

Huawei OptiX OSN 580



MPLS-TP based Transformer for Metro Access & Aggregation

- **Large Capacity:** 280G Packet / 300G TDM universal switch, 15 service slots, 5U height with 19 inch
- **Ultra Broadband:** Smart 40G line transport in one port, 100G line ready
- **Future-proof:** OTN switch hardware ready

Smart Transport for Multiservice Universal Switch and Transport

- Smart transport based on universal switch and smart line card for all types of services in any possible mix, including Ethernet, ATM, TDM, and future services.
- Universal switch at any level of packet and TDM in their original format, high efficiency and best performance, '0' waste of bandwidth.
- Smart line card for packet and TDM multiservice universal transport in one port, carefree evolution among different types of services, '0' waste of investment.

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.

PID inside for Tailored Metro Ultra Broadband Transport

- Integrating OTU, MUX and DEMUX boards by a PID chip, providing 40G/100G capacity per port.
- SDH-like O&M without complicated photonic layer design such as wavelength planning and OSNR calculating, with less patch cords and fiber operations, time to market greatly reduced.
- 50% footprint saving and 50% power consumption reduction.

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.
- Maintenance experience even better than SDH: visualized end-to-end bandwidth management, intelligently locating 92% failure, analyzable and predicable network management

Specifications	OSN 580	
Dimensions	221mm (H) x 442mm (W) x 224mm (D)	
Switch capacity	Packet: 280 Gbit/s and TDM: 300 Gbit/s (higher order), 20 Gbit/s (lower order)	
Service slots	15 slots	
Supported interfaces	OTN interface	OTU-2, OTU-3(40G, compliant with OTL3.4 standard)
	Ethernet interface	FE/GE/10GE/40GE
	SDH interface	STM-1/4/16/64
	PDH interface	E1/T1, E3/T3
	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 ~ 45°C Short term: -5°C ~ 55°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-Connect, 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
	SDH based Service Protection	<ul style="list-style-type: none"> 2/4 fiber MS-SP Ring 1+1/1:n (n<=14) Linear MSP SNCP 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) 	