

## Part No. LCMM100



### Cable Description

Large Core Multi-mode Optical Fiber (100/140  $\mu\text{m}$ )

100/140 $\mu\text{m}$  multimode fiber is a graded index multi-mode optical fiber with a 100 $\mu\text{m}$  core diameter and a 140 $\mu\text{m}$  cladding diameter. The optical fiber is comprehensively optimized for performance at the 850 nm and 1300 nm operating wavelength. The fiber has the highest bandwidth and lowest attenuation, which is satisfying the use at 850 nm and 1300 nm. Uninet 100/140 $\mu\text{m}$  multimode fiber is designed and manufacturing according to the most advanced level in the world. Due to low attenuation and high bandwidth, the fiber is specially suited for transmission in local networks. The fiber with high NA and a large core has higher coupling efficiency and can collect higher powers from sources than standard sing-mode or graded index fibers.

### Application

Local-area network, Industrial data communications, CATV, Optical device and connectors

### Process and Coating

Uninet fibers are manufactured using the advanced Plasma Activated Chemical Vapor Deposition (PCVD) process. Because of the inherent advantages of the process, Uninet fibers show extremely refined refractive index (RI) profile control, excellent geometrical performance, low attenuation, etc.

### Cable Characteristic

- Efficient coupling to LED and laser sources
- High bandwidth and low attention at 850 nm and 1300 nm
- Dual UV-Cured Acryl ate Coating offering good protection
- Excellent strip ability

### Customer Variation

Available in a range of NA, core size and index profile to meet customer requirement

# LCMM100

## Fiber Core Performance

Characteristics	Conditions	Specified Values		Units
<b>Optical characteristics</b>		<b>100/140-170</b>	<b>100/140-250</b>	
Numerical Aperture (calculated)		0.29±0.02	0.29±0.02	
Attenuation	850 nm 1300 nm	≤5.0 ≤3.0	≤5.0 ≤3.0	[dB/km] [dB/km]
Bandwidth	850 nm 1300 nm	≥100 ≥100	≥100 ≥100	[MHz·km] [MHz·km]
Index Profile		Graded Index	Graded Index	
<b>Geometrical characteristics</b>				
Core diameter		100±4	100±4	[μm]
Cladding diameter		140±3	140±3	[μm]
Coating diameter		170±5	250±15	[μm]
Core non-circularity		≤5.0	≤5.0	[%]
Coating non-circularity		≤2.0	≤2.0	[%]
Coating/cladding concentricity error		≤5.0	≤5.0	[μm]
<b>Mechanical characteristics</b>				
Proof test	off line	>100 >10.6	>100 >10.6	[KPSI] [N]
Short-term bend radius		≥11	≥11	[mm]
Long-term bend radius		≥19	≥19	[mm]
Delivery length (km/reel)		≥0.8 ≤4.4	≥0.8 ≤4.4	[km]

**Remarks:**

1. Other fiber lengths are available on request.
2. Other proof test is available.
3. Other jacket coating diameter is available.