

FLEXTUNE™ SELF-TUNING FUNCTIONALITY

As bandwidth demand continues to increase, service providers are adding more Dense Wavelength Division Multiplexing (DWDM) solutions within their networks. Many challenges can arise if fixed wavelength pluggable transceivers are used, such as inventory and sparing issues.



FEATURES

- Significantly simplifies the network deployment of Dense Wavelength Division Multiplexing (DWDM) transceivers
- Saves hours of set-up and installation time
- Reduces complexity and confusion as well as fiber tracking requirements

APPLICATIONS

- Remote PHY DWDM Networks
- DWDM Mobile Front-haul Networks
- Point to Point DWDM Networks

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Wavelength-tunable transceivers offer a more efficient solution compared to fixed wavelength transceivers and avoid the need to know or predict which wavelengths are needed for a specific installation. However, even with wavelength-tunable transceivers, technicians still need to track and identify optical Mux/Demux fibers, and program the correct wavelength into each module on site. This could take hours depending upon how organized the fibers are and how many transceivers need to be programmed.

Coherent's solution to this issue is called FlexTune™, an automatic transceiver wavelength tuning feature which can significantly reduce provisioning time and operating expenses when deploying DWDM transceivers. Using Coherent-patented technology, each transceiver on a DWDM optical link can self-tune to the correct wavelength determined by its physical connection to the passive mux/demux infrastructure, and without assistance by the host system or technicians. This greatly simplifies set-up and saves hours of installation time, by eliminating the need of fiber tracking or labeling on patch panels.

Technicians simply insert the tunable DWDM transceivers with the pre-installed FlexTune™ capability, into any host port on both ends of the link and connect them to any of the optical mux/demux ports with fiber optic patch cables. The firmware contained within the transceivers determines the proper wavelengths to connect each host port to its remote end of the link, reducing provisioning time from hours to only a few minutes. This can result in significant OpEx savings for service providers in metro and access applications which use DWDM such as mobile front-haul, Remote PHY, and data center interconnections (DCI).

FlexTune™ is available now on Coherent tunable SFP+ transceiver modules.