

Huawei OptiX OSN 7500



MPLS-TP based Transformer for Metro Aggregation & Core

- **Large Capacity:** 360G TDM / 160G Packet universal switch, 22 service processing slots and 8 service interface slots.
- **Perfect Evolution Capability:** 100% TDM to 100% Packet evolution based one platform.
- **Powerful OAM:** TP-Assist, MPLS-TP OAM, MPLS OAM, Ethernet OAM, etc.

Smart Transport for Multiservice Universal Switch and Transport

- Smart transport based on universal switch for all types of services, including Ethernet, ATM, TDM.
- Carefree evolution among different types of services, such as from 100% TDM to 100% packet, '0' waste of investment.
- Universal switch at any level of packet and TDM in their original format, high efficiency and best performance, '0' waste of bandwidth.

MPLS-TP for Highly Efficient and Highly Available Packet Transport

- Guaranteed Performance from end-to-end committed bandwidth mechanism.
- 99.999% availability: 50ms recovery for both linear and ring applications.
- SDH-like OAM mechanism capable of fast detection and troubleshooting, including end-to-end performance monitoring.

TP-Assist for Easy O&M

- MPLS-TP based O&M solution 'TP-Assist' providing efficient planning, fast deployment and easy maintenance, making the large-scale packet network easily manageable
- Traffic based crystal clear O&M is supported with visual network-level view, graphical format to display end-to-end service configuration, performance and status.
- Better maintenance experience even than SDH: visualized end-to-end bandwidth management, intelligently locating 92% failure, analyzable and predicable network management

Specifications	OSN 7500	
Dimensions	757 mm (H) x 497 mm (W) x 295 mm (D)	
Switch Capacity	Packet: 160 Gbit/s and TDM: 360 Gbit/s (higher order), 40 Gbit/s (lower order)	
Service Slots	22 slots for processing boards and 8 slots for interface boards	
Supported Interface	Ethernet interface	FE/GE/10GE
	SDH interface	STM-1/4/16/64
	PDH interface	E1/E3/E4/T1/T3
	ATM interface	E1, STM1
	WDM interface	40-channel DWDM interfaces, compliant with ITU-T G.694.1 8-channel CWDM interfaces, compliant with ITU-T G.694.2
	Other interface	DDN, SAN, Video
Networking Mode	<ul style="list-style-type: none"> Supporting pure packet, hybrid (packet + SDH) or SDH networking Supporting WDM networking Supporting single-fiber bidirectional transmission 	
Power Supply	-38.4~ -72V DC; 110/220V AC (External module)	
Operation Environment	Temperature	Relative Humidity
	Long term: 0°C ~ 45°C Short term: -5°C ~ 55°C	10% ~ 90% 5% ~ 95%
Ethernet Feature	<ul style="list-style-type: none"> E-Line and E-LAN, QinQ MPLS-TP based VPWS and VPLS Multi-section pseudo-wire (MS-PW) ETH PWE3, TDM PWE3, ATM/IIMA PWE3 IGMP Snooping V1/V2/V3 Blacklist, Broadcast packet suppression, ACL VLAN SWAP 	
QoS	<ul style="list-style-type: none"> Hierarchical QoS scheduling and traffic shaping DiffServ mode based on traffic classification , eight priority queues Simple traffic classification, complex traffic classification, per hop behavior (PHB), and ACL Committed access rate (CAR), shaping based on port scheduling priority PQ scheduling priority, weighted fair queuing (WFQ) and PQ+WFQ queuing Tail drop and weighted random early detection (WRED) 	
OAM	MPLS-TP OAM	LSP/PW OAM: <ul style="list-style-type: none"> CC, LB, LT AIS, RDI LM, DM LCK, TST CSF
	MPLS OAM	LSP/PW OAM: FDI, BDI, CV, FFD, TraceRoute, Ping, LM, DM PW OAM: CES PW VCCV
	Ethernet OAM	ETH-CC, ETH-Loopback, ETH-Link Trace, Remote Loopback, Remote Fault Detection, RMON(RFC 2819)
Protection	Equipment-level Protection	Cross-connect 1+1 backup, control board 1+1 backup and power 1+1 backup, clock 1+1 backup
	MPLS-TP based Service Protection	<ul style="list-style-type: none"> LSP/PW Linear protection, Ring protection Anti multifailure protection based on MS-PW LAG, MC-LAG, Dual-homing protection, LPT
	SDH based Service Protection	<ul style="list-style-type: none"> Mesh Protection and restoration (ASON) 2/4 fiber MS-SP Ring; 1+1/1:n (n<=14) Linear MSP SNCP/SNCMP/SNCTP 1:N tributary protection for E1/T1, E3/T3, E4, STM-1(e) and FE
Synchronization	<ul style="list-style-type: none"> Both Ethernet and SDH networks supporting clock synchronization Supporting G.813, Synchronous Ethernet and IEEE 1588v2 synchronization Adaptive clock recovery (ACR) Two external clock inputs/outputs (2 MHz or 2 Mbit/s) Two external time signals (1pps+TOD) 	