EL5610 Series EPON OLT

EL5610 is a high integration and medium capacity cassette EPON OLT designed for operators' access and enterprise campus network. It follows the IEEE802.3 ah technical standards and meets the EPON OLT equipment requirements of *YD/T 1945-2006 Technical requirements for access network——based on Ethernet Passive Optical Network (EPON)* and *China telecom EPON technical requirements 3.0*. EL5610 series possesses excellent openness, large capacity, high reliability, complete software function, efficient bandwidth utilization and Ethernet business support ability, widely applied to the operator front-end network coverage, private network construction, enterprise campus access and other access network construction.

EL5610 series provides 4/8/16 * downlink 1000M EPON ports, 8 * GE Ethernet ports and 2/4 * 10G uplink ports. The height is only 1U for easy installation and space saving. It adopts the advanced technology, offering efficient EPON solution. Moreover, it saves a lot cost for operators for it can support different ONU hybrid networking.

EL5610-04P

- ☐ 1RU19 inch
- ☐ 1+1 power redundancy
- ☐ 4* fixed EPON port
- ☐ 4*10GE SFP+ 8 * GE
- ☐ 1* console port
- ☐ full-load power consumption≤40 W

EL5610-08P

- ☐ 1RU19 inch
- ☐ 1+1 power redundancy
- ☐ 8* fixed EPON port
- ☐ 4*10GE SFP +8* GE
- ☐ 1* console port
- ☐ full-load power consumption≤45 W

EL5610-16P

- ☐ 1RU19 inch
- ☐ 1+1 power redundancy
- ☐ 16 * fixed EPON port
- ☐ 4 * GE SFP, 4*GE COMBO port, 2*10GE SFP
- ☐ 1* console port
- ☐ full-load power consumption≤85W

Product Specification:

Item	EL5610-04P	EL5610-08P	EL5610-16P
Switching Capacity	128Gbps		
Forwarding Capacity(Ipv4/Ipv6)	95.23Mpps		
Service Port	4*PON port, 4*10GE/GE SFP+8GE	8*PON port, 4*10GE/GE SFP +8GE	16*PON, 4*GE SFP, 4*GE COMBO port, 2*10GE/GE SFP
Redundancy Design	Built-in double power supply, including AC, double DC, AC+DC, single AC, single DC distinguished via model		Pluggable double power supply, double AC, double DC and AC+DC
Power Supply	AC: input100～240V 47/63Hz DC: input36V～75V		
Power Consumption	≤40W	≤45W	≤85W
Dimensions (Width x Depth x Height)	440mm×44mm×311mm		442mm×44mm×380mm
Weight (Full-Loaded)	≤3kg		
Environmental Requirements	Working temperature: -10°C～55°C Storage temperature: -40°C～70°C Relative humidity: 10%～90%, non-condensing		

Service Features:

Item		EL5610-04P/08P/16P
PON Features		IEEE 802.3ah EPON China Telecom/Unicom EPON Maximum 20 Km PON transmission distance Each PON port supports the max. 1:64 splitting ratio Uplink and downlink triple churning encrypted function with 128Bits Standard OAM and extended OAM ONU batch software upgrade, fixed time upgrade, real time upgrade PON transmit and inspect receiving optical power PON port optical power detection
L2 Features	MAC	MAC Black Hole Port MAC Limit 16K MAC address

	VLAN	4K VLAN entries Port-based/MAC-based/protocol/IP subnet-based QinQ and flexible QinQ (StackedVLAN) VLAN Swap and VLAN Remark PVLAN to realize port isolation and saving public-vlan resources GVRP
	Spanning Tree	STP/RSTP/MSTP Remote loop detecting
	Port	Bi-directional bandwidth control Static link aggregation and LACP(Link Aggregation Control Protocol) Port mirroring
Security Features	User's Security	Anti-ARP-spoofing Anti-ARP-flooding IP Source Guard create IP+VLAN+MAC+Port binding Port Isolation MAC address binding to the port and MAC address filtering IEEE 802.1x and AAA/Radius authentication
	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 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 BGPv4 packets and MD5 cryptograph authentication
IP Routing	IPv4	ARP Proxy DHCP Relay DHCP Server Static Routing RIPv1/v2 OSPFv2 BGPv4 Equivalent Routing Routing Strategy

	IPv6	ICMPv6 ICMPv6 Redirection DHCPv6 ACLv6 OSPFv3 RIPng BGP4+ Configured Tunnels ISATAP 6to4 Tunnels Dual stack of IPv6 and IPv4
Service Features	ACL	Standard and extended ACL Time Range ACL Flow classification and flow definition based on source/destination MAC address, VLAN, 802.1p, ToS, DiffServ, source/destination IP(IPv4/IPv6) address, TCP/UDP port number, protocol type, etc packet filtration of L2～L7 deep to 80 bytes of IP packet head
	QoS	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 Priority remark to port or self-defined flow and provide 802.1P, DSCP priority and Remark CAR(Committed Access Rate), Traffic Shaping and flow statistics Packet mirror and redirection of interface and self-defined flow Super queue scheduler based on port or self-defined flow. Each port/ flow supports 8 priority queues and scheduler of SP, WRR and SP+WRR. Congestion avoid mechanism, including Tail-Drop and WRED
	Multicast	IGMPv1/v2/v3 IGMPv1/v2/v3 Snooping IGMP Filter MVR and cross VLAN multicast copy IGMP Fast leave IGMP Proxy PIM-SM/PIM-DM/PIM-SSM PIM-SMv6, PIM-DMv6, PIM-SSMv6 MLDv2/MLDv2 Snooping
Reliability	Loop Protection	EAPS and GERP (recover-time <50ms) Loopback-detection
	Link Protection	FlexLink (recover-time <50ms) RSTP/MSTP (recover-time <1s) LACP (recover-time <10ms) BFD
	Device Protection	VRRP host backup 1+1 power hot backup

Maintenance	Network Maintenance	Port real-time, utilization and transmit/receive statistic based on Telnet RFC3176 sFlow analysis LLDP 802.3ah Ethernet OAM RFC 3164 BSD syslog Protocol Ping and Traceroute
	Device Management	CLI, Console port, Telnet and WEB SNMPv1/v2/v3 RMON (Remote Monitoring)1, 2, 3, 9 groups MIB NTP NGBNView network management

Purchase Information:

Product name	Product description
EL5610-04P	4*PON port, 4*10GE/GE SFP +8GE, dual power with optional
EL5610-08P	8*PON port, 4*10GE/GE SFP +8GE, dual power with optional
EL5610-16P	16*PON, 4*GE SFP, 4*GE COMBO port, 2*10GE/GE SFP, pluggable power supply
NG01PWR100AC	power module for NG01PWR100AC
NG01PWR100DC	power module for NG01PWR100DC

