



X6500-10G

Optical Transport 10G Transponder Module



Product Highlights

- 2-Channel Transponder
- CWDM & DWDM
- Port rates 10 Gb/s max
- Automatic loopback test

Product line X6500 overview

Product line X6500 is the XenOpt most cost effective offer of a complete line of managed Data Transport System Equipment and WDM (Wavelength-Division Multiplexing) solutions for service providers, content delivery networks, data centre operators, internet exchanges, cloud service providers, and others. Applications in point to point or fixed point to multipoint connections range from enterprise networks to data and storage area interconnect, from regional backbones to campus rings. Services from simple digital carrier signal transmission, signal regeneration, service demarcation to complex distributed multiplexed multirate up to 10 Gbp solutions can be offered with a variety of hardware platforms and managed by intelligent and open control and management software.

X6500 family is a generation of fully integrated fibre transmission platform. It offers a full range of solutions including:

- High density short and long distance connectivity from 100M to 10GE,
- Optical multiplexing and de-multiplexing (DWDM - Dense WDM, CWDM - Coarse WDM),
- Optical add/drop, including custom solutions,
- Optical signal amplification (EDFA - Erbium-Doped Fibre Amplifier),
- Fibre optimization and protection (OLPS - Optical Line Protection System),
- Distance extension with amplification or digital signal regeneration,
- Network demarcation and OEO (Optical-Electrical-Optical) media conversion,
- Supports single or dual fibre transport solutions.

It is a fully modular product series that integrates a range of optical transport modules supporting wide range of variable speed interfaces and protocols in selection of chassis sizes for simple and flexible operations. All of these modules are hot pluggable, allowing simple maintenance procedures.

X6500-10G overview

X6500-10G service card is an optical link wavelength converter. (i.e. Signal Amplifier). Under the industry accepted theory of optical-electrical-optical transfer to regenerate the optical signal, the X6500-10G module makes the optical signal's amplification and wavelength transfer operate optimally. Users can operate wave division multiplexing transmission, combined with C/DWDM multiplexer and de-multiplexer, which is especially suitable for 10G/S SDH/SONET, Ethernet optical communication systems. It provides fast and low cost transmission solutions for the transfer line of optical relay and correcting the system during optical resources shortage.

Features:

- Optical port's maximum rate 10Gb/s,
- Transmitter wavelength (located in C-Band), in the limitation of DWDM wavelength ruled by ITU-T,
- Manage and control separately,
- Self-Loopback test,
- 3R function to interpret the data to enable transmission within neighbouring ports
- CDR functions to optimize the output of optical frequency.

Performance specification:

Parameters	Module Type: 10 Gbps			
Transmission Distance (km)	~ 0.3	~10	~40	~80
Laser Type	VCSEL	DML	EML	EML
Center Wavelength (nm)	840 ~ 860	1290 ~ 1330	1530 ~ 1565	1530 ~ 1565
Maximum Spectral Width (nm)	1	1	1	1
Side Mode Suppression Ratio (dB)	-	30	30	30
Average Output Power (dBm)	-7 ~ -1	-6 ~ -1	-1 ~ 2	0 ~ 4
Extinction Ratio (dB)	> 3	> 6	> 8.2	> 9
Receive Type	PIN	PIN	PIN	APD
Minimum Load (dBm)	-3	0	-9	-9
Receive Sensitivity (dBm)	< -10	< -16	< -16	< -24
Maximum Dispersion Tolerance	n.a.	35	800	1600
Optical Path Penalty (dB)	1	1	1	2
Maximum Return Loss (dB)	-27	-27	-27	-27

X6500- 10G specifications

Warranty: Limited lifetime warranty

Ordering information

Part Number	Product Description
X6500-10G	Optical Transport System Dual Transponder Module with FEC
Other X6500 family products	
X6500-I	Optical Transport System 1 U 4 Slot Chassis
X6500-II	Optical Transport System 2 U 8 Slot Chassis
X6500-V	Optical Transport System 5 U 18 Slot Chassis
X6500-SC	Optical Transport System Management Module
X6500-TMUX-10G	Optical Transport System 10G Muxponder Module
X6500-SFP+	Optical Transport System Transponder SFP+
X6500-8SFP+	Optical Transport System Transponder 8 x SFP+
X6500-OLP	Optical Transport System Fibre Protection Switch
X6500-OLP-BIDI	Optical Transport System Fibre Protection Switch Bidirectional
X6500-BA	Optical Transport System Boost Amplifier
X6500-PA	Optical Transport System Pre-Amplifier
X6500-LA	Optical Transport System InLine Amplifier
X6500-GTAP	Optical Transport System Network device for monitoring copper Ethernet connections

For accurate order specification please contact XenOpt reseller before placing an order. The content of this document is subject to change without notice. XenOpt does not guarantee errorless or outdated information.

To find out more, please contact: