

Meeting The Demands of Today's Networks with Fiber

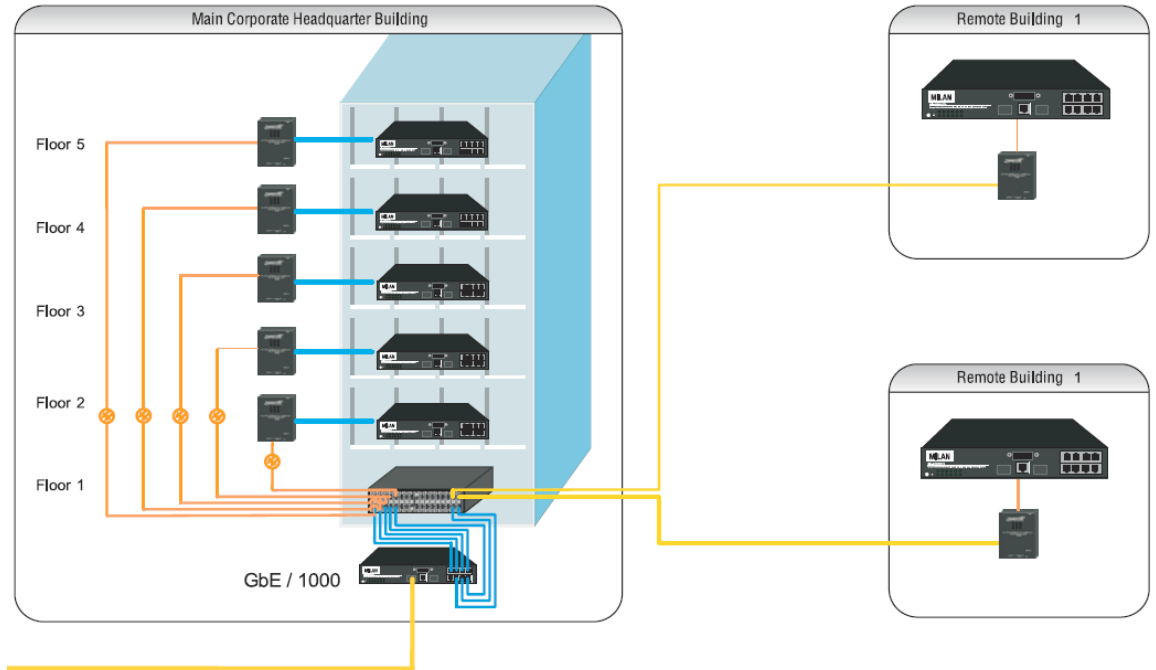
The demands on today's Enterprise networks are perpetually on the rise. Whether it's adding new users or new capabilities, the networks' performance requirements are often out pacing the original design of the cabling infrastructure. As organizations have adopted new technology they have often found themselves incurring the expense of upgrading their cabling plant. Network technology standards have changed dramatically over the past 15 years (10MB, 100MB, 1Gig and now 10G). Every time network speeds increase, the copper manufacturers come out with new cable technology to meet the demand. Unfortunately, organizations attempting to keep up with these standards are forced to spend significant amounts of money every 4-5 years because their current copper infrastructure will not support the new technology that is being introduced. Due of these challenges, more and more IT Professionals are recognizing the benefits of migrating to a fiber-based cabling system.

Fiber optic cabling can alleviate these expensive upgrades by providing a more future proof solution. With virtually unlimited bandwidth support, fiber can handle today's network speeds as well as tomorrows. Beyond its bandwidth capacity, fiber also offers additional benefits over copper such as being able to transmit greater distances and the ability to isolate data from sources of noise and interference. These benefits put fiber in the position of offering real advantages to large enterprise networks and campus area networks.

As organizations start to take a closer look at fiber they soon realize that it's not as simple as just replacing their cabling, they will need new equipment to interface with the fiber, equipment that is often much more expensive than its copper equivalents. To reduce the expense of deploying fiber cable, many similar applications have turned to media converters for help.

Benefits of Fiber

- Future proof your network
- Greater transmission distance
- Security
- Less noise and interference



Media converters can be used to establish links between the new fiber cabling and the existing copper based network devices. With media converters, users are now able to connect fiber to their current RJ-45 based switches, routers, and NICs - greatly reducing the expense of a fiber upgrade. Even when organizations have invested in fiber-based devices, these devices may not support the fiber type or transmission distance needed for a particular application. Again, media converters can play a role in interfacing between different cabling technologies. Media converters are available with a variety of options including support for LAN protocols as well as voice grade, serial lines, and analog video. Users can choose from various fiber interfaces and transmission distances with support for ST, SC, LC connectors and data transmissions up to 120km.