

Huawei OptiX OSN 550



MPLS-TP based Transformer for Metro Access

- **Large Capacity:** 64G Packet / 20G TDM universal switch, 8 service slots, 2U height with 19 inch
- **Any service access:** supporting full rate from 2Mbit/s to 10Gbit/s
- **High operating temperature:** up to 65°C

Universal Switch and Transport

- Accessing all types of services, including Ethernet, ATM, TDM and future services.
- Universal switch at any level of native packet and native TDM, high efficiency and best performance.
- Multi-mode Scenario: Hybrid mode, pure Packet mode, and pure SDH mode, meeting the requirements of network evolution towards All-IP.

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 for quick fault detection, troubleshooting and end-to-end performance monitoring.

Flexible installation

- 2U high box.
- Fitting 19/23' rack, outside cabinet, wall, desk and pole mounting.
- AC or DC power supply with 1+1 protection.

TP-Assist for Easy O&M

- MPLS-TP based O&M solution 'TP-Assist' providing efficient planning, fast deployment and simple 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 550	
Dimensions	88mm (H) x 442mm (W) x 220mm (D)	
Switch capacity	Packet: 64 Gbit/s and TDM: 20 Gbit/s (higher order), 5 Gbit/s (lower order)	
Service slots	8 slots	
Supported interfaces	Ethernet interface	FE/GE/10GE
	SDH interface	STM-1/4/16
	PDH interface	E1/E3; T1/T3
	CES interface	ATM/IMA E1, ch STM-1
	WDM interface	40 DWDM wavelengths, compliant with ITU-T G.694.1 8 CWDM wavelengths, compliant with ITU-T G.694.2
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, 100~240V AC	
Operation Environment	Temperature Long term: 0°C ~ 55°C Short term: -5°C ~ 65°C	Relative Humidity 10% ~ 90% 5% ~ 95%
Ethernet Feature	<ul style="list-style-type: none"> E-Line , E-LAN and QinQ MPLS-TP based VPWS and VPLS MS-PW ETH PWE3 IGMP Snooping v2/v3 Blacklist, Broadcast packet suppression, ACL 	
QoS	<ul style="list-style-type: none"> Hierarchical QoS scheduling and traffic shaping DiffServ mode based on traffic classification Simple traffic classification, complex traffic classification, per hop behavior (PHB), and ACL Committed access rate (CAR) PQ scheduling priority, weighted round robin (WRR) and PQ+WRR queuing Tail drop and weighted random early detection (WRED) Shaping based on port scheduling priority 	
OAM	MPLS-TP OAM	LSP/PW OAM: <ul style="list-style-type: none"> CC, LB, LT AIS, RDI LM, DM LCK, TST CSF
	Ethernet OAM	ETH-CC, ETH-Loopback, ETH-Link Trace, Remote Loopback, Remote Fault Detection, RMON(RFC 2819)
Protection	Equipment-level Protection	Universal Cross Connection, System Control and Clock Processing Board 1+1 backup and power 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 ERPS, ML-PPP, MSTP
	SDH based Service Protection	<ul style="list-style-type: none"> 2 fiber MS-SP Ring; 1+1/1:n (n<=14) Linear MSP, SNCP LAG, LPT, LCAS E1/T1 1+1 tributary protection switch (TPS)
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) 	