



Multi-Wavelength Transmission System

More room for HD, VoIP, VoD, HSD and other broadband services, without installing new fiber.

As the pressure mounts to deliver more services over existing bandwidth, network operators can rely upon the Scientific Atlanta® multi-wavelength system solution that enables dramatic bandwidth increase over a single optical fiber.

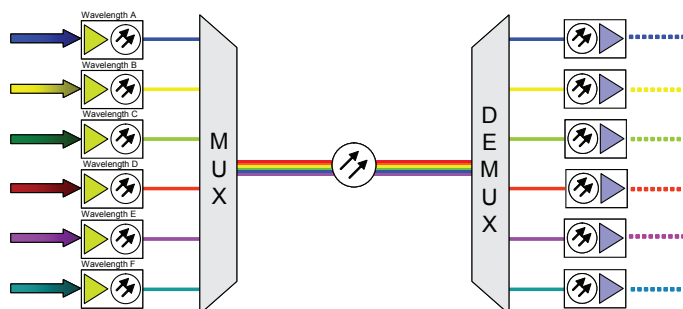
This system uses Prisma II™ forward transmitters capable of co-propagating multiple wavelengths in the 1320nm to 1335nm window down a single fiber using Wavelength Division Multiplexing, with each transmitter carrying a full RF load. The transmitters, housed in a high density module, provide increased bandwidth capacity per fiber for the expanding service demands of HDTV, VoIP, VOD and high-speed data. These transmitters are ideal for segmentation of node service areas because they enable the reuse of existing fiber up to six times over distances up to 30 kilometers.

Scientific Atlanta provides both forward transmission and bi-directional systems to provide flexible multi-wavelength solutions designed to match the network operators' specific needs as they increase the availability of the services today's consumers demand.

Multi-Wavelength Forward Transmission System

System Highlights

- Six wavelengths available (1320 to 1335nm)
- Optical output power levels of 4, 6, 8, 10, 12 dBm, up to a 30 km link
- Existing fiber efficiency can be dramatically increased
 - Multiple transmitters can service existing fiber architectures
 - Allows for service group segmentation for fiber-starved areas
- Fiber recovery results from replacing separate point-to-point links using dedicated fibers with a single-fiber multi-wavelength system. The now un-used fibers can be reclaimed for new revenue-generating applications.
- New and/or expanded customer services can be added with more on-demand capacity, VoIP, and increased HSD rates
- Additional wavelengths may also be used for redundancy purposes, increasing network reliability
- Passive elements, critical for link performance, are fully qualified for outdoor/ aerial mount environments
 - Single channel, 2-channel, 4-channel, and 6-channel versions
 - LGX and cassette modules
 - SC/APC connectors standard (other styles available upon request)



Multi-Wavelength Bi-Directional Transmission System

System Highlights

- Single fiber solution that optimizes the bandwidth in a 4x4 node configuration
 - Four (4) forward wavelengths (1320 to 1335 nm) and four (4) reverse wavelengths (1471nm to 1611 nm)
- Fiber recovery results from replacing separate point-to-point links using dedicated fibers with a single-fiber multi-wavelength system. The now un-used fibers can be reclaimed for new revenue-generating applications.
 - New and/or expanded services can be added with more on-demand capacity, VoIP, and increased HSD rates
- Existing fiber efficiency can be dramatically increased
 - Multiple transmitters can service existing fiber architectures
 - Allows for service group segmentation for fiber-starved areas
- Optical output power levels of 4, 6, 8, 10, 12 dBm, up to a 30 km link
- Passive elements, critical for link performance, are fully qualified for outdoor/ aerial mount environments
 - 4-channel forward and 4-channel reverse, 2-channel forward and 2-channel reverse (with expansion port)
 - LGX and cassette module
 - SC/APC connectors standard (other styles available upon request)

