

8 Port GPON OLT ITU -T Standard With QoS Feature

Model: GPT8610-08P/16P



Product Profile

GPT8610-08P is a new series cassette OLT providing 8 downstream GPON ports, 4 uplink GE Combo ports, 2 10GE SFP+ ports. The height is only 1U, easy to install and maintain.

It adopts advanced technology, with powerful Ethernet services and QoS feature, supporting SLA and DBA. The splitting ratio up to 1:128, supporting different types of ONU in different networks, minimizing operators' investments.

Features

- ❖ Provide a high density PON, the full match can support 1024 ONU terminals, more than ordinary cassette OLT capacity
- ❖ Each PON port supports 1:128 splitting ratio (max 128 ONU), the design of PON optical module hot swap, transmission distances of 20Km max
- ❖ Support Dynamic bandwidth allocation DBA algorithm
- ❖ 1U design, less power consumption, reduce operational costs
- ❖ support dual power supply

Technical Specifications

PON features	
GPON	<p>Satisfy ITU -T standard TR-101 compliant solution for FTTx OLT applications High splitter rate, each PON port supports 128*ONU ,384*T-CONT Maximum transmission distance of 20KM Support uplink FEC, downlink FEC(Forward Error Correction) ONU identifier authentication :SN /SN+PASSWD Bandwidth allocation mechanism 5 types of T-CONT bandwidth Static Bandwidth Allocation Dynamic Bandwidth Allocation GPON feature parameter 4096 port-IDs per GPON MAC (Downstream and Upstream) 1024 Alloc -IDs per GPON MAC (Upstream)</p>
L2 features	
MAC	<p>MAC Black Hole Port MAC Limit</p>
VLAN	<p>4K VLAN entries Port-based/MAC-based/IP subnet-based VLAN Port-based QinQ and Selective QinQ (StackVLAN) VLAN Swap and VLAN Remark and VLAN Translate GVRP Based on ONU service flow VLAN add, delete, replace</p>
Spanning protocol	<p>tree IEEE 802.1D Spanning Tree Protocol (STP) IEEE 802.1w Rapid Spanning Tree Protocol (RSTP) IEEE 802.1s Multiple Spanning Tree Protocol instances (MSTP)</p>
Port	<p>Bi-directional bandwidth control Static link aggregation and LACP(Link Aggregation Control Protocol) Port mirroring and traffic mirroring</p>
Security features	
User security	<p>Anti-ARP-spoofing Anti-ARP-flooding IP Source Guard create IP+VLAN+MAC+Port binding Port Isolation MAC address binds to port and port MAC address filtration IEEE 802.1x and AAA/Radius authentication TACACS+ authentication dhcp anti-attack flood attack automatic suppression</p>

	ONU isolation control
Device security	Anti-DOS attack(such as ARP,Synflood, Smurf, ICMP attack), ARP detection, worm and Msblaster worm attack SSHv2 Secure Shell SNMP v3 encrypted management Security IP login through Telnet Hierarchical management and password protection of users
Network security	User-based MAC and ARP traffic examination Restrict ARP traffic of each user and force-out user with abnormal ARP traffic Dynamic ARP table-based binding Supports IP+VLAN+MAC+Port binding L2 to L7 ACL flow filtration mechanism on the 80 bytes of the head of user-defined packet Port-based broadcast/multicast suppression and auto-shutdown risk port URPF to prevent IP address counterfeit and attack DHCP Option82 and PPPoE+ upload user's physical location Plaintext authentication of OSPF,RIPv2 and MD5 cryptograph authentication
IP routing	
IPv4	ARP Proxy DHCP Relay DHCP Server Static route
IPv6	ICMPv6 ICMPv6 redirection DHCPv6 ACLv6 Configured Tunnel 6to4 tunnel IPv6 and IPv4 Tunnels
Service features	
ACL	Standard and extended ACL Time Range ACL Packet filter providing filtering based on source/destination MAC address, source/destination IP address, port, protocol, VLAN, VLAN range, MAC address range, or invalid frame. System supports concurrent identification at most 50 service traffic Support packet filtration of L2 ~ L7 even deep to 80 bytes of IP packet head

QoS	<p>Rate-limit to packet sending/receiving speed of port or self-defined flow and provide general flow monitor and two-speed tri-color monitor of self-defined flow</p> <p>Priority remark to port or self-defined flow and provide 802.1P, DSCP priority and Remark</p> <p>CAR(Committed Access Rate),Traffic Shaping and flow statistics</p> <p>Packet mirror and redirection of interface and self-defined flow</p> <p>Super queue scheduler based on port and self-defined flow. Each port/flow supports 8 priority queues and scheduler of SP, WRR and SP+WRR.</p> <p>Congestion avoid mechanism,including Tail-Drop and WRED</p> <p>Support the rate limitation on the basis of each ONU uplink and downlink.</p> <p>Support the flow classification of DBA and SLA</p> <p>Support flow-based tag priority and message redirection</p>
Multicast	<p>IGMPv1/v2/v3</p> <p>IGMPv1/v2/v3 Snooping</p> <p>IGMP Filter</p> <p>MVR and cross VLAN multicast copy</p> <p>IGMP Fast leave</p> <p>IGMP Proxy</p> <p>PIM-SM/PIM-DM/PIM-SSM</p> <p>PIM-SMv6,PIM-DMv6,PIM-SSMv6</p> <p>MLDv2/MLDv2 Snooping</p>
MPLS	NPLS LDP
Reliability	
Loop protection	<p>EAPS and GERP (recover-time <50ms)</p> <p>Loopback-detection</p>
Link protection	<p>FlexLink (recover-time <50ms)</p> <p>RSTP/MSTP (recover-time <1s)</p> <p>LACP (recover-time <10ms)</p> <p>BFD</p>
Device protection	<p>VRRP host backup</p> <p>Double fault-tolerant backup of host program and configuration files</p> <p>1+1 power hot backup</p>
Maintenance	
Network maintenance	<p>Telnet-based statistics</p> <p>RFC3176 sFlow</p> <p>LLDP</p> <p>802.3ah Ethernet OAM</p> <p>RFC 3164 BSD syslog Protocol</p>

	Ping and Traceroute
Device management	Command-line interface(CLI), Console, Telnet and WEB configuration System configuration with SNMPv1/v2/v3 RMON (Remote Monitoring)1/2/3/9 groups of MIB NTP(Network Time Protocol)
Environment	
Switching capacity	102Gbps
Throughput (IPv4/IPv6)	152.52MPPS
Ports	8(or 16)*PON port,4*GE Combo ports,2*10GE SFP+
Power redundancy	Dual power supply. Can be double AC, double DC or AC+DC
Power supply	AC:Input 90~240V,47~63Hz DC:Input -36V~-72V
Power consumption	≤150W
Outline dimensions (mm) (W*D*H)	437mm×44mm×377mm
Weight	≤3kg
Environmental requirements	Working temperature:-15°C~55°C Storage temperature:-40°C~70°C Relative humidity:10%~90%,no condensing
Switching capacity	102Gbps

Order information

Products	Description
GPT8610-08P	8* PON ports; 4*GE Combo ports, 2*10GE SFP+
GPT8610-16P	16 * PON ports; 4*GE Combo ports, 2*10GE SFP+

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