

WXGP5000-05E-X2 XGPON OLT



WXGP5000-05E-X2 is a rack-type XG (S) PON/GPON master OLT device that can provide high integration and large capacity comprehensive access for operators, ISPs, enterprises, and area applications. The product follows the technical requirements of ITU-T G.984/G.987/G.988/G.9807, with complete software functions, good openness, strong compatibility, and high reliability. Combined with GPON/XG-PON/XGS-PON optical network units (ONUs), it can be widely used in the construction of access network networks for operators such as FTTH, VPN, government enterprise park access, campus network access, etc., providing users with a variety of comprehensive services such as broadband, voice, video, monitoring, etc.

This product adopts a compact frame-design and supports GPON/XG-PON/XGS-PON mixed insertion, with 2 main control slots and 2 user board slots. The single user board supports up to 32 GPON ports/32 XG (S) PONs, and each PON port can support up to 128 optical network units (ONUs). The main control board of the system can provide 4* GE/10GE SFP+interfaces and 2* 100G QSFP28 ports.

Only 2U high, easy to install and maintain, and save extently space for customers. The equipment adopts advanced technology in the industry, with efficient bandwidth utilization and Ethernet business support capabilities, providing customers with reliable solutions. It can support mixed networking of different types of ONUs, saving operators a lot of costs.

Main Features

- Fully compliant with ITU-T G.984/G.987/G.988/G.9807 standards, with good interoperability
- GPON/XGPON/XGS-PON multi-service unified platform, which is convenient for subsequent network upgrade and technology evolution
- Dual master control, dual power supply redundancy, PON backbone fiber protection, to ensure business continuity and stability
- 2U 19-inch chassis, compact size and high density

- Modular design of the whole machine, all boards support hot swap
- Rich Layer 2 and Layer 3 switching features and flexible management modes
- Powerful QoS function to ensure service quality
- Safe DDOS and virus attack protection functions
- Unified Network Management Platform
- Standard OMCI remote deployment and management of user terminals

Hardware specifications

Item	WXGP5000-05E-X2
Interface	MPSA: main control board, 4*10GE/GE SFP+,2*100G QSFP28 GP16A: 16-port GPON line card XS16A: 16-port XG/XGS PON line card CS16A: 16-port GPON/XG/XGSPON combo line card
Exchange capacity	720Gbps
Packet forwarding rate	535.68Mpps
Running memory	4G Bytes (main control board) + 4GBytes (PON board)
Flash	64M + 8G Bytes (main control board) + 64MBytes (PON board)
Management interface	Console interface、debugging network port
Standard compliance	Compliant with ITU TG.984/T G.987/G.988 standard
PON	Center wavelength: GPON: 1310nm (uplink) 1490nm(downlink), XGSPON: 1270nm(uplink) 1577nm (downlink) ; Link rate: GPON downlink 2.48832Gbps, uplink 1.25 Gbps XGPON downlink 9.95328Gbps, uplink 2.48832Gbps; XGSPON downlink 9.95328Gbps, uplink 9.95328Gbps; Flexible and compatible with any brand of ONT, capable of batch software upgrades for ONUs
Environmental temperature	Operating temperature: -10℃ ~ 50℃ Storage temperature: -40℃ ~ 70℃
Environmental humidity	Operating humidity: 10% ~ 95% (non-condensation) Storage humidity: 10% ~ 95% (non-condensation)
Weight	12KG
Power supply	Modular power supply, AC+DC or DC+DC optional AC: 100 ~ 240V 47/63Hz; DC: 48V;
Power consumption	280W
Dimension (W*D*H)	482.6*270*88.9mm

