

ZORA Indoor 10 Gigabit OM3-330 Multimode Optical Cable



ZORA Indoor 10 Gigabit OM3-330 Multimode Optical Cable Overview

ZORA's Indoor 10 Gigabit OM3-330 Multimode Optical Cable is a high-performance solution for indoor network connections. ZORA is Leading Indoor Multimode Optical Cable Factory

ZORA brand Indoor OM3 Single Mode Cable is suitable for backbone and horizontal applications and can be directly connected to connectors, thus saving installation time and reducing connection costs.

ZORA brand fiber can meet the highest performance requirements of data communication, voice and video network requirements, ZORA indoor fiber is suitable for any indoor application. The 900M compact buffer protective layer is designed to withstand frequent twists and complex wiring, both of which are typical in indoor environments.

This cable offers low attenuation and excellent bandwidth, ensuring reliable and fast data transmission. Its tight - buffered construction makes it easy to install and handle indoors. The flame - retardant outer jacket provides safety in building environments, making it a top choice for high - speed, secure indoor networking needs.

Features

- Number of fiber cores: 4-24
- Extremely flexible compact buffer protective layer design
- ATM, FDDI, Fiber Channel performance guarantee
- As a reinforcing material, aramid fiber has excellent tensile strength

The skin is anti-corrosion, waterproof, anti-ultraviolet radiation, and has the advantages of environmental protection

The Indoor 10 Gigabit OM3 - 330 Multimode Optical Cable is a high - performance solution for indoor network connections. It features a 50/125μm fiber core and cladding, optimized for 10 Gigabit Ethernet applications over short to medium distances. With a 330 - meter reach at 10Gbps, it's ideal for data centers, enterprise networks, and campus backbones.

Indoor 10 - Gigabit OM3 - 330 Multimode Optical Cable features high - speed data transmission, excellent bandwidth performance, and good signal integrity. It has a maximum reach of 330 meters at 10 Gbps, which is suitable for short - to - medium - range indoor applications. The cable uses 50/125 - μm multimode fiber, which offers low attenuation and high resistance to electromagnetic interference, ensuring reliable data transfer in harsh electromagnetic environments. Additionally, its compact and flexible design facilitates easy installation and routing within buildings.

Conform to standards

- Between buildings
- Backbone network
- Drop ceiling
- 10Gbps 40 / 100Gbps Ethernet
- 550MHz broadband video
- Storage Local Area Network (SAN), data center
- Suitable for any indoor wiring needs

Applications

- ANSI/TIA 568-2.D
- ISO/IEC11801 / CENELEC EN 50173
- IEC60794-1 / IEC60332-3C

Ordering information

Product number	Product name	Packing specification
ZRC51SM-4	ZORA 4-core indoor OS2 fiber optic cable	2 km/roll
ZRC51SM-6	ZORA 6-core indoor OS2 fiber optic cable	2 km/roll
ZRC51SM-8	ZORA 8-core indoor OS2 fiber optic cable	2 km/roll
ZRC51SM-12	ZORA 12-core indoor OS2 fiber optic cable	2 km/roll
ZRC51SM-24	ZORA 24-core indoor OS2 fiber optic cable	2 km/roll

Color Configuration

Fiber color - First set of 12 cores

Class Number	1	2	3	4	5	6
Color	Blue	Orange	Green	Brown	Gray	White
Class Number	7	8	9	10	11	12
Color	Red	Black	Yellow	Purple	Pink	Blue

Technical specification

Structure	
Outer skin and cushioned protective layer	
Skin material	Low smoke non-toxic
Cable reinforcement material	Aramid fibre
Main buffer layer compact buffer	250 microns \pm 5 microns 900 microns \pm 50 microns Fiber size
Fiber size	9/125 microns

Technical data - Mechanical	
Maximum tensile strength (IEC794-1)	
Install	660N
Operation	220N
Compressive strength	1000N / 100mm
Minimum bending radius (IEC794-1)	
Mount	20 x diameter

Operates	10 x diameter
Operating Temperature	
Mount	-20°C ~ +60°C
Operates	-20°C ~ +60°C

