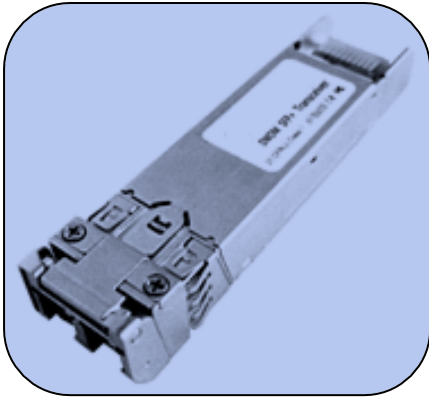




XTDTCA-80LY

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

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Product Highlights

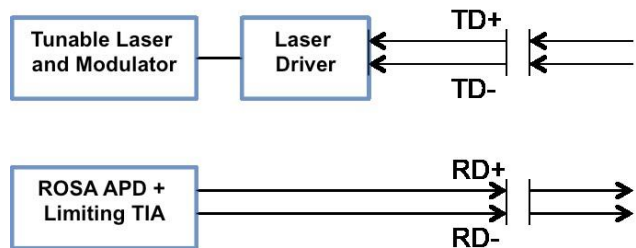
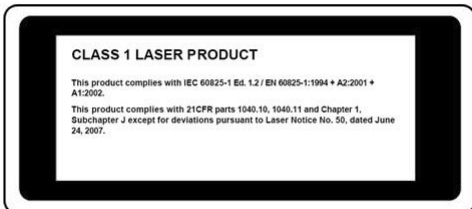
- Hot-pluggable SFP+ footprint
- 50GHz DWDM ITU-T Full C-band Tunability
- Support 9.95Gb/s to 11.3Gb/s bit rates
- 80km 50GHz DWDM laser
- 80km APD photodiode receiver
- Single 3.3V power supply
- Power dissipation < 2.0W
- 5°C to +70°C
- Duplex LC fiber connectors
- 10GBASE-ZR/ZW
- SDH STM-64 ITU-T 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

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

XenOpt 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 Optical and Electrical Characteristics

Parameters	Symbol	Min.	Typical	Max.	Unit	Notes
Support data rate	-	9.95	10.3125	11.1	Gb/s	-
Center Wavelength (DWDM)	λ	1528.38	-	1565.50	nm	ITU-T
Wavelength Stability after Startup	$\Delta\lambda_{EOL}$	$\lambda_i - 25$	-	$\lambda_i + 25$	pm	
DWDM Channel Spacing	fSPACING		50		GHz	
Tuning Time	$\Delta TUNE$			1	sec	
Average Optical Output Power	Po	-1.0	-	+3.0	dBm	
Optical Power of Off Transmitter	Poff	-	-	-30	dBm	
Extinction Ratio	Er	9.0	-	-	dB	10.709Gbps, PRBS 2 ³¹ -1
Side Mode Suppression Ratio	SMSR	35			dB	10.709Gbps, PRBS 2 ³¹ -1
Tx Eye Crossing		45		60	%	
Output Eye Diagram	Compliant with SFP+ MSA					

Receiver Optical and Electrical Characteristics

Parameters	Symbol	Min.	Typical	Max.	Unit	Notes
Support data rate	-	9.95	10.3125	11.1	Gb/s	-
Operating Wavelength	-	1525	-	1570	nm	-
Sensitivity @ 9.95 to 10.3Gbps	Sen1			-24	dBm	1
Sensitivity @ 11.1Gbps	Sen2			-23	dBm	1
Saturation	Ps	-7	-	-	dBm	1
Optical Path Penalty @ 9.95Gbps 1600ps/nm	OPP1			2	dB	1
Optical Path Penalty @ 10.7Gbps 1600ps/nm	OPP2			2.5	dB	1
Optical Path Penalty @ 11.1Gbps 1450ps/nm	OPP3			3	dB	1
Rx Damage Threshold	RXDAMAGE			1	dBm	
LOS Asserted (EOL)	T_loss_on	-40.0	-	-27.5	dBm	High level: Alarm
LOS De-Asserted	T_loss_off	-	-	-27	dBm	
LOS Hysteresis (EOL)	T_loss_Hs	0.5	-	-	dB	

Notes:

- Rx wavelength range is 1270nm to 1610nm with 2dB penalty outside of specified operating range
- PRBS 2³¹-1 at 10⁻¹² BER

Ordering information

Part Number	Product Description
XTDTCA-80LY	50GHz Full C-band Tunable 10GBASE-ZR/OC-192 LR-2 SFP+ Transceiver 10Gb/s 80km . ROHS-6 compliant, -5°C ~ +70°C

Notice. Please specify any compatibility requirements at time of ordering. Standard MSA compatible pluggable components may not work or some function of these components may not be available in devices that require customized compatible devices. Pluggable components compatible with one type of communications equipment may not work in other type of communications equipment.

Important Notice

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