Data sheet

CTX Series

OPSµs

Ultra-fast Optical Protection Switch

Main Features

- Protocol and rate independent
- Optical layer
- Supports 1+1 failover mechanisms, switchover time <900µs
- Extremely stable latching mode
- No moving parts, best durability
- Monitoring optical connections in active and passive network components
- 1:1 and BIDI optional
- Modular and cost-effective

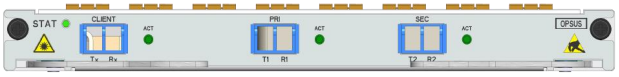


Figure 1: OPSUS Card

Benefits

- Ultra-fast switchover
- High availability
- Managed service platform CTX6600
- Modular and cost-effective for future growth and maintenanceaccess

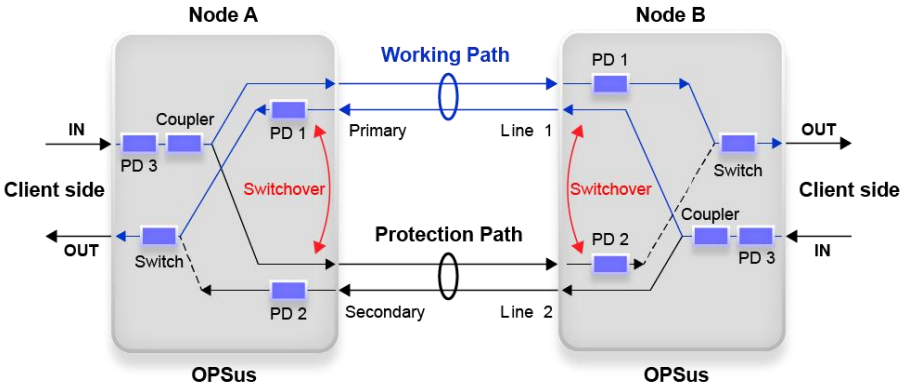
Applications

- Finance, securities, games etc for reliability and low latency
- Enterprise Private Line
- DWDM DCI Networking
- End to End, Single end
- Dual fibers, BIDI single fiber

Description

The OPSus is a head-end split, tail-end select optical protection switch, 1+1 Optical protection switch is provided by primary and secondary transmit paths for line or channel protection.

The OPSus card uses an all solid-state device without any moving parts. The switching of the optical signal is based on well-known Faraday Effect, and realized by using a patent protected non-mechanical configuration with solid-state all-crystal design which eliminates the need for mechanical movement. The microsecond fiber optic switch is designed to meet the most demanding switching requirements for reliability, durability, speed, and none-stopping high frequency switching, Typical application below:



Technical Specifications

Common features	Value
Type	1+1 OPSUS
Operating Wavelength	1470 nm to 1625 nm 1290 nm to 1360 nm
Switch Type	Latching
Durability(Cycle)	100bilions
Protocol and rate	Transparent
Reverse Recovery	Supports
Connector	LC/UPC
Other type	1:1 OPS/ bidi OPSUS depend on Request
Rx Switch(Line Side)	
Insertion Loss(including connector)	2.0dB(Max.)
Switchover time	< 900μs
Input Optical Power	14dBm(Max.)
Settable LOS Threshold	-10dBm~ -30dBm
Power detection accuracy	±1dB Typical
Crosstalk	55dB(Min.)
Optical Return Loss	40dB ~ 45dB
Repeatability	-0.1dB ~ +0.1dB
Tx Switch(Line Side)	
Insertion Loss(including connector)	3.0dB ~ 3.5dB
Input Optical Power	24dBm(Max.)
Optical Return Loss	55dB(Mini.)
Performance Monitoring	
Visual Indicators	LED status indicators for: client and line ports,Pri/Sec,STAT of line card
Optical Monitoring	Rx/Tx Optical Power etc
OAM	Event logs Alarms
Physical feature	
Dimensions(HxWxD mm)	20x192x223
Weight (kg)	0.35
Package options	Plug-in Card
Platform	CTX6600 I/II/V
Slot assignment	Any slot except for Slot 1
Environment	
Operating Temperature	-5°C to 50°C
Storage	-20°C to 85°C
Humidity	5% ~ 85% RH non-condensing
Power Supply	
Power Input	DC -48V input from backplane
Power Consumption	< 15
Compliance	
Standards	RoHS 5/6