DATA SHEET

XTM SERIES

10G OTN MUXPONDER

Effective OTN Aggregation of Multiple Traffic Formats

The 10G Optical Transport Network (OTN) Muxponder (MXP-10GOTN) is a part of the Infinera XTM Series. The 10G OTN Muxponder enables aggregation of up to 10 client services to a 10G signal, thus saving wavelengths in the network. With its small footprint and pluggable optics, it is suitable for deployment in all parts of the network, from CWDM access nodes to DWDM core networks.

True OTN Mapping and Transport

The 10G OTN Muxponder supports the latest technology for mapping and transporting services according to ITU-T G.709 standards, including GbE-optimized ODU0 mapping, as well as generic ODUflex container.

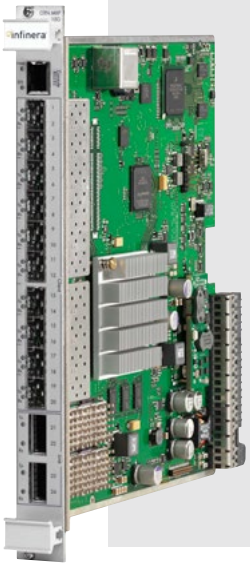
This enables the 10G OTN Muxponder to be deployed both in greenfield networks and in existing optical transport network (OTN) environments.

Since it fulfills the multiplexing hierarchy of OTN standards, the applications reach beyond standard point-to-point networks with the ability to hand off aggregated services at an OTU2 level at a single interface.

The standardized mapping of any service makes the network easier to plan and operate, which lowers the total cost of ownership.

Advanced Monitoring and Management Capabilities

The service monitoring capabilities built into the 10G OTN Muxponder, where performance evaluating bytes follow the service from ingress to egress, make it an ideal unit for business wholesale applications. Any type of Layer 1 service can be monitored end to end through any complex multi-vendor OTN network at any time.



Key benefits:

- Cost-efficient and compact aggregation of client signals to an OTU2 line signal
- True OTN mapping of services, including the latest standards (ODU0 and ODUflex)
- Flexible client configuration allows one board for all service aggregation and reduces operational cost
- Full G.709 support enables multi-vendor environment deployment
- Technology agnostic. Pluggable transceivers enable usage in both CWDM and DWDM networks
- Tunable optics for full flexibility and cost-efficient spares management
- Built-in end-to-end service monitoring improves service level agreement (SLA) management
- Low power design assures low total cost of ownership

This ensures a high degree of SLA management and SLA-based services, while also providing simple and reliable troubleshooting of a service.

The 10G OTN Muxponder supports multiple embedded management channels on different levels, which makes it possible to manage a remote node or network through another OTN network. This simplifies the operational environment of the management plane within the network.

Flexible Configuration

The 10G OTN Muxponder provides easy and flexible configuration of client ports, which allows different and dynamic traffic combinations. This makes it suitable for multi-service aggregation in a one-board-for-any type of application, lowering the operational and spare part cost.

The usage of pluggable transceivers provides a high level of flexibility since the 10G OTN muxponder can be used in both CWDM and DWDM networks by selecting the appropriate type of XFPs.

The support for DWDM XFPs with tunable lasers further enhances the flexibility and cost efficiency.

The dual line ports provide support for protection of aggregated services. Both line ports provide forward error correction (FEC), which makes the 10G OTN Muxponder also suitable for amplified long-haul networks.

Tailored Network Element Options

The 10G OTN Muxponder can be mounted in any of the XTM Series chassis options:

- As a self-managed network element in a 1U TM-102 chassis
- As one of many traffic units in a TM-3000/II (11U) or TM-301 (3U) chassis

This enables a tailored setup depending on current and future capacity needs of the site.

Fig 1. 1U Collector Node with 1+1 Line Protection.

Low Power Design

A fully equipped 10G OTN Muxponder typically consumes 40 W. Low power consumption in combination with a small footprint reduces site costs and enables more capacity to be handled at sites with restrictions on power consumption, cooling and space.

Specifications

Supported Traffic Formats	STM-16/OC-48 Gigabit Ethernet 1 Gb/s / 2 Gb/s / 4 Gb/s Fiber Channel
Mapping and Multiplexing Technology	Full ITU-T G.709-compliant Client mapping: ODU0, ODU1, ODUflex Line format: OTU2
Performance Monitoring	SDH/SONET: Based on B1 Gigabit Ethernet and Fiber Channel: based on CRC and 8B/10B Collected every 15 min/24 h and presented according to G.826 End-to-end PM presentation
Protection	1+1 line protection. Non-revertive switching typically <50 ms 1+1 client/equipment protection
Power Consumption	Typically 40 W including optics
Misc. Line Interface Features	Management channels: GCC0, GCC1 and GCC2 Forward error correction: GFEC and EFEC Support of tunable XFPs
Interfaces	Client interfaces: SFP-based. Supporting MM, SM at 1310 nm/1550 nm, CWDM/DWDM Line interfaces: XFP 40 km/70 km CWDM or DWDM

Specifications and Features Are Subject to Change

Infinera