Software characteristics

VLAN	<p>Support 4K VLAN</p> <p>Support VLAN based on port, MAC and protocol</p> <p>Support dual Tag VLAN, port-based static QinQ and flexible QinQ</p>
MAC	<p>128K MAC address</p> <p>Support static MAC address setting</p> <p>Support black hole MAC address filtering</p> <p>Support port MAC address limit</p>
PON	<p>Splitting ratio: 1:128 (GPON, XG-PON, XGS-PON)</p> <p>Support B+/C+/C++ GPON optical modules</p> <p>Support N1/N2/E2 XG-PON or XGS-PON optical modules</p> <p>Support N1/B+, N2/C+, E2/D Comboptical modules</p> <p>SN / SN + Password ONU authentication</p> <p>Support FEC</p> <p>ONU optical power detection</p> <p>Rogue ONU detection</p>
Layer2 Ring Network Protocol	<p>Support STP/RSTP/MSTP</p> <p>Support ERPS Ethernet ring network protection protocol</p> <p>Support Loopback-detection port loopback detection</p>
Port control	<p>Support two-way bandwidth control</p> <p>Support port storm suppression</p> <p>Support 9K Jumbo ultra-long frame forwarding</p>
Port aggregation	<p>Support static link aggregation</p> <p>Support dynamic LACP</p> <p>Each aggregation group supports a maximum of 8 ports</p>
Mirroring	<p>Support mirroring</p>
ACL	<p>Support standard and extended ACL</p> <p>Support ACL policy based on time period</p> <p>Provide flow classification and flow definition based on IP header information such as source/destination MAC address, VLAN, 802.1p, ToS, DSCP, source/destination IP address, L4 port number, protocol type, etc.</p>
QoS	<p>Support flow rate limiting function based on custom business flow</p> <p>Supports mirroring and redirection functions based on custom business flows</p> <p>Support priority marking based on custom service flow, support 802.1P, DSCP priority Remark capability</p> <p>Support port-based priority scheduling function, support queue scheduling algorithms such as SP/WRR/SP+WRR</p>
Security	<p>Support user hierarchical management and password protection</p> <p>Supports IEEE 802.1X authentication/centralized MAC address authentication</p> <p>Supports radius&TACACS+certification</p> <p>Supports MAC address learning limit and black hole MAC function</p> <p>Supports SSH 2.0 and provides a secure encryption channel for user login</p>

	<p>Support SNMP v3 encryption management</p> <p>Supports port isolation and hardware isolation of packets between different ports</p> <p>Support broadcast message rate suppression</p> <p>Support IP Source Guard to automatically create IP+MAC+port+VLAN binding tables, and support manual binding of table items</p> <p>Supports DHCP Option82 and PPPoE+</p> <p>Support automatic suppression of ARP flooding attacks and ARP spoofing protection</p> <p>Support the control layer to prevent various DOS and virus attacks against the CPU</p>
Layer3 function	<p>Support ARP learning and aging</p> <p>Support the creation of VLAN layer three interfaces and configuration of static IPv4/IPv6 addresses</p> <p>Support static routing configuration</p> <p>Supports RIP/OSPF protocol functionality</p> <p>Supports VRRP protocol functionality</p>
System management	<p>Support Console/Telnet/SH2.0 command-line configuration</p> <p>Support web browser configuration management</p> <p>Support download management of FTP and TFTP files</p> <p>Supports SNMP V1/V2/V3</p> <p>Supports RMON</p> <p>Support SNTP clock</p> <p>Support system work logs</p> <p>Supports LLDP neighbor device discovery protocol</p> <p>Supports 802.3ah Ethernet OAM</p> <p>Supports RFC 3164 Syslog function</p> <p>Supports Ping and Traceroute</p>

Product Information

Model	Description
WXGP5000-05E-X2	Complete machine, including frame and rear panel
MPSA	Main control board, 4*GE/10GE+2*100G uplink
GP16A	16 ports GPON OLT line card
XS16A	16ports XG/XGS PON line card
CS16A	16 ports GPON/XG/XGSPONCOMBO line card
FMSA	Fan
NPACA	AC+DC dual power supplies
NPDCA	DC+DC dual power supplies