



## DUPLEX PATCHCORDS LC/SC

Thanks to a stringent quality policy & individual inspection/testing of each manufactured piece, Gigamedia patchcords offer a high level of performance at a fair price. Each patchcord is packaged individually and delivered with a unique serial number & individual IL/RL test report.



### MECHANICAL PROPERTIES

	G657 A2	OS2	OM1	OM2	OM3	OM4/OM5
<b>Connector body</b>	plastic	plastic	plastic	plastic	plastic	plastic
<b>Ferule surface</b>	convex	convex	convex	convex	convex	convex
<b>Core diameter</b>	9.2 ± 0.4 μm	9.2 ± 0.4 μm	62.5 ± 2.5 μm	50 ± 2.5 μm	50 ± 2.5 μm	50 ± 2.5 μm
<b>Cladding diameter</b>	125 ± 0.7 μm	125 ± 1.0 μm				125 ± 2.0 μm
<b>Cladding non-circularity</b>	≤ 0.7 %	≤ 1.0 %	≤ 1.0 %	≤ 1.0 %	≤ 1.0 %	≤ 1.0 %
<b>Core/cladding concentricity error</b>	≤ 0.5 μm	≤ 0.6 μm	≤ 6.0 μm			≤ 1.5 μm
<b>Ferule material</b>	ceramic (ZrO2) Ø (inner) 126 μm	ceramic (ZrO2) Ø (inner) 126 μm	ceramic (ZrO2) Ø (inner) 127 μm			
<b>Polishing method</b>	UPC or APC	UPC or APC	PC	PC	PC	PC

### OPTICAL PROPERTIES

	OM5	OM4	OM3	OM2	OM1
<b>Typical loss</b>	≤ 2.4 dB/km (850 nm) ≤ 1.7 dB/km (953 nm) ≤ 0.6 dB/km (1300 nm)	≤ 2.7 dB/km (850 nm) ≤ 0.8 dB/km (1300 nm)	≤ 2.7 dB/km (850 nm) ≤ 0.8 dB/km (1300 nm)	≤ 2.8 dB/km (850 nm) ≤ 0.8 dB/km (1300 nm)	≤ 3 dB/km (850 nm) ≤ 1 dB/km (1300 nm)
<b>Bandwith (MHz/km)</b>	≥ 3500 MHz.km (850 nm - OFL) ≥ 500MHz.km (1300 nm - OFL) ≥ 4700 MHz.km (850 nm - EMBc*) ≥ 2470 MHz.km (953 nm - EMBc*)	≥ 3500 MHz.km (850 nm - OFL) ≥ 500 MHz.km (1300 nm - OFL) ≥ 4700 MHz.km (850 nm - EMBc*)	≥ 1500 MHz.km (850 nm - OFL) ≥ 500 MHz.km (1300 nm - OFL) ≥ 2000 MHz.km (850 nm - EMBc*)	≥ 500 MHz.km (850 nm - OFL) ≥ 500 MHz.km (1300 nm - OFL)	≥ 200 MHz.km (850 nm - OFL) ≥ 500 MHz.km (1300 nm - OFL)
<b>Typical Insertion Loss</b>	≤ 0.15 dB	≤ 0.15 dB	≤ 0.15 dB	≤ 0.15 dB	≤ 0.15 dB
<b>Max. Insertion Loss</b>	≤ 0.25 dB	≤ 0.25 dB	≤ 0.25 dB	≤ 0.25 dB	≤ 0.25 dB
<b>Typical Return Loss</b>	≥ 20 dB	≥ 35 dB	≥ 35 dB	≥ 35 dB	≥ 35 dB
<b>Mating cycles</b>	1000 (variation 0.2 dB)	1000 (variation 0.2 dB)	1000 (variation 0.2 dB)	1000 (variation 0.2 dB)	1000 (variation 0.2 dB)

\*EMBc calculated thanks to the DMD mask Method

Performances required by ISO 11801 OS1 & OS2 categories are both fully satisfied.

OTHER SPECIFICATIONS OF FIBER ON REQUEST

	G657 A2	OS2
<b>Typical loss</b>	$\leq 0.35$ dB/km (1310 nm) $\leq 0.20$ dB/km (1550 nm)* $\leq 0.21$ dB/km (1625 nm)	$\leq 0.39$ dB/km (1310-1625 nm) $\leq 0.25$ dB/km (1550 nm)
<b>Typical Insertion Loss</b>	$\leq 0.15$ dB (SC/APC $\leq 0.10$ dB)	$\leq 0.15$ dB (SC/APC $\leq 0.10$ dB)
<b>Max. Insertion Loss</b>	$\leq 0.25$ dB (SC/APC $\leq 0.20$ dB)	$\leq 0.25$ dB (SC/APC $\leq 0.20$ dB)
<b>Typical Return Loss</b>	$\geq 50$ dB (SC/APC $> 65$ dB)	$\geq 50$ dB (SC/APC $> 65$ dB)
<b>Mating cycles</b>	1000 (variation 0.2 dB)	1000 (variation 0.2 dB)

\* Additionnal loss @ 1550 nm:  
 - 10 turns (15 mm mandrel)  $\leq 0,03$  dB  
 - 1 turn (10 mm mandrel)  $\leq 0,1$  dB  
 - 1 turn (7.5 mm mandrel)  $\leq 0,5$  dB

#### CABLE MECHANICAL PROPERTIES

	G657 A2	OM5	OM4	OS2	OM3	OM2	OM1
<b>Construction</b>	semi-tight buffer						
<b>Reinforcement</b>	aramid yarns						
<b>Tensile strength</b>	permanent 250 N; installation 450 N						
<b>Crush resistance</b>	2000 N/dm						
<b>Cable diameter</b>	3 mm						
<b>Min. Bending radius during installation</b>	10 mm						
<b>Temperature range during operation</b>	-5 °C to +60 °C						
<b>Outer sheath material</b>	LSHF						
<b>Outer sheath colour</b>	Yellow	Lime Green	Violet	Yellow	Aqua	Orange	Orange

#### COMPLIANCE

- ▶ IEC 61754-20; IEC 61754-4; Bellcore/telcordia GR-326; EIA/TIA 604-10A
- ▶ EIA/TIA 568; ISO/IEC 11801 2nd Ed, EN 50173; JIS C5973 F04; ITU-T G651; ITU-T G652D; ITU-T 652B ; ITU-T 657A+B
- ▶ IEEE 802.3

#### PART NUMBER

P/N	DESCRIPTION
<b>GGM D3MCLCxM</b>	Duplex patchcord OS2 LCUPC/SCUPC
<b>GGM D3MLCSCAxM</b>	Duplex patchcord OS2 LCUPC/SCAPC
<b>GGM D3MLCASCAXM</b>	Duplex patchcord OS2 LCAPC/SCAPC
<b>GGM D6MCLCxM</b>	Duplex patchcord OM5 LC/SC
<b>GGM D5MCLCxM</b>	Duplex patchcord OM4 LC/SC
<b>GGM D4MCLCxM</b>	Duplex patchcord OM3 LC/SC
<b>GGM D1MCLCxM</b>	Duplex patchcord OM2 LC/SC
<b>GGM D2MCLCxM</b>	Duplex patchcord OM1 LC/SC

\*x denotes the length

#### ACCESSORIES

P/N	DESCRIPTION
<b>GGM PGJ1N</b>	1U patchcord management plate (black)
<b>GGM SUPJN</b>	Black patchcord management brackets (set of 2 pcs)

The patchcord management plates are compatible with GMT0 series patch panels