Technical data - Physics						
Fiber core number	2	4	6	8	12	24
Cable diameter (mm)	4.0±0.20	4.8±0.25	5.1±0.25	5.6±0.25	6.2±0.25	8.1±0.30
Cable weight (kg/km)	About equal to 14	About equal to 20	About equal to 23	About equal to 30.8	About equal to 37	About equal to 59.9

Technical Data - Transmission								
Fiber type	Wane				OFL Bandwidth	Effective modal bandwidth	10G Ethernet SX	Minimum Bending Radius
Conditions	1310/1500 nm		850/1300 nm			850 nm	850nm	
	Normal	Maximum	Normal	Maximum				
Single Bit	dB/kilometers	dB/kilometers	dB/kilometers	dB/kilometers	MHz/kilometers	MHz/kilometers	M	MM
G652D	0.36/0.22	0.5/0.4	---	---	---	---	---	16
G657A1	0.36/0.22	0.5/0.4	---	---	---	---	---	10
G657A2	0.36/0.22	0.5/0.4	---	---	---	---	---	7.5
50/125	---	---	3.0/1.0	3.5/1.5	≥500/500	---	---	30
62.5/125	---	---	3.0/1.0	3.5/1.5	≥200/500	---	---	30
OM3	---	---	3.0/1.0	3.5/1.5	≥1500/500	≥2000	≤300	30
OM4	---	---	3.0/1.0	3.5/1.5	≥3500/500	≥4700	≤550	30
BI-OM3	---	---	3.0/1.0	3.5/1.5	≥1500/500	≥2000	≤300	7.5
BI-OM4	---	---	3.0/1.0	3.5/1.5	≥3500/500	≥4700	≤550	7.5

FAQ

1. What is the maximum transmission distance of the Indoor 10 Gigabit OM3 - 330 Multimode Optical Cable?

OM3 - 330 Multimode Optical Cable?

The OM3 - 330 Multimode Optical Cable can support a maximum transmission distance of 330 meters at a data rate of 10 Gigabits per second. This makes it suitable for short - to - medium - range indoor applications such as within a data center or across a building floor.

2. Is the OM3 - 330 cable compatible with my existing network equipment?

Most modern network equipment that supports multimode fiber optic connections is compatible with OM3 - 330 cables. However, it's crucial to check the specifications of your network devices, such as switches, routers, and servers. They should support 10 - Gigabit Ethernet over multimode fiber and be compliant with the relevant standards like IEEE 802.3ae for 10GBASE - SR.

3. How difficult is it to install the OM3 - 330 Multimode Optical Cable?

Installation of the OM3 - 330 cable is relatively straightforward. Its tight - buffered construction allows for easy handling. However, proper cable management practices should be followed. You need to ensure that the cable is routed neatly, avoiding sharp bends. Termination requires specialized tools like fiber optic cleavers and fusion splicers or pre - terminated connectors. If you're not experienced in fiber optic installation, it's advisable to hire a professional installer.

4. What is the difference between OM3 - 330 and other multimode optical cables?

OM3 - 330 cables are optimized for 10 - Gigabit Ethernet applications with a specific reach of 330 meters at 10Gbps. Compared to OM1 and OM2 cables, OM3 offers higher bandwidth and lower attenuation, enabling faster data transfer over longer distances. OM4 multimode cables, on the other hand, can support even longer distances at 10Gbps (up to 550 meters) and are also better suited for 40Gbps and 100Gbps applications over short - range multimode links.

5. Can the OM3 - 330 cable be used in an outdoor environment?

The OM3 - 330 Multimode Optical Cable is designed for indoor use. Using it outdoors exposes it to environmental factors such as moisture, temperature variations, and physical damage from UV rays and weather. For outdoor applications, you should use cables specifically designed for outdoor use, which have additional protective layers against these elements.

6. How do I maintain the OM3 - 330 Multimode Optical Cable?

Regular inspection is key to maintaining the cable. Check for any signs of physical damage, such as cuts, kinks, or fraying. Keep the cable clean by using appropriate fiber optic cleaning tools to remove dust and debris from the connectors. Also, ensure that the cable is not being subjected to excessive stress or bending. If any issues are detected, repair or replace the affected sections promptly to maintain optimal performance.