

Network Multiplexing

BTI 7000 Series



BTI offers network multiplexing filters to address a wide variety of network capacity and site wavelength add/drop requirements. The portfolio provides both Coarse Wavelength Division Multiplexing (CWDM) and Dense WDM (DWDM) support to efficiently and cost effectively multiply the capacity of existing fiber infrastructures. Network Multiplexing modules act as integrated components within the BTI 7000 Series to scale networks with WDM virtual fiber.

Network Multiplexing Family

BTI's passive multiplexing elements can achieve a full add/drop of up to 40 DWDM channels and/or 16 CWDM channels that cover BTI's entire wavelength plan. BTI's family of mux/demux modules provide band-based wavelength add-drop of up to 8 DWDM wavelengths or 4 CWDM wavelengths and can be cascaded together using an expansion port architecture to provide modular and scalable add/drop functionality. BTI's OADMs (optical add/drop modules) provide sub-band granularity adding or dropping 1, 2 or 4 channels at any site within the network. CWDM to DWDM hybrid combination can be configured using the CWDM/DWDM coupler/splitter, which expands the capacity beyond BTI's CWDM system. The 40ch DWDM mux/demux module allows add/drop of up to 40 DWDM channels at a single node.



40ch DWDM mux/demux module

Features

CWDM and DWDM support

BTI's wavelength plans provide CWDM and DWDM options. ITU-compliant CWDM modules provide multiplexing for low to moderate channel count systems, whereas ITU-compliant DWDM modules provide multiplexing for high channel count systems or for systems interfacing with BTI's reach extension portfolio.

Both wavelength plans offer 10 Gbps channel solutions and provide immense capacity increases over direct-on-fiber alternatives. This means that 400G of capacity can now be placed onto a single fiber pair.

Modular and Scalable Architecture

BTI's filter modules provide a modular and scalable solution by offering 1, 2, and 4 channel Optical Add Drop Multiplexers (OADMs) as well as high capacity, band-based mux/demux modules. Expansion ports allow for direct interworking between passive network elements, meaning that your passive infrastructure can be tailored precisely to your needs.

40ch Mux/Demux

The 40ch mux/demux is a high density, low loss and standalone passive optical module that provides easy access to all 40 DWDM channels at a single site. It is ideally suited for high density add/drop requirements in DWDM networks.

Hybrid DWDM/CWDM Operation

A low-cost alternative to DWDM network architectures, a CWDM solution is ideal for low-channel-count networks. The BTI 7000 Series supports a CWDM & DWDM Splitter Combiner (CDSC) for use in networks transitioning from CWDM to DWDM. Exclusive CWDM and DWDM splitter/combiners are also available, and can be used as a coupler to combine signals, or as a splitter to divide a signal.

Modules Hardened For Outside Plant Applications

Modules are environmentally hardened for outside plant deployments, meeting the Telcordia standard GR-3108 requirement for extended temperature of -40°C to +65°C.

