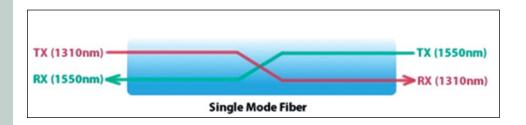
Singlemode / Single Fiber
Connect copper ports over a single fiber strand
( also referred to as "Bi-Directional" BiDi or WDM)

MediaConvertersWDM\_AN\_ENB01W

## Singlemode / Single Fiber Connect copper ports over a single fiber strand (also referred to as "Bi-Directional" BiDi or WDM).

When Single Strand fiber is used, a pair of Single Fiber Media Converters is needed for the copper to fiber conversion. LanPro Single Fiber Media Converters are also referred to as "Up/Down" models. An "Up" must be matched with a "Down" peer to deal with transmit and receive frequencies separately.



The majority of installations for singlemode fiber media converters are of the "dual connector" or "dual fiber" type where one fiber connection is used for transmit, the other for receive. These are physically "crossed" to match up the Transmit/Receive links.

However, to reduce costs, or where there are limits on available fiber, WDM technology may be utilized. WDM uses separate transmit and receive frequencies to communicate on a single fiber strand. WDM technology relies on the fact that optical fibers can carry many wavelengths of light simultaneously without interaction between each wavelength. Thus, a single fiber can carry many separate wavelength signals or channels simultaneously.

So remember, if Single Strand fiber is used, you will need an "Up" Media Converter on one side and a "Down" Media Converter on the other for copper to fiber conversion.

We offers a wide variety of Single Fiber ("Up/Down") Media Converters to connect 10BaseT, Fast Ethernet and Gigabit to single fiber. Whether you need Managed or Unmanaged, Standalone or Modular Chassis Based, 20km or 120km, LanPro has the right model to meet your fiber conversion requirement.