



Pigtail

LightMax® SINGLE MODE All Range

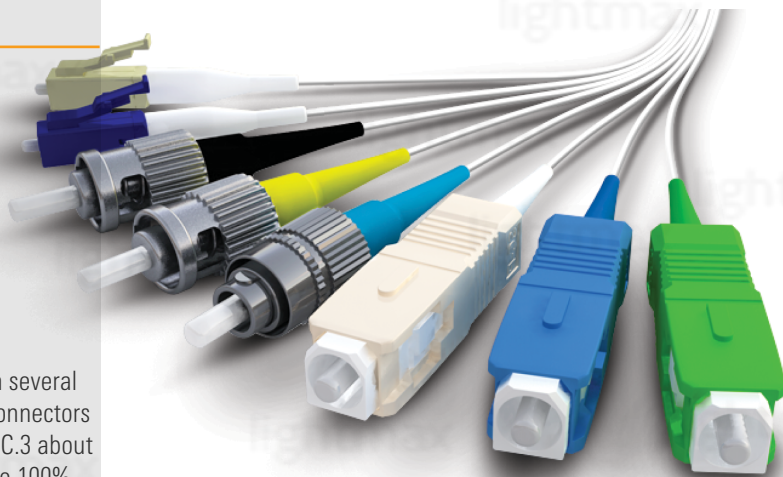
900 µm

SM - G.652.D | G.657.A2

SC | LC | ST | FC | E2000 | MU

LightMax® Single Mode All Range Pigtails are available in several options and configurations in terms of optical fibre and connectors types. Being made in compliance with ANSI/TIA/EIA-568.C.3 about material specifications LightMax® Single Mode Pigtails are 100% inspected during and after their production process, with the only purpose of assuring the best performance and quality.

[Pictures for reference only]



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Applications:

- Local and Wide Area Networks (LANs & WANs)
- Fibre Optic CATV, FTTX
- Fibre Optic telecommunications systems
- Fibre Optic Backbone infrastructure.

Features:

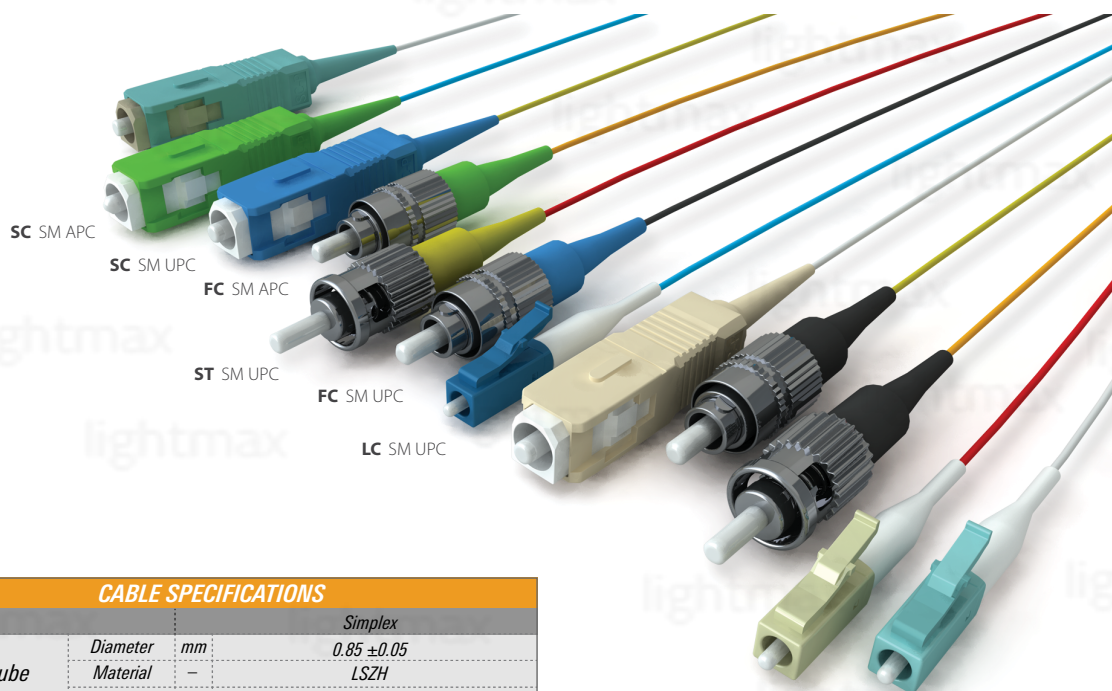
- Low insertion loss and high return loss
- Free-floating ceramic ferrule
- UL-rated plastic housing and boot
- Boot available in a variety of colours
- High precision alignment
- RoHS 3 compliance

