

5820/01 4G Multi-Service Muxponder

A TDM multiplexer for multiple services and easy CPE deployment

Key benefits:

- Provides transparent transport of SDH/SONET, Gigabit Ethernet and SAN formats
- Enables high wavelength utilization using Transmode's iWDM™ architecture to achieve 4Gbps line rate
- Easy mounting in wall mount chassis, making it ideal for CPE usage
- Enables CPE standalone-mode deployments without the need for a Control Unit
- Plug and play and automatic provisioning providing easy and fast installation
- Pluggable transceivers enable usage in CWDM as well as DWDM networks
- Low Power Design ensures low total cost of ownership

The 5820/01 4G Multi-Service Muxponder is a powerful part of Transmode's TS-Series platform enabling optimized and cost efficient transport networks based on CWDM/DWDM technology.



Ideal for CPE standalone-mode deployments without the need for Control Unit (CU)

The 5820/01 is especially designed to work in standalone mode, i.e. a node without the CU board (6003). PM data and inventory information from the 5820/01 in standalone mode is presented in the GUI of the node with CU.

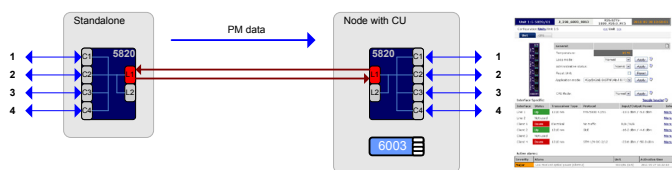


Fig. 1 The standalone 5820/01 can be mounted in a TS-9002/02 chassis without any CU or in TS-9001/01, see figure 2, (wall mount chassis with 1 slot)



Fig. 2 5820/01 mounted in TS-9001/01 wall mount chassis

Optimized for Metro/Access applications

The 5820/01 is an extremely powerful device for metro/access applications where multi-service support, compact design and low power consumption are crucial components. The 5820/01 is easily optimized for its purpose by initiating tailored traffic images. Different traffic combinations can be addressed while still maintaining low power consumption and the 4Gb/s line rate provides high utilization of the wavelength capacity. As an example, the 5820/01 can be configured to carry 2x Gigabit Ethernet signals plus 2x STM-1/OC-3 or STM-4/OC-12 signals, far more efficiently than traditional SDH/SONET solutions that would require multiple plug-in units to support this capacity.

The combination of SDH/SONET and Gigabit Ethernet is an ideal solution for mobile transmission networks where a combination of circuit switched and packet based connections is needed to/from the base station clusters. The 5820/01 supports these networks and also provides a seamless transition to an all-Ethernet solution. This traffic combination is also a powerful option for broadband networks having a mix of ATM/SDH/SONET and Gigabit Ethernet signals.

The 5820/01 also addresses large enterprise customers, who often need to transport a combination of Gigabit Ethernet and SAN traffic in their networks. The 5820/01 supports 1G as well as 2G Fibre Channel signals in combination with Gigabit Ethernet.

For traffic combinations see table below.

True transparency multiplexing of SDH/SONET

The 5820/01 is based on Transmode's intelligent WDM (iWDM™) concept enabling true transparent transport of SDH/SONET signals as compared to SDH/OTN multiplexers where the Section Overhead (SOH) is terminated and thus prevents the usage of the inherent data channels (DCC-channels) of the SDH/SONET frames.

Tailored Network Element options

The 5820/01 can be mounted in any of the TS-Series two active chassis options;

- 1U TS-100 chassis (9002/02)
- 6U TS-1100 chassis (9013)

Working in standalone mode the 5820/01 is easily mounted in a passive wall mount chassis TS- 9001/01.

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

Embedded Management

The embedded management (EM) channels enable easy remote management via the line signal. There is no need to provide access to the customer DCN network if the 5820/01 is placed at a customer site.

Low Power Design

A fully equipped 5820/01 consumes less than 14W in any of the available chassis options. When mounted in a passive wall mount chassis this equates to a total node power consumption of less than 14W. 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 | STM-1/OC-3, STM-4/OC-12, STM-16/OC-48 Gigabit Ethernet 1G/2G FC/FICON |
| Layer-1 performance monitoring | SDH/SONET: Based on B1 calculations Gigabit Ethernet: Based on CRC and 8B10B coding errors SAN formats: 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 14W, worst case (with all client ports active and using DWDM SPFs) |
| Misc line interface features | Embedded management channels on line signals |
| Operational modes | Muxponder mode Master (4 client ports + 1 line ports) Muxponder mode Slave (4 client ports + 1 line port), this mode is used in the remote node that do not have a CU. |
| Released traffic combinations | 4xGbE 2xGbE + 2x STM-1/OC-3 or STM-4/OC-12 2xGbE + 1x 2G FC/FICON Other traffic combinations are provided on request |
| Interfaces | Client interfaces: SFP MM, SM @ 1310nm/1550nm versions covering ranges from 100m up to 15km. MultiRate 100Mb/s – 2,125Gb/s. Dedicated STM-1/OC-3 (S-1.1). Electrical SFP for Gigabit Ethernet. Line interfaces: SFP 4Gb/s 40km/80km CWDM (16 channels) or 80km DWDM (40 channels) |

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.

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