

### Features

- Hot-pluggable SFP+ footprint
- 50GHz DWDM ITU-T Full C-band Tunability
- Support 9.95Gb/s to 11.3Gb/s bit rates
- 80km 50GHz DWDM laser
- 80km APD photodiode receiver
- Single 3.3V power supply
- Power dissipation < 2.0W
- 5°C to +70°C
- Duplex LC fiber connectors
- 10GBASE-ZR/ZW
- SDH STM-64 ITU-T G.959.1 P1L1-2D2
- Full Digital Optical Monitoring
- Metal enclosure for lower EM
- Complies with RoHS directive (2002/95/EC)
- Compliant with SFP+ Electrical MSA SFF-8431
- Compliant with SFP+ Mechanical MSA SFF-8432
- Laser Class 1 IEC/CDRH compliant

## 50GHz Full C-band Tunable 10GBASE-ZR/OC-192 LR-2 SFP+ Transceiver 10Gb/s 80 km

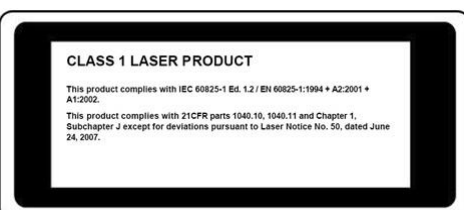
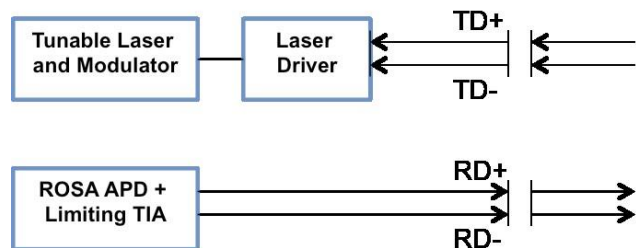
### XTDTCA-80LY

#### Applications

- Full C-band Tunable 10GBASE-ZR 10GEthernet
- 8GB/10GB Fibre Channel
- SONET OC-192 LR-2
- SDH STM-64 ITU-T G.959.1 P1L1-2D2
- Access DWDM Ethernet Switch or IP
- Router Interconnect

#### Description

Xenya 50GHz Full C-band Tunable XTDTCA-80LY SFP+ transceivers are designed for use in 10Gb/s to 11.1Gb/s 50GHz DWDM links up to 80km of G.652 fiber. The SFP+ module supports 10GBASE-ZR and – ZW applications along with SONET OC-192 LR-2 and SDH STM-64 ITU-T G.959.1 P1L1-2D2 applications for Ethernet Switches, IP Routers or SONET/SDH optical interfaces. Digital Optical Monitoring interfaces are provided via the SFP+ standards compliant I2C interface.



## Transmitter E-O Characteristics

Parameter	Symbol	Min.	Typ.	Max.	Unit	Note
Support data rate	-	9.95	10.3125	11.1	Gb/s	-
Center Wavelength (DWDM)	$\lambda$	1528.38	-	1565.50	nm	ITU-T
Wavelength Stability after	$\Delta\lambda_{EOL}$	$\lambda_i - 25$	-	$\lambda_i + 25$	pm	
DWDM Channel Spacing	fSPACI		50		GHz	
Tuning Time	$\Delta TUN$			1	sec	
Average Optical Output Power	Po	-1.0	-	+3.0	dBm	
Optical Power of Off	Poff	-	-	-30	dBm	
Extinction Ratio	Er	9.0	-	-	dB	1
Side Mode Suppression Ratio	SMSR	35			dB	1
Tx Eye Crossing		45		60	%	
Output Eye Diagram	Compliant with SFP+ MSA					

1. 10.709Gbps, PRBS 2<sup>31</sup>-1

## Receiver O-E Characteristics

Parameter	Symbol	Min.	Typ.	Max.	Unit	Note
Support data rate	-	9.95	10.3125	11.1	Gb/s	-
Operating Wavelength	-	1525	-	1570	nm	-
Sensitivity @ 9.95 to 10.3Gbps	Sen <sub>1</sub>			-24	dBm	1
Sensitivity @ 11.1Gbps	Sen <sub>2</sub>			-23	dBm	1
Saturation	Ps	-7	-	-	dBm	1
Optical Path Penalty @ 9.95Gbps	OPP <sub>1</sub>			2	dB	1
Optical Path Penalty @ 10.7Gbps	OPP <sub>2</sub>			2.5	dB	1
Optical Path Penalty @ 11.1Gbps	OPP <sub>3</sub>			3	dB	1
Rx Damage Threshold	RX <sub>DAMAGE</sub>			1	dBm	
LOS Asserted (EOL)	T loss o	-40.0	-	-27.5	dBm	High level: Alarm
LOS De-Asserted	T loss of	-	-	-27	dBm	
LOS Hysteresis (EOL)	T loss H	0.5	-	-	dB	

Notes:

1. Rx wavelength range is 1270nm to 1610nm with 2dB penalty outside of specified operating range
2. PRBS 2<sup>31</sup>-1 at 10<sup>-12</sup> BER

## Ordering Information

Part Number	ROHS Compliant	Operating Case Temperature
XTDTCA-80LY	ROHS-6	-5 ~ +70°C

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