

# LC Optical Fibre Connectors

## Description

Gem Cable's LC connector is a small form factor fibre optic connector. The LC connector helps to reduce space on panels or outlets by 50%. It is cost effective as it simplifies movement, addition and modification. It uses the standard RJ-style telephone connector which gives an audible click upon engaging.

Gem Cable manufactures a range of LC connectors suitable for various applications. The LC connector uses a 1.25mm ferrule which is half the diameter of the standard ferrule. Gem Cable's LC connectors are available in singlemode for both UPC and APC and in multimode UPC. The connectors come with standard boots suitable for 900µm and 2mm cable diameters. The connectors are also available in simplex and duplex (with clips) options. The LC connector is available in blue, green and beige.

## Features

- ▶ Complies with IEC 61754-20 and TIA 604-10-A
- ▶ Compact design based on RJ45 style interface
- ▶ Low insertion loss and back reflection
- ▶ Zirconia ceramic ferrule with high end UPC finish
- ▶ RoHS, REACH SvHC compliant
- ▶ Available in standard colours and standard packaging

## Applications

- ▶ Telecommunications networks
- ▶ CATV, LAN, MAN and WAN application
- ▶ Data processing networks
- ▶ Cable television
- ▶ Fibre-To-The-Home (FTTH)
- ▶ Premises distribution

## Technical Specification

MECHANICAL PROPERTIES	CRITERIA	EFFECT	CONFORMANCE
Mechanical endurance	500 matings	<0.2 dB change	IEC 61300-2-2
Vibration	10-55Hz, 0.75 amplitude	<0.2 dB change	IEC 61300-2-1
Drop	Drop height 1m, 5 drops	<0.2 dB change	IEC 61300-2-12
Cable retention	Magnitude 90 N	<0.2 dB change	IEC 61300-2-4
Cable torsion	1.5kg -2.5kg for 2mm-3mm cable diameter	<0.2 dB change	IEC 61300-2-5
Operating temperature	-25 to +70, 12 cycles	<0.2 dB change	IEC 61300-2-22
Cold	-25 for 96 hrs	<0.2 dB change	IEC 61300-2-17
Dry Heat	+70 for 96 hrs	<0.2 dB change	IEC 61300-2-18

## LC connector PC and APC- Singlemode

OPTICAL PERFORMANCE	GRADE A	GRADE B	GRADE C	CONFORMANCE
IL MAX/Master (Acceptance)	0.10 dB	0.15 dB	0.25 dB	IEC 61300-3-4
IL MAX/Random	0.20 dB	0.30 dB	0.40 dB	IEC 61300-3-4
Ave/Master	0.08 dB	0.12 dB	0.18 dB	IEC 61300-3-4
Ave/Random	0.08 dB	0.12 dB	0.18 dB	IEC 61300-3-4
Return Loss	55/70 dB	55/65 dB	55/65 dB	IEC 61300-3-6

