DT5600-08 GPON OLT

DT5600-08 cassette OLT 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. The GL5600-08P 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.

Product Specification:

Attributes	DT5600-08
Switching capacity	102Gbps
Throughput (IPv4/IPv6)	75.88MPPS
Ports	8*PON port，8*GE FX+8*GE TX，2*10GE SFP+
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 (mm) (W*D*H)	440mm×44mm×380mm
Weight (in maximum configuration)	≤3kg
Environmental requirements	Working temperature：-15℃～55℃ Storage temperature：-40℃～70℃ Relative humidity：10%～90%，no condensing

Features:

| Attributes		DT5600-08 series
PON features	GPON	• Satisfy ITU -T standard • TR-101 compliant solution for FTTx OLT applications • High splitter rate, each PON port supports up to128*ONU (each onu supports • 3* T-CONT), 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)
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
	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
	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	● 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
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 and WEB configuration
		● System configuration with SNMPv1/v2/v3
		● RMON (Remote Monitoring)1/2/3/9 groups of MIB
		● NTP(Network Time Protocol)

Application

Replace Ethernet design
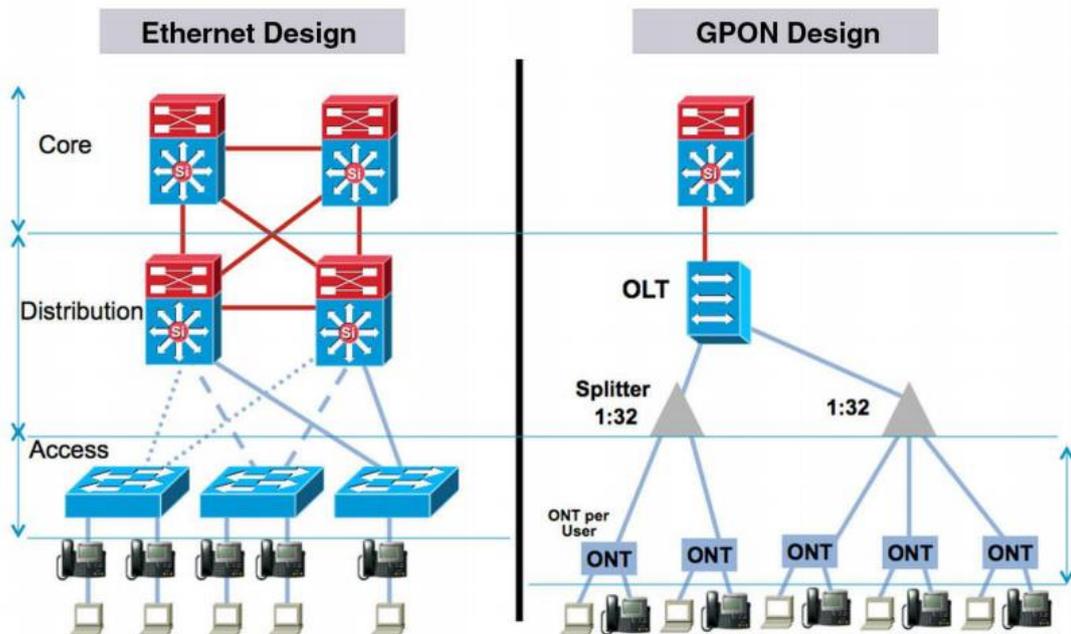
GPON in the campus replaces this three-tier architecture with a two-tier fiber optic network by eliminating active access and distribution Ethernet switches with passive optical devices.