

EL7500-16 Cost-Effective EPON OLT

EL7500-16 is the latest EPON OLT launched by GCOM. It uses modularized design concept, combined with advanced industrial design and manufacture technology to provide users with broadband access with moderate density, high reliability, flexible networking, easy installation and maintenance. EL7500-16 offers the IPv4/ IPv6 linear forward capacity, incomparable service performance, operational security attribute. Therefore, it can supply operational BBA network large capacity, high speed and high bandwidth data, voice and video service access for its high reliability, high scalability and super service performance. According to different user scenarios, EL7500-16 can be applied to FTTB, FTTC, FTTH, etc.

EL7500-16



- 8U ultra-compact chassis, high-density line card
- □ 1+1 master redundancy, 1+1 power redundancy
- $\hfill\Box$ hot plug fan tray, intelligent speed and temperature control
- 16 *slot (14 * line card service slot and 2
 *master transmission slot)
- □ GE/10GE/EPON board , 48*EPON Port max
- □ 220Gbps high-speed backplane
- ☐ full-load power consumption≤ 300 W

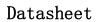


Product Specification:

Item	EL7500-16
backplane bandwidth	220Gbps
Switching Capacity	176Gbps
Forwarding Capacity(lpv4/lpv6)	131Mpps
Qty of total slots	16
Qty of service slots	14
Service port	downlink maximum 48*GEPON Uplink maximum 4* 10GE SFP+ / GE COMBO
Redundancy Design	Double master redundancy Double power supply redundancy
Power Supply	AC: input 90~264V, 47~63Hz DC: input -36V~-72V
Power Consumption	≤300W
Dimensions (Width x Depth x Height)	483mm×352mm×364mm
Weight (Full-Loaded)	≤26kg
Environmental Requirements	Working temperature: $-5^{\circ}\text{C} \sim 55^{\circ}\text{C}$ Storage temperature: $-40\text{C} \sim 70\text{C}$ Relative humidity: $10\% \sim 90\%$, non-condensing

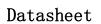
Service Features:

lt	em	EL7500-16
		IEEE 802.3ah EPON
		China Telecom/Unicom GEPON
		Maximum 20 Km PON transmission distance
		Each PON port supports the max. 1: 64 splitting ratio
PON Features		Uplink and downlink triple churning encrypted function with 128Bits
		ONU terminal legitimacy certification, report illegal ONU registration
		DBA algorithm, the particle is 64Kbit/s
		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	32K MAC address
		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
	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
Security	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
Features	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





		ICMPv6 Redirection DHCPv6 ACLv6
		Dual stack of IPv6 and IPv4
	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
		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
Service	QoS	CAR(Committed Access Rate), Traffic Shaping and flow statistics
Features		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
		MLDv2/MLDv2 Snooping
	Loop	ERRP and ERPS (recover-time <50ms)
	Protection	Loopback-detection
Reliability	Link Protection	FlexLink (recover-time <50ms) RSTP/MSTP (recover-time <1s) LACP (recover-time <10ms) BFD
	Device Protection	VRRP host backup Double fault-tolerant backup of host program and configuration files 1+1 power hot backup Fan/board redundancy
Maintenance	Network Maintenance	Port real-time, utilization and transmit/receive statistic based on Telnet
		port RFC3176 sFlow analysis LLDP
		802.3ah Ethernet OAM RFC 3164 BSD syslog Protocol Ping and Traceroute



Datasheet

Device Management	CLI, Console port, Telnet SNMPv1/v2/v3 RMON (Remote Monitoring)1, 2, 3, 9 groups MIB NTP NGBNView network management
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Purchase Information:

Product name	Product description	
EL7500-16	EL7500-16, Rack	
EL75MSUA	EL7500-16, main control panel	
EL75EP04A	EL7500-16, EPON service port, 4*EPON SFP(should be used with SFP EPON	
	optical module)	
EL75GC02A	EL7500-16, GE card, 2*GE COMBO	
EL75XG02A	EL7500-16, 10 GE card,2*10GE SFP+(should be used with 10GE SFP optical	
	module)	
NG01PWR450DC	450W DC power supply module, input DC -36V~-72V	
NG01PWR450AC	450W AC power supply module, input AC 90V~264V,47~63Hz	