

Fibre specification



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Attenuation values are valid for fibers in the cable

Multi mode fiber

| Fibre type | | 62,5/125 µm OM1 | 50/125 µm OM2 | 50/125 µm OM2 | 50/125 µm OM2 | 50/125 µm OM3 | 50/125 µm OM4 |
|---|--------|------------------------|--------------------------------------|--|---|------------------------|------------------------|
| Bandwidth (overfilled launch) @ 850 nm @ 1300 nm | Mhz.km | ≥ 220 ≥ 600 | ≥ 500 ≥ 500 | ≥ 600 ≥ 1200 | ≥ 600 ≥ 1200 | ≥ 1500 ≥ 500 | ≥ 3500 ≥ 500 |
| | Mhz.km | - - | - - | - - | - - | ≥ 2000 ≥ 500 | ≥ 4700 ≥ 500 |
| 1Gbps Ethernet operation Link Length @ 850 nm @ 1300 nm | (m) | ≤ 300 ≤ 550 | 550 ¹ 550 ² | ≤ 600 ¹ ≤ 600 ² | ≤ 750 ¹ ≤ 2000 ² | - - | - - |
| | (m) | - | - | - | - | ≤ 300 | 550 |
| Attenuation- Loose Tube Cables @ 850 nm (typical / maximum) @ 1300 nm (typical / maximum) | dB/km | 2.6 / 3.0 0.5 / 1.0 | 2.4 / 3.0 0.7 / 1.2 | 2.3 / 2.8 0.6 / 0.9 | 2.3 / 2.8 0.6 / 0.9 | 2.0 / 3.0 0.5 / 1.0 | 2.0 / 3.0 0.5 / 1.0 |
| | dB/km | 2.6 / 3.2 0.5 / 1.0 | 2.0 / 3.0 0.5 / 1.2 | 2.0 / 2.8 0.5 / 0.9 | 2.0 / 2.8 0.5 / 0.9 | 2.1 / 3.5 0.7 / 1.1 | 2.1 / 3.5 0.7 / 1.1 |
| Numerical Aperture | µm | 0.275 ± 0.015 | 0.20 ± 0.015 | 0.20 ± 0.015 | 0.20 ± 0.015 | 0.20 ± 0.015 | 0.20 ± 0.015 |
| Core Diameter | µm | 62.5 ± 2.5 | 50.0 ± 2.5 | 50.0 ± 2.5 | 50.0 ± 2.5 | 50.0 ± 2.5 | 50.0 ± 2.5 |
| Cladding Diameter | µm | 125 ± 1.0 | 125 ± 1.0 | 125 ± 1.0 | 125 ± 1.0 | 125 ± 1.0 | 125 ± 1.0 |
| Coating Diameter | µm | 245 ± 10 | 245 ± 10 | 245 ± 10 | 245 ± 10 | 245 ± 10 | 245 ± 10 |
| KDP fibre code | | G6 | G5 | M5 | N5 | X5 | Y5 |

1 - serial Laser 1000BASE-SX

2 - serial Laser 1000BASE-LX

3 - Effective Modal Bandwidth per TIA/EIA-492AAAC and draft IEC 60793-2-10 for type A1a.2, ensured by DMD performance specifications for sources meeting launch conditions specified in 10Gbit Ethernet (IEEE 802.3ae), OIF OC-192/STM-64 VSR-4-04, and 10 Gbit Fibre Channel (10GFC).

Single mode fiber

| Fibre type | | 9/125 µm OS2 G.652D – ZWP | 9/125 µm OS2 G.657.A1 – ZWP | 9/125 µm OS2 G.657.B3 | 9/125 µm G.655C&D | 9/125 µm G.655C & E , G.656 |
|---|------------|---|---|---|--|---|
| Attenuation- Loose Tube Cables @ 1310 nm (typical / maximum) @ 1550 nm (typical / maximum) @ 1625 nm (typical / maximum) | dB/km | 0.31 / 0.35 0.20 / 0.24 0.21 / 0.26 | 0.31 / 0.35 0.20 / 0.24 0.21 / 0.26 | 0.31 / 0.35 0.20 / 0.24 0.21 / 0.26 | - / 0.36 - / 0.30 - / 0.27 | - / 0.45 - / 0.30 - / 0.27 |
| | dB/km | 0.40 / 0.50 0.30 / 0.40 | 0.40 / 0.50 0.30 / 0.40 | 0.35 / 0.40 0.25 / 0.30 | 0.40 / 0.50 0.28 / 0.32 | 0.40 / 0.48 0.28 / 0.32 |
| | µm | 9.2 ± 0.4 10.4 ± 0.5 | 8.9 ± 0.4 10.8 ± 0.5 | 8.4 – 9.2 9.2 – 10.4 | - 8.4 ± 0.4 | - 8.6 ± 0.4 |
| Chromatic Dispersion @ 1285 – 1330 nm @ 1550 nm @ 1530 – 1565 nm @ 1565 – 1625 nm @ 1460 – 1625 nm | ps/(nm.km) | ≤ 3.5 ≤ 18 - - - | - - - - - | - - - - - | - - 2.6 – 6.0 4.0 – 8.9 -1.0 – 8.9 | - - 5.5 – 8.9 6.9 – 11.4 2.0 – 11.4 |
| | nm | ≤ 1260 | - | ≤ 1260 | - | - |
| | nm | 1302 – 1322 | 1302 – 1322 | 1250 – 1324 | - | - |
| | ps/vkm | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 |
| | µm | 125 ± 0.7 | 125 ± 0.7 | 125 ± 0.7 | 125 ± 0.7 | 125 ± 0.7 |
| Coating Diameter | µm | 245 ± 10 | 240 ± 5 | 245 ± 10 | 245 ± 5 | 245 ± 5 |
| KDP fibre code | | E9 | E8 | D9 | B9 | R9 |

Information contained in this data sheet is subject to change without prior notice. We recommend require the latest version of this specification