB/km] |
| Mechanical Specification | | | | |
| Proof Test | -- | ≥9.0 | | [N] |
| | -- | ≥1.0 | | [%] |
| | -- | ≥100 | | [kpsi] |
| Coating Strip Force | typical average force | 1.5 | | [N] |
| | peak force | ≥1.3, ≤8.9 | | [N] |
| Dynamic Stress Corrosion Susceptibility Parameter (n_f , typical) | -- | 20 | | -- |

Remarks:1. Support distance with SWDM transceivers <http://www.swdm.org/msa/>

2. The launch condition for the macrobending loss measurement fulfils that described in IEC 61280-4-1.