

5900/01 10G Muxponder

A TDM multiplexer for multiple services

Key benefits:

- Plug and play, including automatic provisioning
- Transparent transport of Gigabit Ethernet and SAN formats
- Maximum wavelength utilization via Transmode's iWDM™ concept using 10 Gb/s line rate
- Technology agnostic. Pluggable transceivers enable usage in CWDM as well as DWDM networks
- SFP+ enabling low CAPEX, low power consumption and small footprint
- Low Power Design ensures low total cost of ownership

The 5900/01 10G Muxponder is a powerful part of Transmode's TS-Series platform enabling cost efficient transport networks based on CWDM/DWDM technology.



Optimized for Metro/Access applications

The 5900/01 10G Muxponder is an extremely powerful device for the Metro/access applications where low cost, compact design and low power consumption are crucial. The 5900/01 can be used together with a 5800/01 or 5810/01 muxponder in order to offer a multiservice 10G solution. The 5900/01 is also capable of directly supporting 4G FC / FICON together with GbE services.

The 5900/01 electrically multiplexes four GbE signals plus one 4.25 signal into one 10Gb/s wavelength channel. The client with 4.25Gb/s is used for either a 5800/01 Muxponder, a 5810/01 Multi-Service Muxponder, or a direct 4G FC / FICON service. The port dedicated for 5800/01 or 5810/01 Muxponders uses an Embedded Management channel which means the 58xx/01 and 5900/01 units can be located in two different locations within the network with full management support.

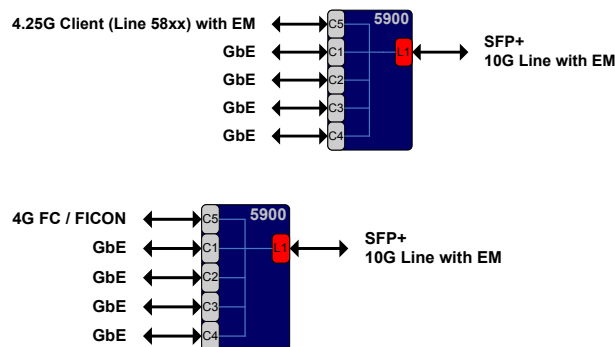


Fig. 1 The main operating modes of the 5900

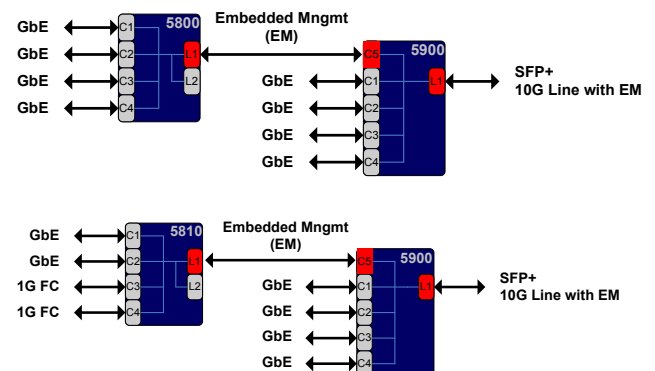


Fig. 2 5900 configured with 5800/01 and 5810/01 Muxponders

The 7910/01 10G Transponder can be used to regenerate the line signal of the 5900/01 Muxponder. The figure below shows an example where 8x GbE channels are carried over a point-to-point network with an intermediate regenerator node. All nodes can be remotely managed via the embedded management channels.

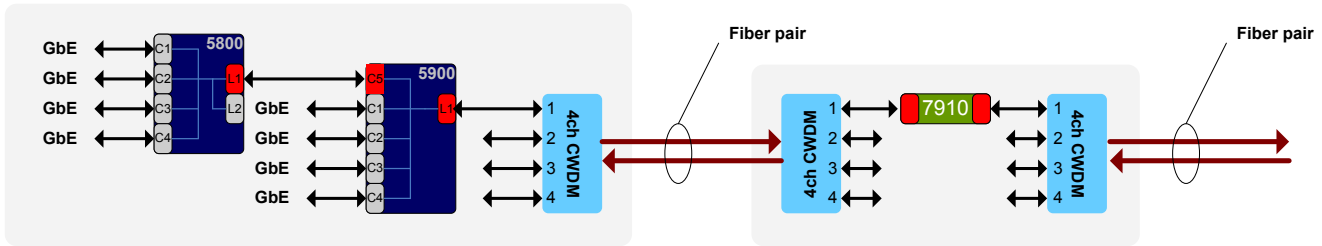


Fig. 3 7910 used as a regenerator for the 5900 line signal

Tailored Network Element options

The 5900/01 MXP can be mounted in any of the TS-Series two chassis options;

- 1U TS-100 chassis
- 6U TS-1100 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 7910 and 5900 line signals. There is therefore no requirement to provide access to the customer DCN network if the 5900/01 or 5800/5810 Muxponders are placed at a customer site.

Low Power Design

A fully equipped 5900/01 consumes less than 16W. 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. As an example, a 5900/01 mounted in a 1U TS-100 chassis will consume less than 26W.

Technical specifications:

Supported traffic formats	Gigabit Ethernet Fast Ethernet 4G FC / FICON 1 / 2 G FC, STM-1 and STM-4 also supported through 5810/01
Layer-1 performance monitoring	Gigabit Ethernet: Based on CRC and 8B10B coding errors Line signal: Block error based on coding and framing errors
Layer-2 performance monitoring	Channel utilization (%) on GbE clients
Power consumption	Max 16W worst case (with all client ports active and using DWDM SPFs)
Misc line interface features	Embedded management channels are available on line signal as well as the port dedicated for 5800/01 and 5810/01
Released traffic combinations	4xGbE and line signal of 5800/01 with 10G line signal 4xGbE and line signal of 5810/01 with 10G line signal
Interfaces	Client interfaces: SFP MM, SM @ 1310nm/1550nm versions covering ranges from 100m up to 15km. MultiRate 100Mb/s – 2,125Gb/s. SFP 4Gb/s 40km/70km CWDM (up to 16 channels) or 80km DWDM (up to 40 channels) Line interfaces: SFP+ 10Gb/s CWDM + DWDM 40 km + 80 km

The specifications and information within this document are subject to change without further notice. All statements, information and recommendations are believed to be accurate but are presented without warranty of any kind. Contact Transmode for more details.