Alcatel 6934
10 Gigabit GLight™ Multimode Fiber

Alcatel's 10 Gigabit GLight™ fibers are guaranteed over distances of up to 300 meters at 10 Gb/s Ethernet transmission at 850nm without the need of mode conditioning. The GLight™ fibers are also fully compatible with all the major industry network protocols available on the market today, including Gigabit Ethernet, Fast Ethernet, FDDI, ATM and Token Ring.

Additionally, the GLight™ fibers are backwards compatible and with legacy systems and provide significantly higher distances at lower network speeds. They guaranteed for use in a variety of cables, including Loose Tube and Tight Buffer Cable.

All of Alcatel's Multimode fibers are further enhances with Alcatel's revolutionary and unique processes, including the Alcatel Fiber Coating (AFC™) process.

The AFC™ coating ensures a level of fiber durability and robustness in harsh environments unseen in the industry. Additionally, Alcatel's Multimode fibers benefits from the Furnace Chemical Vapor Deposition (FCVD) process. The FCVD process ensures superior geometry and uniformity as well as enhanced purity.

Alcatel's GLight™ family of multimode fibers is the new generation of graded index Multimode fibers designed specifically for laser applications and high bit-rate networks. The fibers have been designed to satisfy the increasing pressure for Service Providers to support the exponential growth in high-speed transmission over shorter distances, including corporate and campus environments.

As one of the world's largest manufacturers of communications products, Alcatel has the expertise, technology and manufacturing resources to provide end-to-end solution to support your fiber, cable, and systems requirements.

FEATURES	BENEFITS
Optimized to take advantage of lower-cost transceivers (LEDs, VCSELs)	Significant cost savings, higher transmission speeds and lowest cost per bit
Guaranteed for up to 10 Gb/s Ethernet transmission at 850 over extended distances without a mode conditioning patchcord.	Enhanced transmission performance and distance Operational flexibility and backward compatibility
Compatible with all major network standards, inclu-ding FDDI, Ethernet, Fast Ethernet, Token Ring and ATM	Safeguards the future evolution of your network, and maximize performance of today's applications
Utilizes Alcatel's proprietary Advanced Plasma and Vapor Deposition (APVD) process	Ensures fiber with superior geometry and uniformity, as well as enhanced purity
Utilizes Alcatel's unique Fiber coating AFC™ coating, specially modified for Multimode	Provides superior durability and robustness even in the harshest conditions, resulting in lower maintenance and replacement costs

KEY INDUSTRY LEADING MILESTONES

- **1999**- Introduced Alcatel's AFC™ coating specifically designed to provide superior aging performance for Multimode fibers and better stability during the coating process
- **2000**- Introduced Alcatel's proprietary Furnace Chemical Vapor Deposition (FCVD) fiber production process to ensure the highest quality fiber
- **2000**- Introduced GLight™ family of Multimode fibers, specifically designed to support 1 Gb/s Ethernet transmission at 850nm and 1300nm

Rev 0, March. 02

ALCATEL

ARCHITECTS OF AN INTERNET WORLD

Alcatel 6934
10 Gigabit GLight™ Multimode Fiber

Optical Specifications

Spectral Attenuation and Bandwidth

Attenuation @ 850/1300nm	2.5/0.7 dB/km Maximum
Class A Bandwidth @ 850/1300nm	750/500 MHz.km Minimum
Class B Bandwidth @ 850/1300nm	1500/500 MHz.km Minimum

Restrictive Launch Bandwidth

Bandwidth @ 850nm*	2000 MHz.km Minimum

Distance for 10 Gigabit Ethernet (802.3ae)

Class A: 150 m at 850nm
Class B: 300 m at 850nm

Point Discontinuity

@850nm/1300nm	≤ 0.2 dB

Bending Sensitivity Attenuation

The maximum attenuation with bending does not exceed the following values @ 850 nm and 1300nm:

100 turns on 75 mm diameter	≤ 0.5 dB

Chromatic Dispersion

Zero Dispersion Wavelength (λo) is between	1295 and 1320nm
Zero Dispersion Slope (So) for 1300nm < λo <1320nm is typically	≤ 0.11 ps/nm²•km
for 1295nm < λo <1300nm is typically	≤ 0.001 *(λo-1190) ps/nm²•km

Numerical Aperture (NA)

Numerical Aperture	0.200 ± 0.015

Effective Group Index of Refraction

@ 850 nm	1.482
@1300 nm	1.480

General Specifications

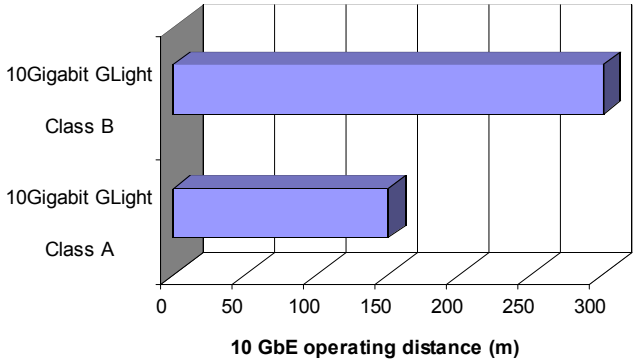
Core Diameter	50 ± 3 µm
Core Non-Circularity	≤ 6%
Cladding Diameter	125 ± 2 µm
Cladding Non-Circularity	≤ 2%
Core/Cladding Concentricity Error	≤ 6%
Coating Diameter	245 ± 10 µm
Coating Non-Circularity	≤ 6%
Coating/Cladding Concentricity Error	≤ 12.5 µm

Fibers with different characteristics and lengths can be concentricity request

References for products: IEC pub 60793/2 EN 188000-206

* Laser Bandwidth per TIA DMD measurement method FOTP-220 - For Class B

Alcatel reserves the right to change specifications without prior notice.



Environmental Specifications

Induced Attenuation Change@ 850 &1300nm

Operating Temperature -60 to +85°C	≤ 0.2 dB/km
Temperature/Humidity Cycling -10/+70°C RH 95%	≤ 0.2 dB/km

Mechanical Specifications

Proof-test

The entire length is subjected to a tensile proof-test > 100 Kpsi

Other Values

Stress corrosion factor (n)	> 20
Strippability (50-500 mm/mn)	> 1 N

Delivery Lengths

Upon request

References for measurements
EC Pub 60793 1-1, 1-2, 1-3, 1-4, 1-B6
EIA-TIA 455-31C/46A/58A/59/168A/173/176/177A/204

For additional information visit Alcatel online or call your nearest Optical Fiber Sales Representative

www.alcatel.com/opticalfiber

Brazil +55 11 3068 9993
China +86 10 6539 2200
France +33 1 55 51 51 36
France (HQ) +33 1 39 19 12 00
Germany +49 2166 27 2164
India +91 11 335 9650
Spain +34 942 247 111
UK +44 1633 413 600
North America +1 828 459 9787
800 879 9862

Rev 0, March. 02

ALCATEL

ARCHITECTS OF AN INTERNET WORLD