

TNX20 for CTX6600 platform

OTN 10G Transponder

Key Features

- OTN 10G Transponder with 20 Ports
- Uplink (Line side) supports OTU2/OTU2e
- Client side supports 10G LAN/WAN, 8G/10G FC, STM64/OC192, OTU2, OTU2e
- Fully compliant with ITU-T standard, such as G.709, G.798, etc.
- Standards based ITU-T G709 RSFEC, I.4, I.7
- Supports full C-band DWDM for line side
- Performance Monitoring
- Automatic Laser Shutdown(ALS) for all ports

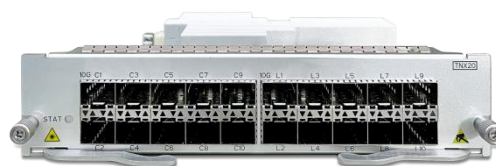


Figure 2: TNX20 Muxponder

Application Scenarios:

| Metro Network Application

| Regional Network Application

| Data Center interconnection (DCI)

| High Capacity and Long Haul Solution

| Enterprise Line

| DWDM Upgrade

Applications

TNX20 pluggable board in CTX6600 chassis is Danriver's 10G multi-rate/multi-protocol Transponder for high capacity transport solutions, it allows migration exist various and future services without replacement.

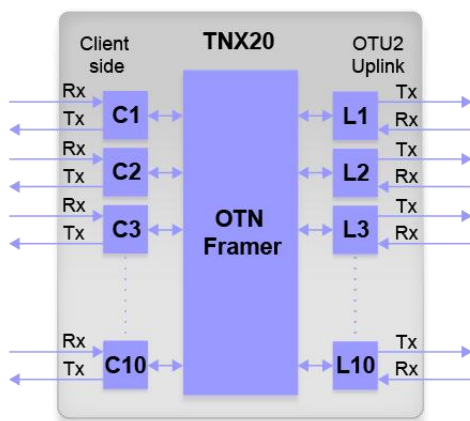


Figure 1: TNX20 Block Diagram

Technical Specifications

Operation Mode	TNX20
Transponder Mode	10x 10G client and 10x 10G uplink
Client port	
Number of port	10
Interface	10xSFP+
Transceiver	Wavelength, Protocol, Distance depend on SFP+
Protocol	Ethernet 10GbE-LAN/WAN SDH/SONET STM64/OC192 Storage 8G/16/32G FC G.709 OTN OTU2,OTU2e
Uplink port	
Number of port	10
Interface	10xSFP+
Transceiver	DWDM SFP+ Fixed or Tunable wavelength
Protocol	OTU2/OTU2e
FEC Feature	
FEC function	Regular FEC (G.709)
	I.4 Super FEC (G.975.1)
	I.7 Super FEC (G.975.1)
FEC gain(dB)	8~9 Max
Protection	
Transmission Protection	SNC/N,SNC/I
Client Side Signal and Mapping Mode	
10GE	10GBASE-R (via BMP) <-> ODU2e
10GE	10GBASE-R (via GFP-F) <-> ODU2
10GE	10GBASE-R (via GFP-F extended payload with preamble) <-> ODU2
STM64/OC192	OC-192/STM-64 (via AMP or BMP) <-> ODU2
8G FC	FC8G (via BMP) <->ODUflex (HW ready)
Performance Monitoring	
Optical module	TX/RX power level, wavelength, temperature

Ports	OTU Section OTU Far Section ODU Path ODU Far Path OTN FEC Correct error OTN FEC uncorrected error
Optical module	TX/RX power level, wavelength, temperature
Diagnostic test	
Loopback	Facility loopback: local loopback, remote loopback
PRBS test	Supports
Management	
In-band DCN Management	GCC0 on OTU2/2e
	GCC1 or GCC2 or GCC1+2 on ODU2/2e
Environmental	
Operating Temperature	0 to 45°C
Operating Humidity	5 to 95% (non-condensing)
Storage Temperature	-20 to + 70°C
Mechanics	
Card type	Pluggable
Slot assignment	2 adjacent slots vertically, slot 5/6/9/10/13/14/17/18
Platform	CTX6600V
Dimensions (H x W x D mm)	40x192x223
Power Supply	
Card type	Pluggable power supply
Power feed	DC -48V input from backplane
Power Consumption	<90W