



Model

- 10G ODU-XC 8x2 Combiner:
- TCX22-HA



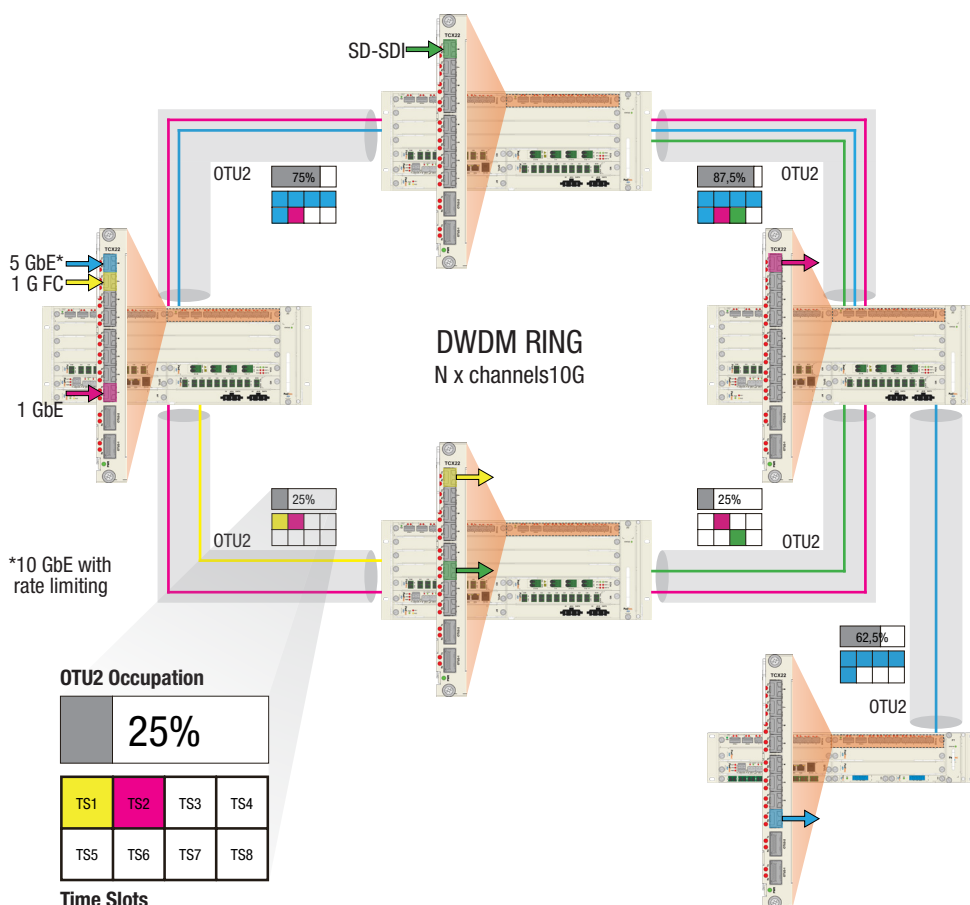
Applications

- Corporate access
- Metropolitan Networks
- Backbones

The need for improvements in telecommunications networks comprises several aspects and go far beyond the demand for bandwidth and increase transmission capacity. Especially in metropolitan and regional scenarios, maintaining business model competitiveness and efficiency also implicates increasing networks granularity and flexibility in order to meet specific demands with tailored solutions and optimized costs.

The 10G ODU-XC 8x2 Combiner has two network interfaces and eight multiprotocol client interfaces. Supporting cross-connections with or without the protection, 10G ODU-XC 8x2 Combiner adds capillaries to networks and enables fast provisioning of new services.

Application Example



Maximum consumption

- TCX22-HA: 38 W

Adopted Standards

- ITU-T G.709 e G.798, OIF Forum

Compatibility

- Medium capacity systems



2U Shelf



4U Shelf

- Higher capacity systems



14U Shelf

DWDM Network Interface

- OTU2 – 11.35 Gb/s
- GFEC
- Fixed XFP or Tunable-XFP
- T-XFP in C-band
- 50 GHz Spacing

Client Interface

- 10G ODU-XC 8x2 Combiner:
 - SFP/SFP+
 - FE
 - GbE, 10GbE (rate limiting)
 - 1/2/4G FC
 - STM-1/4/16
 - SD/HD/3G-SDI
 - OTU1

General Characteristics

- Rate limiting for 10 GbE with rate setting by management
- Error correcting codes that ensure the optical performance even in critical segments, configurable GFEC or XFEC
- 1 + 1 ODP protection*: Wavelength and equipment, based on signal failure or BER

Performance

Modulation	DWDM Fixed XFP	DWDM T-XFP
Output Power [dBm]	0 a 4	-1 a 3
Sensitivity [dBm]	-19	-24
Saturation [dBm]	-7	
OSNR [dB]	19	17
CD [ps/nm]	1,100	1,600
DGD [ps]	30	

- Chaveamento de proteção menor que 50 ms, segundo padrões ITU-T
- Protection switching in less than 50 ms, according to ITU-T standards
- Auto Laser Off (ALO) for fault propagation
- Supports remote management via GCC (General Communication Channel)

Cross-Connections

- Mapping in Levels:
 - ODU0 (1.25G)
 - ODU1 (2.5G)
 - ODUFlex (N x 1.25G)

Management

- Performance management functionalities which allows traffic monitoring for SLA verification to assure high QoS per wavelength
- Fault management allowing quick event tracking contributing to increased traffic availability
- Tracing per wavelength which allows the verification of physical connectivity in complex networks