ZORA Indoor 10 Gigabit OM4-550 Multimode Optical Cable

ZORA Indoor 10 Gigabit OM4-550 Multimode Optical Cable Overview

ZORA's High-performance OM4-550 multimode optical cable for indoor use, supporting 10 Gigabit speeds. Reliable, durable, and ideal for data centers and enterprise networks.

An "Indoor 10 Gigabit OM4-550 Multimode Optical Cable" is a type of fiber optic cable designed for indoor use, capable of supporting 10 Gigabit Ethernet speeds over distances up to 550 meters, using the OM4 multimode fiber standard

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

ZORA brand indoor fiber is suitable for backbone and horizontal applications and can be directly connected to connectors, saving installation time and reducing connection costs.

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℃ ~ +60℃
Transport	-20℃ ~ +60℃

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
	1310/1500 nm		850/1300 nm			850 nm	850nm	
Conditions	Normal	Maximu	Normal	Maximum				

		m						
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

What is the primary use of the OM4-550 cable?

It's designed for high-speed indoor networking, supporting 10 Gigabit

Ethernet up to 550 meters in data centers and enterprise environments.

How does OM4-550 differ from OM3 cables?

OM4-550 offers higher bandwidth (4700 MHz·km vs. 2000 MHz·km for OM3) and longer reach (550m vs. 300m for 10Gbps), making it superior for advanced applications.

What types of environments suit this cable best?

It's ideal for indoor settings like data centers, office buildings, and telecom rooms where high data rates and reliability are critical.

Can it support speeds beyond 10 Gigabit?

Yes, it supports 40Gbps and 100Gbps up to 150 meters, providing flexibility for future network upgrades.

What is the attenuation specification for OM4-550?

It has a maximum attenuation of 3.0 dB/km at 850nm, ensuring lower signal loss compared to OM3's 3.5 dB/km.

Is the OM4-550 cable backward compatible?

Yes, it's fully compatible with OM3 and earlier multimode fibers, allowing

seamless integration into existing systems.

What connectors work with this cable?

It supports various connectors like LC, SC, and MPO, offering versatility for

different network setups.

Why choose OM4-550 for indoor applications?

Its high bandwidth, extended reach, and durability make it a cost-effective,

future-proof solution for indoor high-speed connectivity needs.