



# MA5800-X2

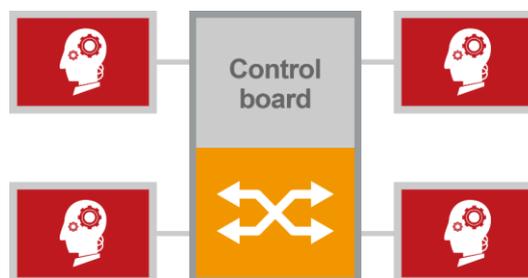
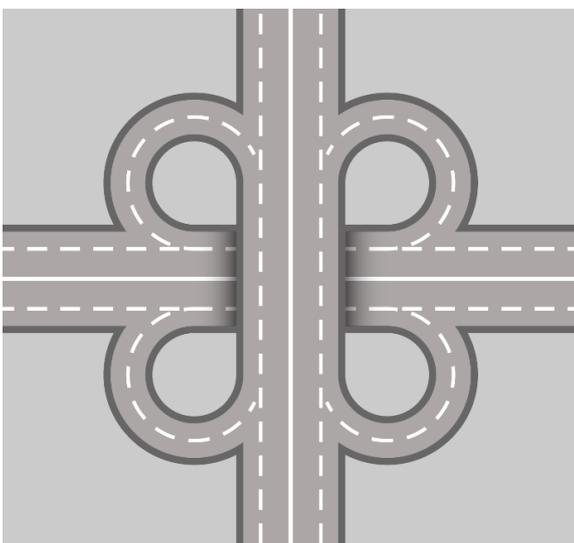
## Full-service distributed architecture OLT

- The MA5800-X2 is a 2U high OLT with distributed architecture, it provides a unified carrying platform for multiple services, such as broadband, wireless, and video backhaul.
- The MA5800-X2 provides GPON, XG-PON, XGS-PON, P2P 10GE/GE/FE access, and supports FTTO, FTTH, FTTR network construction modes. It carries all services over one fiber network, simplifying network architecture and reducing OPEX.
- The MA5800-X2 supports L3 functions (static routing, IPv6, RIP, OSPF, BGP, IS-IS, GR for OSPF/IS-IS/BGP), SSH, 802.1x/MAC authentication, portal authentication, AAA, DHCP server function, and so on.

### Product Highlights

#### Distributed architecture

Switching is implemented on the control board and service processing is implemented on service boards (for heavy traffic scenarios)

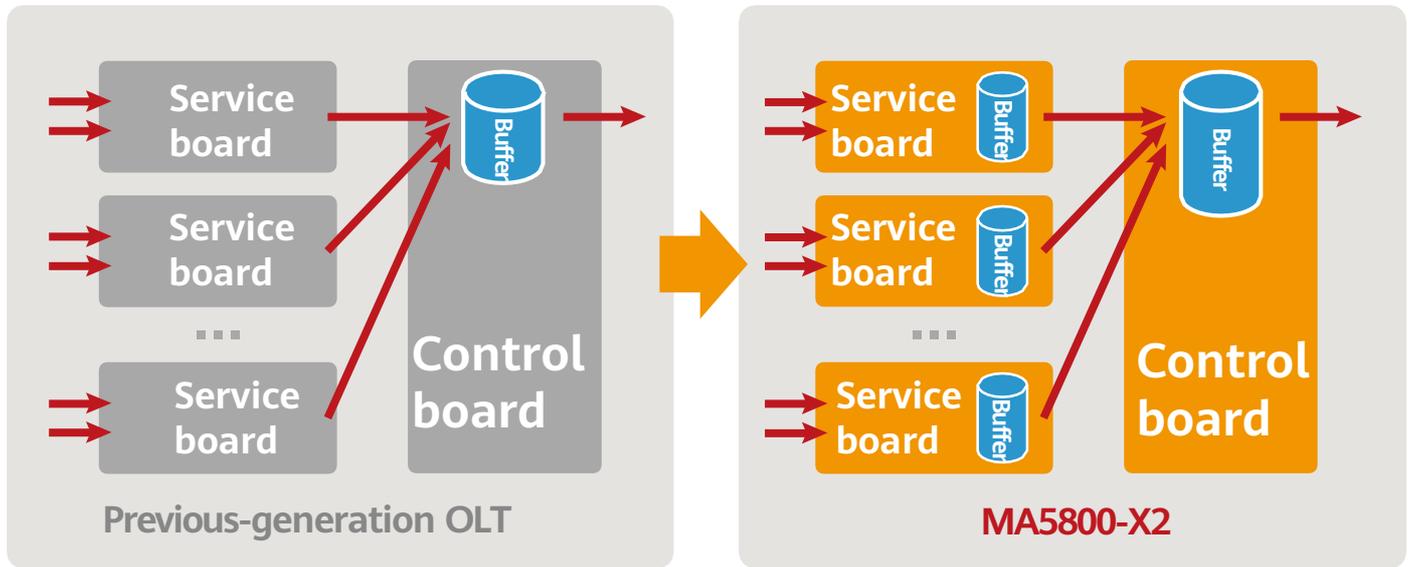


#### Distributed scheduling

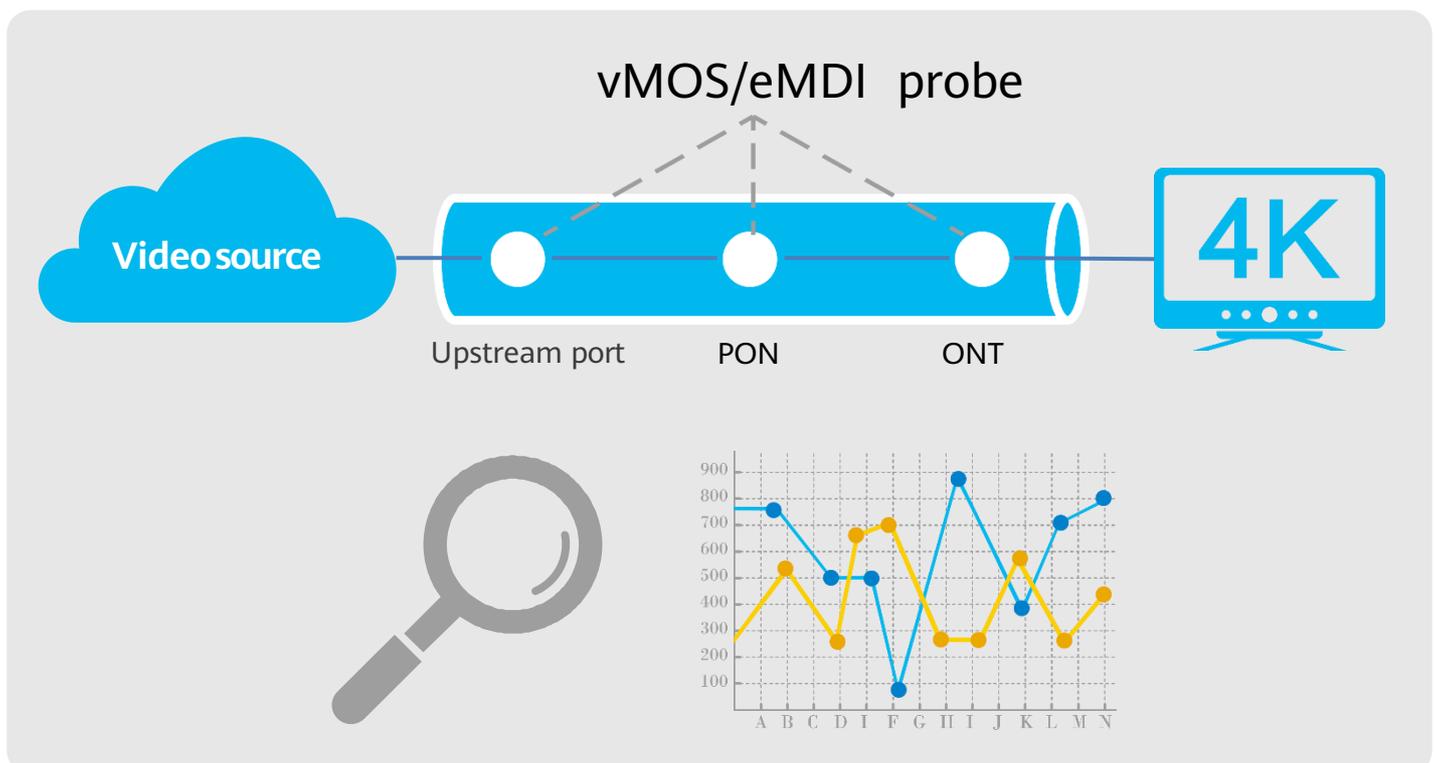
Switching, high service throughput, easy expansion

## Optimum video experience

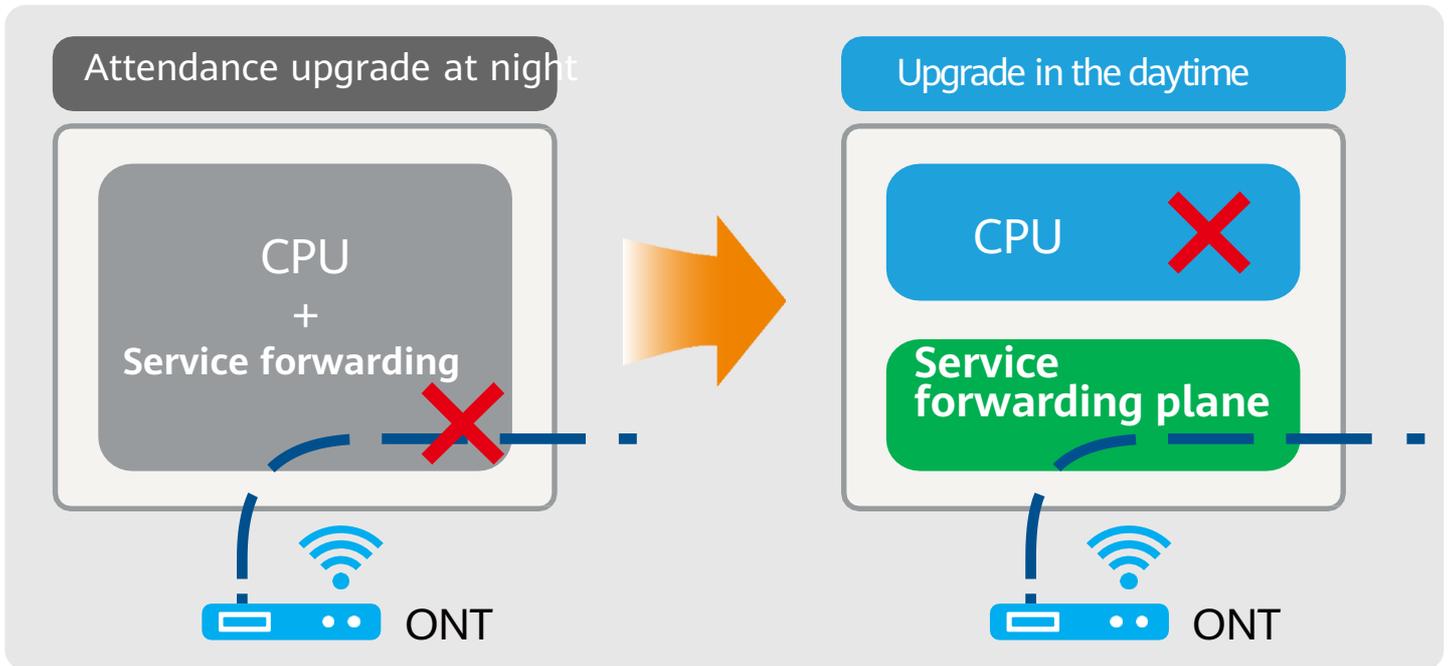
- The MA5800-X2 supports cache in the distributed architecture for fast 4K/8K video start or channel zapping.



- Supports vMOS/eMDI video quality monitoring. Built-in probes on boards are used to collect video indicators and the NMS is used for remote monitoring and monitoring result query, improving video O&M. experience.

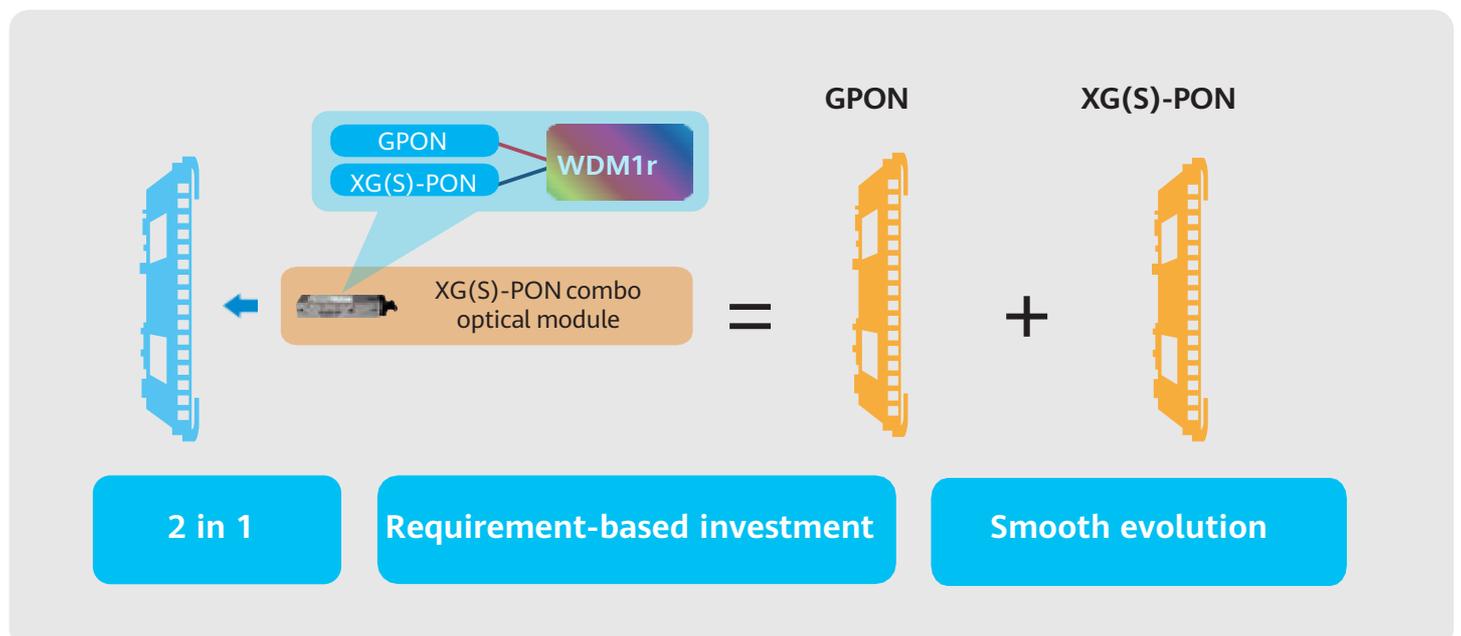


- Video service is not interrupted during an OLT upgrade, enhancing user experience.



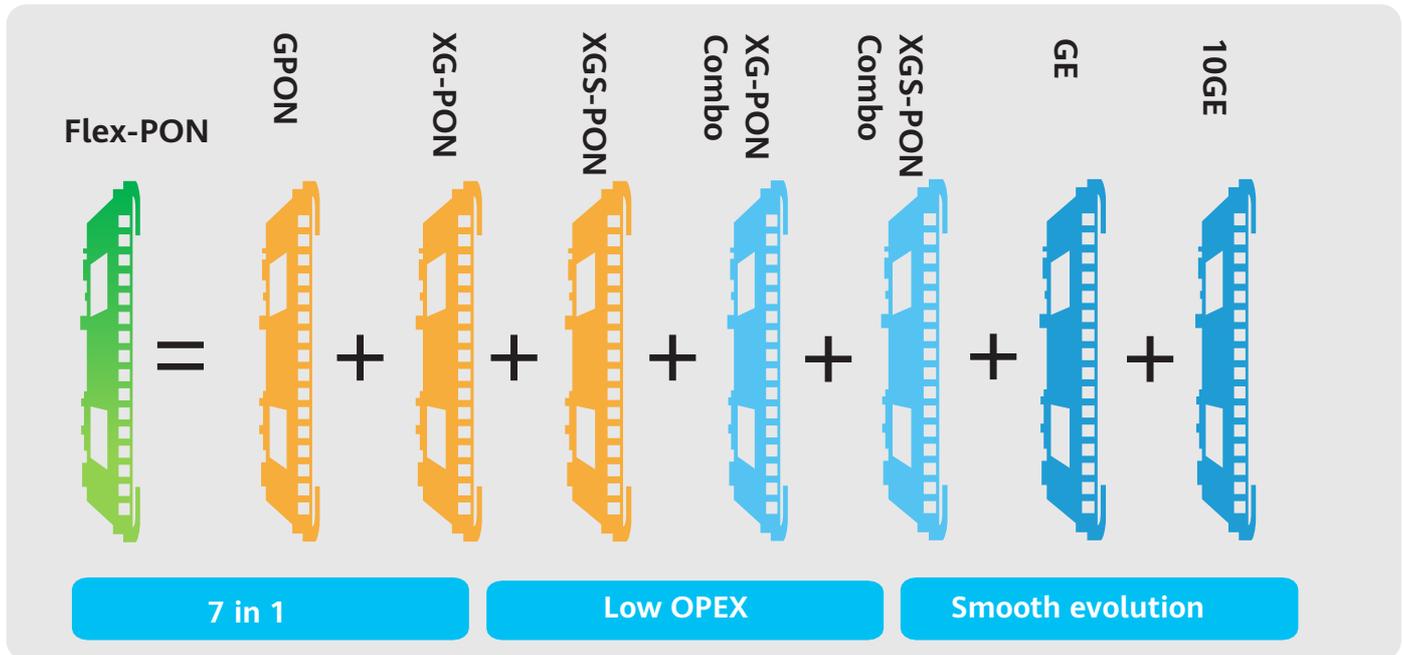
## XG(S)-PON Combo

The MA5800-X2 supports the PON combo technology, and can work with the built-in WDM1r optical module to support two generations PON (GPON and XG(S)-PON ) in one board.



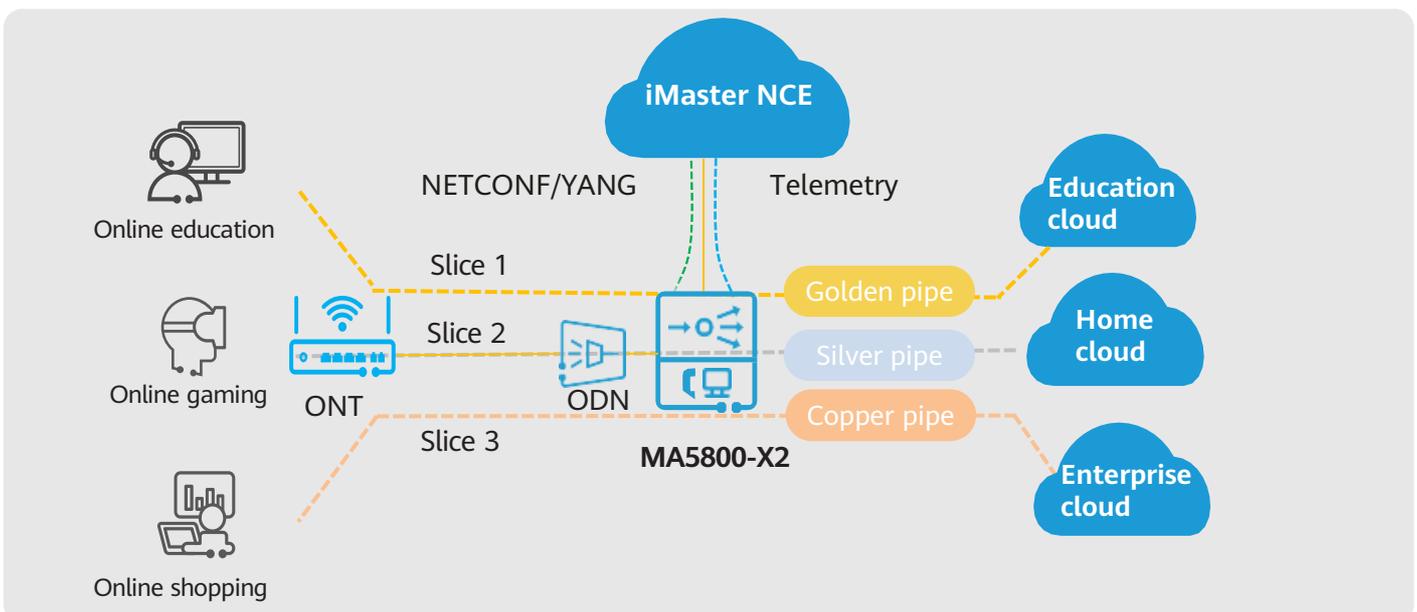
## Flex-PON

A Flex-PON board supports GPON, XG-PON, XGS-PON, XG-PON&GPON combo, XGS-PON&GPON combo and GE/10GE with the corresponding optical module, and reduces OPEX by smooth evolution without board replacement.



## Slicing Technology

The MA5800-X2 supports hard isolation of dedicated network and service slices. The E2E slicing technology provides differentiated bearing for services with different SLA requirements, achieving forwarding resource isolation and application-level bandwidth and latency commitment.



# Primary Features

## Access features

- GPON/XG(S)-PON Access
- 10GE/GE/FE P2P Access

## Layer 2 features

- VLAN+MAC forwarding
- SVLAN+CVLAN forwarding
- PPPoE+
- DHCP option82

## Multicast

- IGMP v2/v3
- IGMP proxy/snooping
- MLD v1/v2
- MLD Proxy/Snooping
- VLAN-based IPTV multicast
- IPv4 PIM and PIM-SSM

## IPv6

- IPv4/IPv6 dual stack
- IPv6 L2 and L3 forwarding
- DHCPv6 relay
- DHCPv6 server (V100R022C10 and later versions)

## Layer 3 features

- Static route
- RIP/RIPng
- OSPF/OSPFv3
- IS-IS
- BGP/BGP4+
- ARP
- DHCP relay
- VRF
- DHCPv4 server (V100R021C10 and later versions)

## QoS

- Traffic classification
- Priority processing
- trTCM-based traffic policing
- WRED
- Traffic shaping
- HQoS
- PQ/WRR/PQ+WRR
- ACL

## MPLS&PWE3

- MPLS LDP
- MPLS RSVP-TE
- MPLS OAM
- MPLS BGP IP VPN
- Tunnel protection switching
- TDM/ETH PWE3
- PW protection switching

## VXLAN

Virtual eXtensible LAN

## SRv6

Segment Routing IPv6

## System reliability

- GPON type B/type C protection
- 10G GPON type B/type C protection
- BFD
- ERPS (G.8032)
- MSTP
- Monitor Link
- Intra-board and inter-board LAG
- 2 control boards for redundancy protection
- In-service software upgrade (ISSU) of the control board
- In-service board fault detection and rectification
- Service overload control

## Application security

- 802.1x
- AAA

## Eco-friendly and energy-saving

In compliance with the Code of Conduct v8.1 released by the European Commission (V100R021C10 and later versions)

## Slice

- Service slicing
- Dedicated network slice (V100R021C10 and later versions)

# Product Specifications

<p style="text-align: center;"><b>Product</b></p> <p style="text-align: center;"><b>Indicator</b></p>	<p>DC input</p>  <p>AC input</p> 
<p><b>H x W x D (mm)</b></p>	<p>Excluding mounting ears: 442 x 268.7 x 88.1 Including IEC mounting ears: 482.6 x 268.7 x 88.1 Including ETSI mounting ears: 535 x 268.7 x 88.1</p>
<p><b>Control board switching capacity (load sharing mode)</b></p>	<ul style="list-style-type: none"> <li>➤ MPSG-G: 248 Gbit/s</li> <li>➤ MPSD-G: 560 Gbit/s</li> </ul>
<p><b>Maximum bandwidth per slot (load sharing mode)</b></p>	<ul style="list-style-type: none"> <li>➤ MPSG-G: 40 Gbit/s</li> <li>➤ MPSD-G: 100 Gbit/s</li> </ul>
<p><b>Access ONTs</b></p>	<p>4096</p>
<p><b>Power supply mode</b></p>	<ul style="list-style-type: none"> <li>➤ DC power supply (dual for backup)</li> <li>➤ AC power supply + battery</li> </ul>
<p><b>Rated voltage</b></p>	<ul style="list-style-type: none"> <li>➤ DC power supply: -48 V/-60 V</li> <li>➤ AC power supply: 110 V/220 V</li> </ul>
<p><b>Ambient temperature</b></p>	<p>-40° C to +65° C* (normal operation) Minimum startup temperature: -25° C *65° C indicates the temperature of the air intake vent of the service subrack.</p>
<p><b>GPON/XG-PON/XGS-PON ports</b></p>	<p>16 x 2 = 32</p>
<p><b>GE/10GE upstream ports</b> Double control boards for upstream transmission</p>	<ul style="list-style-type: none"> <li>➤ MPSG-G: 4 x GE + 4 x 10GE/GE</li> <li>➤ MPSD-G: 8 x 10GE/GE</li> </ul>

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