LGPONT16-8SFP

Lightem LGPONT16-8SFP provides 8 downstream GPON ports, 8 uplink GE optical port and 8 GE electrical ports, with an expansion slot, which can access 2 10GE SFP+ ports. The 1U height can be easy installed and maintained to save space. This product adopts the industrial 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

- Satisfy ITU -T standard
- TR-101 compliant solution for FTTx OLT applications
- High splitter rate, each PON port supports 32*ONU ,96*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
- L2 , L3 features

SPECIFICATIONS

Performance	
Switching capacity	102Gbps
Throughput (IPv4/IPv6)	75.88MPPS
Ports	Ports 8*PON port，8*GE FX+8*GE TX
Power redundancy	Dual power supply. Can be double AC, double DC or AC+DC
Power supply	AC：Input 100～240V，47～63Hz； DC：Input -36V～-75V；
Power consumption	≤85W
Outline dimensions (W*D*H)	440mm×44mm×380mm
Weight (in maximum configuration)	≤3kg
Working temperature	-15°C – 55°C
Storage temperature	-40°C – 70°C
Relative humidity	10% – 90%，no condensing

TELECOM/DATACOM SYSTEM

PON features	
GPON	Satisfy ITU -T standard
	TR-101 compliant solution for FTTx OLT applications
	High splitter rate, each PON port supports 32*ONU ,96*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)
L2 features	
MAC	MAC Black Hole
	Port MAC Limit
VLAN	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
Spanning tree protocol	IEEE 802.1D Spanning Tree Protocol (STP)
	IEEE 802.1w Rapid Spanning Tree Protocol (RSTP)
	IEEE 802.1s Multiple Spanning Tree Protocol instances (MSTP)
Port	Bi-directional bandwidth control
	Static link aggregation and LACP(Link
	Aggregation Control Protocol)
	Port mirroring and traffic mirroring
L3 features	
Interface	VLAN L3 Interface ip configure
Router	Static routing
	RIP V1/V2
	OSPF V1/V2/V3
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
IP routing	
IPv4	ARP Proxy
	DHCP Relay
	DHCP Server
	Static route

IPv6	ICMPv6
	ICMPv6 redirection
	DHCPv6
	ACLv6
	Configured Tunnel
	6 to 4 tunnel
	IPv6 and IPv4 Tunnels
Security features	
User security	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+ authentification
	dhcp anti-attack flood attack automatic suppression
	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
Service features	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 and 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
MPLS	NPLS LDP
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
	Double fault-tolerant backup of host program
	and configuration files
	1+1 power hot backup
Maintenance	
Network maintenance	Telnet-based statistics
	RFC3176 sFlow
	LLDP
	802.3ah Ethernet OAM
	RFC 3164 BSD syslog Protocol
	Ping and Traceroute
Device management	Command-line interface（CLI）, Console, Telnet configuration
	System configuration with SNMPv1/v2/v3
	RMON (Remote Monitoring)1/2/3/9 groups of MIB
	NTP(Network Time Protocol)
	NMS

ORDERING INFORMATION

PN	DESCRIPTION
LGPONT16-8SFP	8x Pon ports, 8x GE uplink optic ports, 8x GE uplink electric ports