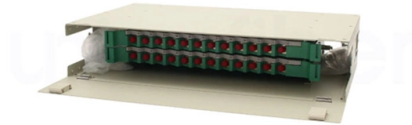


Low temperatures affect optical cables



Overview

When the temperature drops, the water freezes, and ice forms around the fiber – with the large resulting forces causing the fiber to deform and bend. This degrades the signal passing through the fiber, at the very least reducing the bandwidth, but quite possibly stopping data. Optical fiber's ability to withstand extreme heat and cold directly impacts signal integrity, network reliability, and maintenance costs, especially in harsh environments like industrial facilities, outdoor installations, and data centers. Here's how cold weather can. Tiny amounts of grease, dirt or moisture can affect the transmission of light. While the fibers themselves are protected by an acrylic layer, the connectors joining each fiber can be vulnerable in harsh environments. Keep reading to learn more! What are Fiber. The temperature limit for fiber optic cable typically ranges from -40°C to 70°C , although some cables may have a wider temperature range depending on their design and intended use. Specialized cables can also be manufactured to withstand higher or lower temperatures as needed for specific.



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