

# Fibre specification



KABELOVNA Děčín Podmokly s.r.o.  
Ústecká 840/33, 405 33 Děčín 5  
Czech Republic  
DIČ CZ26759993  
tel.: +420 412 706 222  
www.kabelovna.cz

14.2.2012 ver.11

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 <sup>1</sup> 550 <sup>2</sup>	≤ 600 <sup>1</sup> ≤ 600 <sup>2</sup>	≤ 750 <sup>1</sup> ≤ 2000 <sup>2</sup>	- -	- -
	(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