G.652.D FIBRE OPTIC SPECIFICATIONS

Fibre type		G.652.D
Core diameter		9 µm
MFD	@1310 nm	8.7 ~ 9.5 (µm)
	@1550 nm	9.9 ~ 10.9 (µm)
Cladding diameter		125 ±1 µm
Coating diameter		Before colour After colour 245 ±7 µm 250 ±15 µm
Cladding non circularity		≤ 1.0 %
Coating/Cladding concentricity error		≤ 12 µm
Chromatic Dispersion	@1285 ~ 1340 (nm)	≥ -3.4 ≤ 3.4 ps/(nm.km)
	@1550 nm	≤ 18 ps/(nm.km)
	@1625 nm	≤ 22 ps/(nm.km)
	Zero-Dispersion wavelength	1312 nm ±12 nm
PMD	Zero-Dispersion slope	≤ 0.091 ps/(nm².km)
	Max. (fibre on the reel)	≤ 0.1 ps/√km
	Max. (link designed value)	≤ 0.06 ps/√km
Attenuation	@1310 nm	≤ 0.32 dB/km
	@1383 nm	≤ 0.32 dB/km
	@1550 nm	≤ 0.18 dB/km
Macro-bend loss	@1625 nm	≤ 0.20 dB/km
	[100 turns, 50mm radius, 1550/1625nm]	≤ 0.05 dB
Cable Cut-Off wavelength		≤ 1260nm
Standard		ITU-T G.652.D

G.657.A2 FIBRE OPTIC SPECIFICATIONS

Fibre type		Single Mode
Core diameter		9 µm
MFD	@1310 nm	8.8 ±0.4 µm
	@1550 nm	9.8 ±0.5 µm
Cladding diameter		125 ±1.0 µm
Coating diameter		250 ±15 µm
Cladding non circularity		≤ 0.1 %
Coating/Cladding concentricity error		≤ 12 µm
Attenuation	@1310 nm	≤ 0.34 dB/km
	@1550 nm	≤ 0.21 dB/km
Chromatic Dispersion	@1288 ~ 1339 nm	3.5 ps/(nm.km)
	@1571 ~ 1360 nm	≤ 5.3 ps/(nm.km)
	@1550 nm	≤ 18 ps/(nm.km)
	Zero-Dispersion wavelength	1300 nm ~ 1324 nm
PMD	Zero-Dispersion slope	≤ 0.092 ps/(nm².km)
	Max. (fibre on the reel)	0.20 ps/√km
	Max. (link designed value)	0.10 ps/√km
Macrobend loss	30 mm radius, 100 turns, @1550 nm	≤ 0.10 dB/km
	30 mm radius, 100 turns, @1625 nm	≤ 0.10 dB/km
Standard		ITU-T G.657.A2



CABLE SPECIFICATIONS			
Type			Simplex
Semi Loose tube	Diameter	mm	0.85 ±0.05
	Material	—	LSZH
	Colour	—	Yellow
Bend radius	Dynamic	mm	20D
	Static		10D
Temperature	Storage	°C	-20 ~ 60
	Operation		-20 ~ 60
Tensile	N		60 (Long term) 100 (Short term)
Crush resistance	N/100		100 (Long term) 500 (Short term)
Standards			
IEC 60794			
GR-409-CORE			
RoHS 3.0 [Directive 2015/863/EU]			

CONNECTORS SPECIFICATIONS									
CONNECTOR		SC		LC		ST	FC	E2000	MU
		Sx	Dx	Sx	Dx				
Coupling mechanism		Push-pull		Push-pull		Bayonet	Screw in	Push-pull	Push-pull
Housing / Coupling	Material	Plastic		Plastic		Metallic	Metallic	Plastic	Plastic
Ferrule	Material	Zirconia ceramic		Zirconia ceramic		Zirconia ceramic	Zirconia ceramic	Zirconia ceramic	Zirconia ceramic
	Diameter	2.5 mm		1.25 mm		2.5 mm	2.5 mm	2.5 mm	1.25 mm
	Polish type	UPC APC		UPC APC		UPC	UPC APC	UPC APC	UPC
IL [Insertion Loss]	UPC	≤0.25 dB		≤0.25 dB		≤0.25 dB	≤0.25 dB	≤0.25 dB	≤0.25 dB
	APC	≤0.20 dB		≤0.20 dB		N/A	≤0.20 dB	≤0.20 dB	N/A
RL [Return Loss]	UPC	≥ 50 dB		≥ 50 dB		≥ 50 dB	≥ 50 dB	≥ 50 dB	≥ 50 dB
	APC	≥ 65 dB		≥ 65 dB		N/A	≥ 65 dB	≥ 65 dB	N/A
Boot colours	UPC	Blue		Blue		–	Blue	Blue	Blue
	APC	Green		Green		N/A	Green	Green	N/A
Operating Temperature		-40°C ~ 70°C		-40°C ~ 70°C		-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C	-40°C ~ 70°C

Rel. 4-EN/APR21