

7910/01 10G Transponder

A versatile 10 G Transponder

Key benefits:

- Plug and play
- Transparent transport of SDH/SONET, Gigabit Ethernet and SAN formats
- Multi-functional plug-in unit. Same hardware can be used as Transponder and Regenerator
- Technology agnostic. Pluggable transceivers enable usage in CWDM as well as DWDM networks.
- Low Power Design ensures low total cost of ownership

The 7910/01 Transponder is a powerful part of Transmode's TS-Series platform enabling optimized and cost efficient transport networks based on CWDM/DWDM technology.



Optimized for Metro/Access applications

The 7910 Transponder is an extremely powerful device for transport of 10 Gigabit Ethernet signals within enterprise and/or metro/access networks. The usage of pluggable optics (XFPs) enables the unit to be used in both CWDM access networks and amplified DWDM networks.

Based on Transmode's iWDM™ concept

The 7910 is based on Transmode's Intelligent WDM (iWDM) concept. iWDM will, for example, allow the unit to automatically detect the 10G protocol in use, simplifying installation and commissioning. In addition, iWDM enables the unit to be configured into different operational modes. The HW unit can be configured as a single Transponder or as a Regenerator, including functions that enables extension of networks via cascading, see figure below.

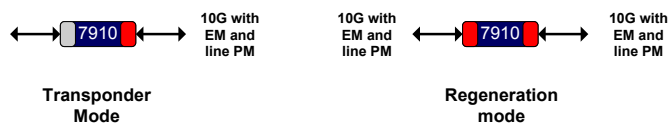


Fig. 1 Different operating modes of the 7910 giving HW flexibility

The HW flexibility reduces the Operational Expenditures (OPEX) as the same plug-in unit can be used for multiple purposes. The regenerator mode can also be used to convert from a CWDM to a DWDM network by using corresponding transceivers (XFPs) on the interfaces, as shown below.

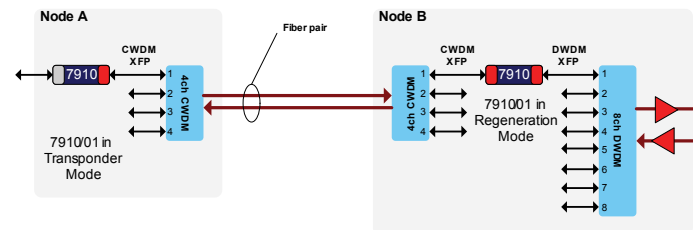


Fig. 2 7910 used as a CWDM to DWDM regenerator

Tailored Network Element options

The 7910 Transponder can be mounted in any of the active TS-Series chassis options;

- As a remotely managed network element in a 1U TS-100 chassis
- As one of many traffic units in a TS-1100 (6U) chassis

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

The embedded management channels enable easy remote management via the line signal. There is therefore no need to provide access to the customer DCN network if the 7910 is placed at a customer site.

Low Power Design

A fully equipped 7910 Transponder unit consumes less than 17W. 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.

Technical specifications:

Supported traffic formats	10 Gigabit Ethernet LAN STM-64/OC-192 10G Fiber Channel
Layer-1 performance monitoring	Gigabit Ethernet: Based on CRC and 8B10B coding errors Line signal: Block error based on coding and framing errors
Power consumption	Max 17W
Misc line interface features	Embedded management channels on line signal.
Operational modes	1x Transponder 1x Regenerator mode (with embedded management channels on all 2 line ports)
Released traffic formats	10 Gigabit Ethernet LAN STM-64/OC-192
Interfaces	Client interfaces: XFP MM, SM @ 1310nm/1550nm Line interfaces: XFP 40km/80km CWDM (8 channels), fixed DWDM (40 channels), tunable DWDM (80 channels)

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