

# CONNECTIVITY PRODUCTS

## Patchcords and Pigtails



Opterna offers high performance patchcords and pigtails that are used in fiber optic systems requiring ultra low loss. Opterna patchcords & pigtails are manufactured in state-of-the-art controlled manufacturing processes to operate over a wide range of wavelengths ranging in 1310 and 1550nm windows.

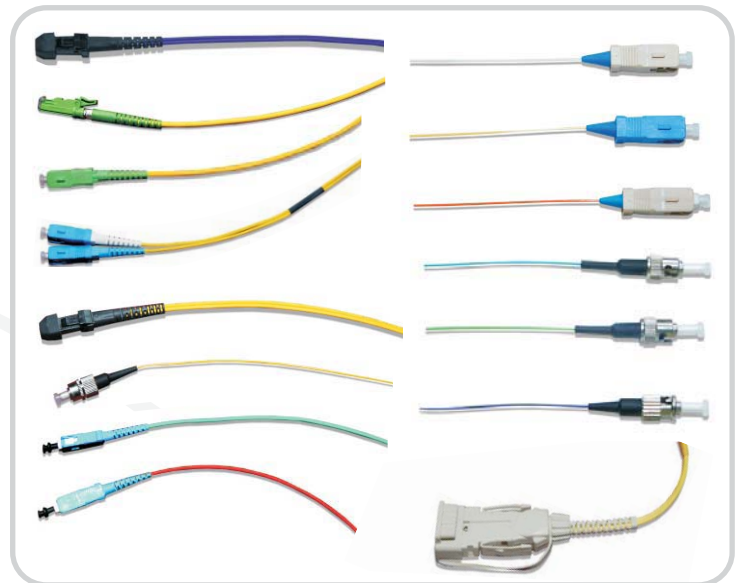
Opterna patchcords and pigtails are offered in almost all the connector and cable options on Multimode and Singlemode.

Each patchcord or pigtail will be individually tested and will come with test certificates. The product will have traceability label that gives reference to components and processes.

Over 10 million terminations from our manufacturing facility have worldwide applications in datacom, telecom and CATV applications and have earned global reputation for its high performance, quality and reliability.

### Features & Advantages

- ❖ Available in Multimode and Singlemode versions
- ❖ Any connector options
- ❖ Uses high quality ferrules and connectors
- ❖ Factory terminated and 100% tested for Insertion Loss and Return Loss
- ❖ **GR-326-CORE compliant for reliability**
- ❖ Improved link loss budget
- ❖ Individual test sheet and unique product identification number for traceability
- ❖ Manufacturing process qualified to meet end face geometry requirements
- ❖ Different cable colors available
- ❖ RoHS compliant
- ❖ Temperature range: -20 + 70°C



### Applications

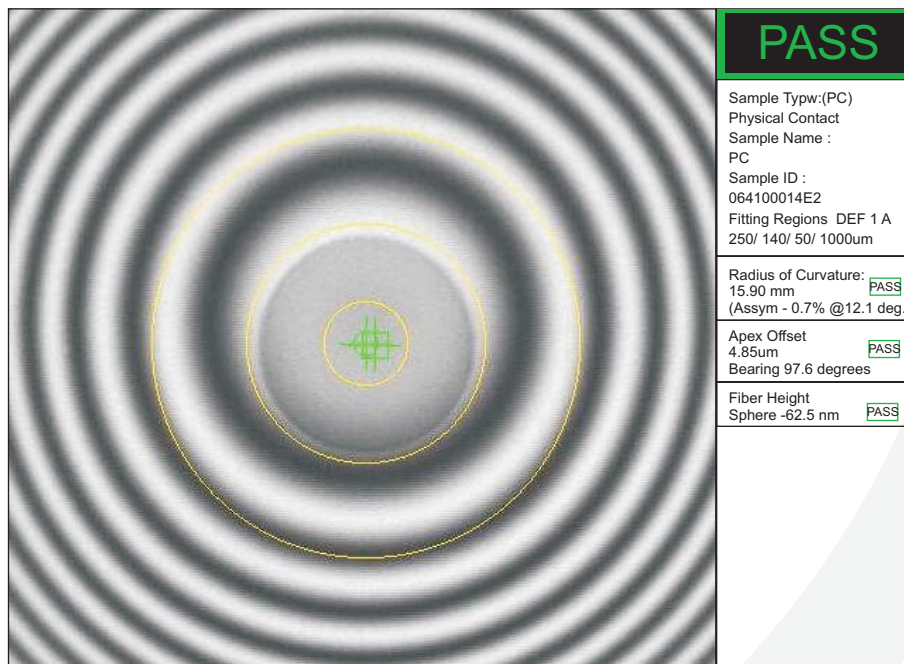
- ❖ Datacenter & Datacom applications
- ❖ Telecommunications and FTTx
- ❖ CATV
- ❖ Fibre Optic Test Equipment & Sensors
- ❖ Passive Optical Networks & Fiber Communication Systems



