

Low-loss SC APC fiber optic connectors for security applications

Article Overview

SC/APC connectors offer ultra-low insertion loss (≤ 0.15 - 0.3 dB) and high return loss (≥ 65 dB), making them ideal for secure, high-precision fiber optic networks.

Key Features

Angled Physical Contact (APC) Design: SC/APC connectors feature an 8° angled ferrule end-face that minimizes back reflection by redirecting reflected light away from the fiber core, which is critical in high-bandwidth and sensitive security systems. This design ensures return loss values typically above 65 dB, significantly reducing signal degradation compared to standard SC/PC connectors.

Low Insertion Loss: These connectors provide very low insertion loss, typically ≤ 0.15 dB for single-mode fibers and ≤ 0.2 dB for multimode fibers, ensuring maximum signal transmission efficiency across both short and long fiber spans.

Push-Pull Latching Mechanism: SC/APC connectors retain the SC interface's convenient push-pull latch, allowing fast, tool-free installation and removal while maintaining a secure connection, which is advantageous for field deployment in security networks.

High Durability and Reliability: SC/APC connectors are rated for minimal performance change (

Discover the 8 essential fiber optic connector types (LC, SC, FC, etc.), their key

Compare APC vs. UPC connector performance for low-loss fiber management. Find out which offers superior return

In fiber optic communications, precision isn't a luxury -- it's a necessity. And when it comes to connector end-face

Fiber connectors are connectors used as terminations of optical fiber cables. They are widely used in

SC APC fiber optic cables are designed to reduce signal loss and reflection, ensuring reliable data transmission. This makes them

The SC/APC connector is a fiber optic connector with a push-pull latching mechanism that provides quick insertion and removal while

LongXing Fast connectors make fiber terminations fast, easy and reliable. These fiber optic connectors offer terminations without any

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With fast installation time and low insertion loss, the OptiSnap Connector system provides a good alternative to fusion splicing.

This product has multiple variants. The options may be chosen on the product page.

As for return loss, APC connectors feature the lowest back reflection. The back reflection is

For a UPC connection, it is normally -55 dB. When connectors are unmated--such as unused ports in an FTTP distribution

Interconnect history, design, types, applications, polishing considerations and properties comparisons Since the 1980s,

An SC/APC fiber optic adapter is a coupling device that allows two SC/APC connectors to be mated inside patch panel

For modern deployments, field-installable SC APC connectors offer a fast, convenient

HYC designs, manufactures and supplies a series of SC secure lockable fiber optic connectors. Get a quote from

The APC line of products offer top performance and high repeatability. Corning's 8-degree APC connectors are fully

Web: <https://www.morwarreconst.co.za>

