



**ELM Board**

<b>OLT Ports</b>	4
<b>Standard</b>	IEEE802.3ah
<b>Optical Fiber</b>	SMF, Single Mode Fiber
<b>Connector</b>	SC
<b>Number of Supported ONU</b>	Each OLT Port Supports Up to 64 ONUs
<b>Rate</b>	1 Gbps Uplink and Downlink
<b>Light Loss Budget</b>	29 dB
<b>Wavelength</b>	Transmission Wavelength: 1490 nm; Received Wavelength: 1310 nm
<b>ONU Customer Authentication</b>	IEEE802.1x
<b>QoS</b>	IEEE802.1p
<b>DBA</b>	Assign the Maximum Bandwidth or the Assured Bandwidth to Each ONU Customer

**L2 Switch Function**

<b>Non-blocking Switch</b>	Link-speed Forwarding
<b>Flexible Address Learning</b>	Independent VLAN Learning (IVL) Address Learning Based on Hardware L2 Forwarding List Based on the Software Configuration 16K L2 Unicast List
<b>L2 Multicast</b>	512 L2 Multicast Lists Support IGMP-Snooping, IGMP-Proxy
<b>VLAN</b>	4094 Tagged (802.1Q) VLANs Ingress Filter Mechanism Based on 802.1Q VLAN
<b>Link Aggregation</b>	At Most Aggregates 4 Uplink IEEE 802.3ad Link
<b>Packet Mirror</b>	Mirror Based on the Port: Ingress, Egress, Ingress and Egress
<b>Packet Buffer and Senior Flow Control</b>	HOL Jam Prevention Based on Cos Support Back Pressure Support Suspended Frame

**QoS**

<b>Class of Service (CoS)</b>	Each Egress Supports 4 CoS Queue Supports 802.1 Q Priority Supports Queuing Mechanisms: Strict Method, Time-delay Method and Weighting Method Supports Priority Remapping of IPv4 TOS Mechanism Supports IP Precedence, DSCP
<b>Rate Shaping for Output Port</b>	From 1 Mbps ~ 1 Gbps Token Bucket Limiting Flow Function Radio, Multicast and DLF Rate Control Based on the Port

**Security**

<b>Access Control List (ACL)</b>	Source and Destination IP, Source and Destination TCP/UDP Port and ToS Combination Supports Five Actions, Such as Permit, Deny, DSCP Remarking, Rate Limit or Priority Remarking
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**L3 Route Protocol**

<b>TCP/IP</b>	RFC 0768 RFC 0791 RFC 0793	User Datagram Protocol Internet Protocol Transmission Control Protocol
<b>ICMP</b>	RFC 0792	Internet Control Message Protocol
<b>ARP</b>	RFC 0826	Ethernet Address Resolution Protocol
<b>Proxy ARP</b>	RFC 1027	Uses ARP to Implement Transparent Subnet Gateways
<b>OSPF</b>	RFC 1587 RFC 1745 RFC 1850 RFC 2328 RFC 1771 RFC 1965 RFC 1966 RFC 1997 RFC 1998	OSPF NSSA Option BGP-4/IDRP for IP-OSPF Interaction OSPF Version 2 MIB OSPF Version 2 A Border Gateway Protocol 4 (BGP-4) Autonomous System Confederations for BGP BGP Route Reflection BGP Communities Attribute An Application of the BGP Community Attribute in Multi-home Routing
<b>PIM-SM</b>	RFC 2362	Protocol Independent Multicast-sparse Mode (PIM-SM)
<b>IGMP</b>	RFC 2236	Internet Group Management Protocol, Version 2

**L3 Switch /Route Performance**

<b>L3 Host Table</b>	8 K
<b>L3 LPM Table</b>	64 K
<b>L3 Interface Table</b>	4 K
<b>DeFailure Route</b>	DeFailure Route Based on VLAN
<b>L3 Enable</b>	Based on the Port
<b>ECMP Routing</b>	Support
<b>IP Multicast Replication</b>	Support
<b>IPMC Group Table</b>	1 K
<b>IPMC Enable</b>	Based on the Port
<b>Jumbo Frame</b>	Up to 9216 Bytes Packet

**Network Management**

<b>FTP</b>	RFC 959	File Transfer Protocol
<b>Telnet</b>	RFC 0854	Telnet Protocol Specification
<b>SNMP</b>	V2.0	Simple Network Management Protocol
<b>DHCP</b>	RFC 2131	Dynamic Host Configuration Protocol
<b>AAA RADIUS</b>	RFC 2138	Remote Authentication Dial In User Service (RADIUS)

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**General Specifications**

<b>Power of Single ELM</b>	Maximum: 30 W
<b>Power of Two ELM</b>	Maximum: 100 W
<b>Power</b>	Two DC power slots: Input voltage -48 V (Allowed Range: -36 V ~ -72 VDC) Or One AC power slot, input voltage: 110/220 V ( Allowed Range: 85 ~ 264 VAC)
<b>Power Consumption of Power Supply</b>	140 W
<b>Uplink Port</b>	Four GE Ports which Support SFP Transceiver, can Equipped with the Optical Module or the Electrical Module
<b>OLT Port</b>	Maximum Offer 8 PON Ports which Support SFP Transceiver, Only can be Equipped with the Optical Module. It's Connected with ONU by the Optical Splitter
<b>PON Ports</b>	Option for 4, 8, or 16 PON Ports
<b>MGNT Port</b>	RJ45, Offer 10/100 Base-T Out-band Management Port
<b>CONSOLE Port</b>	RJ45, Offer Console Port for the System Diagnosis
<b>COM Port</b>	RJ45, Offer Connection Alarm Communication
<b>Weight</b>	5.5 kg (12 lb)
<b>Dimensions (LxWxH)</b>	440 x 275 x 43.6 mm (17.3 x 10.8 x 1.7 in.)