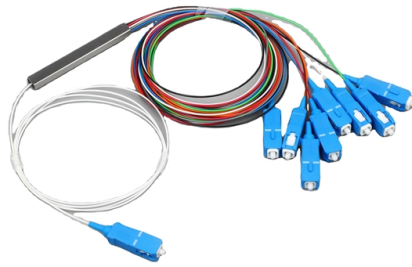


Single-mode fiber optic transceiver multimode



Overview

Single mode fiber, short as SMF, is a fiber cable that only allows one mode of light to transmit. Typically, this fiber includes a small light-carrying core of about $9\mu\text{m}$ diameter. These feature a small modal dispersion for vast-distance signal transmission. In contrast with multimode fiber, single mode enables the concentration of light to travel q. Unlike single mode, multimode fiber (MMF) allows multiple light modes to transmit and pass through. Typically, this fiber includes a large light-carrying core of about $50\mu\text{m}$ or $62.5\mu\text{m}$ diameter. That makes manufacturing easier and offers a lower cost ratio on the same length. However, modal dispersion limits the most significant length of transmission. Now that we have learned their definitions, it is time to compare their differences. Based on the different factors, we took the below benchmarks into their comparison.

Q: How far can single mode fiber go?

A: For most applications, the maximum distance of single mode cable is around 160 kilometers. However, the dispersion-compensating fibers can support more than 200 kilometers.

Q: How far can multimode fiber go?

A: It varies with the data speed and fiber type. Take the common OM2 as an example. It supports a maximum of 550m at 1Gbps and 82m at 10Gbps. However, the maximum distance for all multimode fibers will be less than 2km.

Q: What is the acceptable dB loss for single mode fiber?...

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Model Number SFP 10G Brand Name Unionfiber Place of Origin Guangdong, China
Warranty Time 3 Years Product name SFP Module Type Fiber Optic Transceivers
Connector Type LC / SC / MPO

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