

# Ethernet Fiber Media Converter

An [Ethernet](#) fiber media converter is a device that allows a connection to be made between an Ethernet and a [fiber optic cable](#). This type of connection is important in situations where both cable types are used in a single household or office. Because telephone companies often use [fiber optic cables](#) to deliver telephone and Internet service to their customers, an Ethernet fiber media converter is sometimes necessary to bridge the gap between a telephone line and a computer. In most cases, a modem or router does this. However, when an Ethernet cable is run directly from a telephone line to a computer, an Ethernet fiber media converter is required.

## How an Ethernet Fiber Media Converter Works

Ethernet fiber media converters translate the electricity passing through a copper Ethernet cable into a pulse of light that can be transferred over a fiber [optic cable](#) and vice versa. Ethernet fiber media converters are usually interchangeable with several different Ethernet and fiber [optic cable](#) types. For example, most Ethernet fiber media converters support multi-mode, single-mode, and single-strand [fiber optic](#) connections. In most cases, an Ethernet cable is simply plugged into one side of the Ethernet fiber media converter and a [fiber optic](#) cable is fitted into the other side on a wall mount.



## Applications

Ethernet fiber media converters allow fiber optic connections to be made over a long distance without disrupting the fiber optic cable at its endpoints. They are critical when using fiber optic connections because the fiber optic

cable itself cannot be bent or mishandled without interrupting the entire connection. Ethernet fiber media converters are also economical as they provide a fiber optic cable's transfer rates and have an Ethernet cable's durability and stability.

### **Advantages**

Ethernet fiber media converters are often mounted to the wall near or directly over a telephone jack and do not need to be tampered with once installed. They provide a fiber optic connection's extremely high speeds without having to install a complicated series of fiber optic cables. Ethernet fiber media converters usually have their own power adapter and can transfer several gigabytes of data at a time. In fact, Ethernet fiber media converters can be purchased for commercial purposes that can house and manage up to 19 different connections simultaneously.

**Source:** <http://www.tech-faq.com/ethernet-fiber-media-converter.html>