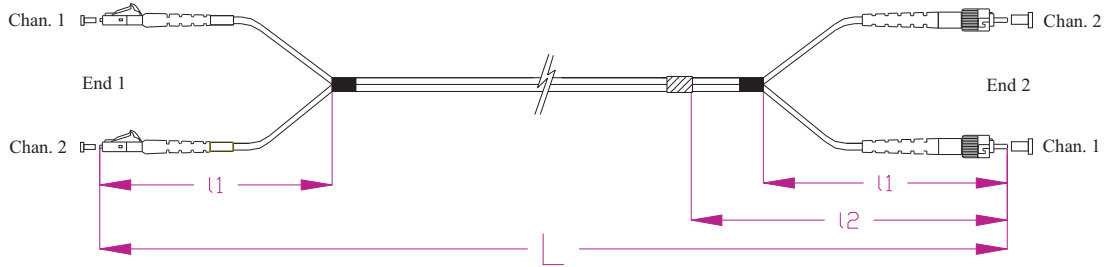
## Patchcords and Pigtaills

### Specification

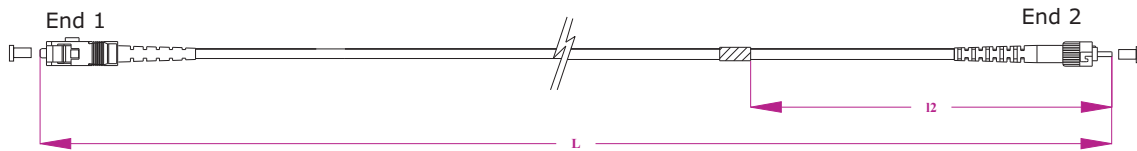
Fiber Types	62.5/125 (OM1), 50/125 (OM2), OM3, SMF-28, SMF-28e, Singlemode Bend insensitive (G657a & b)			
Cable Types	<ul style="list-style-type: none"> <li>• Duplex (2.8, 2.0, 1.8mm)</li> <li>• Simplex (2.8, 2.0, 1.8mm)</li> <li>• 2.8mm Flat Duplex</li> <li>• 900 &amp; 600um buffered fiber (tight, semi-tight easy strip &amp; loose buffered)</li> <li>• 250um hytel buffer</li> </ul>			
Connector Types	SC, LC, MU - Simplex & Duplex FC, ST, MTRJ, ESCON, E-2000, SMA, FDDI			
End face finish	PC, UPC, APC			
Optical Performance				
Insertion Loss (Multimode)	SC, LC, MU, FC, ST, E-2000, ESCON, FDDI	Max : 0.30db; 0.20dB (Typ.)		
	MTRJ & SMA	Max : 0.75dB; 0.50dB (Typ.)		
Insertion Loss (Singlemode)	SC, LC, MU, FC, ST, E-2000, ESCON, FDDI	Max : 0.30dB; 0.15dB (Typ.)		
	MTRJ	Max : 0.50dB; 0.30dB (Typ.)		
Return Loss (Singlemode)	≥50dB for UPC ≥60dB for APC			
Endface Geometry				
Parameter	2.5um ferrule		1.25um ferrule	
	UPC	APC	UPC	APC
Radius of Curvature (ROC)	10-25mm	5-12mm	7 - 25mm	5 - 12mm
Apex Offset	0-50um	0-50um	0 - 50um	0 - 50um
Fiber Height (spherical)	-100 - 100nm	-100 - 100nm	-100 - 100nm	-100 - 100nm
Angle	-	7.7 - 8.3degree	-	7.7 - 8.3degree



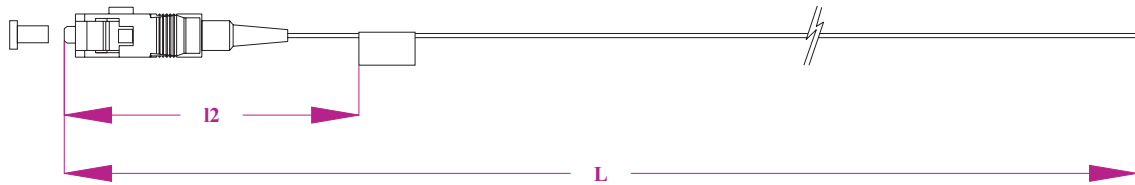
### Size & Dimension



**Fig. 1: Duplex patchcord schematic**



**Fig. 2: Simplex patchcord schematic**



**Fig. 3: Pigtail schematic**

Length of assembly (L)	:	L -0/+100mm (for L<0.5m) L -0/+150mm (for 0.5m>L<5m) L -0/+200mm (for L>5m)
Split length (l <sub>1</sub> ) - only for duplex	:	150 ± 25mm
Traceability label distance (l <sub>2</sub> )	:	200 ± 25mm (from one end)

### Ordering Information

