ZORA indoor 10 Gigabit OM2-150 Multimode optical cable

ZORA Indoor LSZH OS2

Indoor 10 Gigabit OM2-150 Multimode optical cable Overview

Indoor 10 Gigabit OM2-150 Multimode optical cable" refers to a specific type of fiber optic cable designed for indoor use, capable of supporting 10 Gigabit Ethernet speeds over a certain distance, typically using OM2 multimode fiber specifications.

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.

Multimode fiber has a larger core (50 μ m or 62.5 μ m) compared to single-mode fiber (9 μ m), allowing multiple light modes to propagate. This makes it suitable for shorter distances (e.g., within buildings or campuses) and typically more cost-effective than single-mode fiber for such applications.



ZORA brand Indoor OS2 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.

Indoor 10 Gigabit OM2-150 Multimode optical cable" would typically be a duplex (two-fiber) cable with connectors (e.g., SC-SC, LC-LC) on both ends, featuring an orange jacket (standard for OM2). It's designed for indoor networking, such as connecting switches, routers, or servers in a local area network (LAN)

Indoor 10 Gigabit OM2-150 Multimode optical cable" is a 50/125 μm multimode fiber optic cable, likely 150 meters long, designed for indoor environments. While OM2 supports 10 Gbps up to 82 meters, the 150-meter length implies it's either intended for 1 Gbps (fully supported) or requires specific hardware for 10 Gbps. For guaranteed 10 Gbps over 150 meters indoors, OM4 would be a better choice. If you have a specific product in mind,

its documentation would clarify the intended use!

Features

- Number of fiber cores: 4 to 24
- Extremely flexible compact buffer protective layer design
- ATM, FDDI, Fiber Channel performance guarantee
- As a reinforcement material, aramid fiber has excellent tensile strengt
- Anti-corrosion, waterproof, anti-ultraviolet radiation, has the advantages of environmental protection

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 ± 5 microns 900 microns ± 50 microns |
| 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) | | | | | | | |
| Install | 20 x Diameter | | | | | | |
| Operation | 10 x Diameter | | | | | | |

| Operating temperature | |
|-----------------------|---------------|
| Install | -20°C ~ +60°C |
| Transport | -20°C ~ +60°C |

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

Indoor 10 Gigabit OM2-150 Multimode Optical Cable Features

High-Speed Support: Capable of 10 Gigabit Ethernet for fast data transfer up

to 82 meters.

Multimode OM2 Fiber: Uses 50/125 μ m core for short-range indoor

networking.

150-Meter Length: Pre-terminated at 150 meters for flexible indoor

installations.

Indoor Design: Features a lightweight, flexible jacket (e.g., PVC or LSZH) for

safe indoor use.

Wide Compatibility: Works with LED or VCSEL transceivers for 1 Gbps or 10

Gbps connections.

| Technical Data - Transmission | | | | | | | | | | |
|-------------------------------|--------------------------|-------------|----------|-----------|-------------------|---------------------------------|--------------------|------------------------------|--|--|
| Fiber type | | w | ane | | OFL Bandwid th | Effective modal bandwidth | 10G Ethernet SX | Minimum Bending Radius | | |
| | 1310/1500 nm 850/1300 nm | | | | | | | | | |
| Condit ions | Normal | Maximu m | Normal | Maximum | | 850 nm | 850nm | | | |
| Singl | dB/kilom | dB/kilom | dB/kilom | dB/kilome | MHz/kilomet | MHz/kilomete | м | ММ | | |
| e Bit | eters | eters | eters | ters | ers | rs | IVI | IVIIVI | | |
| G652D | 0.36/0.22 | 0.5/0.4 | | | | | | 16 | | |
| G657A 1 | 0.36/0.22 | 0.5/0.4 | | | | | | 10 | | |
| G657A 2 | 0.36/0.22 | 0.5/0.4 | | | | | | 7.5 | | |
| 50/12 5 | | | 3.0/1.0 | 3.5/1.5 | ≥500/500 | | | 30 | | |
| 62.5/1 25 | | | 3.0/1.0 | 3.5/1.5 | ≥200/500 | | | 30 | | |
| ОМЗ | | | 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-OM 3 | | 3.0/1.0 | 3.5/1.5 | ≥1500/500 | ≥2000 | ≤300 | 7.5 |
|------------|------|---------|---------|-----------|-------|------|-----|
| BI-OM 4 | | 3.0/1.0 | 3.5/1.5 | ≥3500/500 | ≥4700 | ≤550 | 7.5 |

FAQ

What is the maximum speed supported by this cable?

It supports up to 10 Gigabits per second (10 Gbps) using the 10GBASE-SR standard, but only up to 82 meters. For 1 Gbps, it can handle the full 150-meter length.

What is the difference between Indoor OS2 and outdoor OS2 cables?

No, OM2 fiber is limited to 82 meters for 10 Gbps. To achieve 10 Gbps over 150 meters, you' d need OM3 or OM4 fiber or specialized equipment like 10GBASE-LRM transceivers.

What type of fiber is used in this cable?

It uses OM2 multimode fiber with a 50 μm core and 125 μm cladding (50/125 μm), designed for short-range applications.

Is this cable suitable for outdoor use?

No, it's designed for indoor use only. It lacks the weatherproofing and durability features needed for outdoor environments.

What connectors does this cable typically have?

It commonly comes with duplex connectors like LC-LC or SC-SC, depending on the specific product, for easy connection to networking equipment.

What is the main advantage of using this cable indoors?

It offers a cost-effective solution for high-speed networking (up to 10 Gbps) over short distances, with a flexible and lightweight design ideal for offices or data centers.