High Capacity Universal 10U GPON OLT

AP8810 Series

- 14 × universal PON slots
- 560 Gbps backplane switching capacity
- Up to 224 PON ports
- 2 × switching and controller slots
- 2 × uplink slots
- 1 + 1 redundancy
- ITU-T and IEEE compliant
- Low power consumption
- Low operating costs
- CLI and SNMP management
- Easy-to-use GUI

AP8810 Series 10U chassis is a high density universal OLT platform which can support both GPON and EPON applications. It is designed using advanced ASIC chip technology and suitable for service providers deploying high-capacity PON OLTs in central office. One OLT card in AP8810 chassis can support up to 16 PON ports. Single chassis can support up to 224 PON ports and can manage up to 28672 remote ONUs.

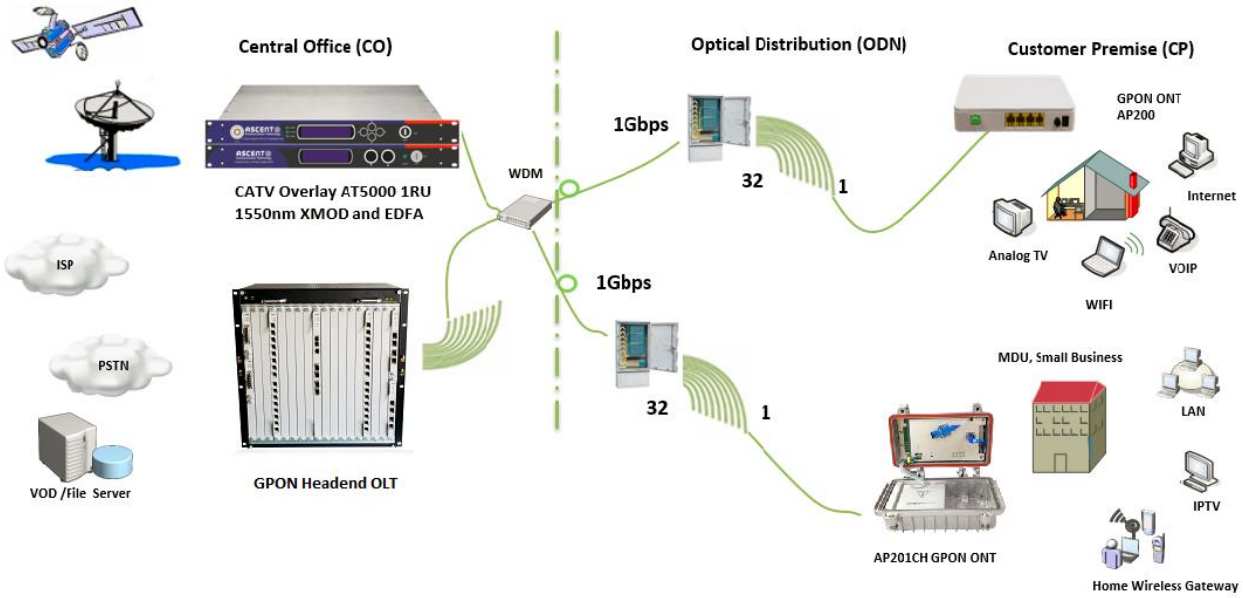
AP8810 series is fully compliant with ITU-T and IEEE standards and is compatible to work with various types of ONTs available. Besides the 14 universal PON slots, it supports multiple 1 + 1 redundancy pair slots including two switching & controller slots, two uplink slots with dual-power supply, which enhances the system reliability and stability for seamless operation. It supports network management via CLI and SNMP, with an easy to operate GUI.

AP8810 platform seamless cooperates with ACT routing and switching products. Combined with ACT Video Overlay package, the AP8810 can provide perfect end-to-end FTTX solution in offering advanced Video, Voice, and Data services, small and large networks.

Key Features

- Compliant with ITU-T and IEEE standards
- Supports 14 × universal GPON/EPON card slots
- Up to 16 GPON/EPON ports per card
- Up to 224 GPON/EPON ports per system
- Supports 2 × uplink slots
- Up to 24 10GE uplink ports per system
- 1 + 1 redundancy power supply
- CLI and SNMP network management

Application Diagram



Specifications

Item	Description
Switching Capacity	560 Gbps
Switching and System Controller	2 slots, each card integrates switching fabric and system controller
	1 + 1 redundancy
PON Interface	14 universal GPON/EPON card slots
	Up to 16 GPON/EPON ports per card
	Up to 224 GPON/EPON ports per system
Uplink Interface	2 uplink slots with 4 10GE ports in each uplink card
	Additional 4 or 8 × 10GE uplink ports integrated in each switching/controller card (there are two switching/controller cards)
	Up to 24 × 10GE uplink ports per system
Power Supply	2 DC power slots with 1 + 1 redundancy
	Input range: -40 V to -75 V
Power Consumption	Typical: 1050 W
	Maximum: 1500 W
Dimensions (W × D × H)	440 mm × 247 mm × 463 mm
Operating Temperature	-5 °C to +50 °C
Storage Temperature	-40 °C to +70 °C
Relative Humidity	10 % to 90 % (non-condensing)

Features

PON Features	Compliant with related ITU-T and IEEE standards
	High splitter rate, each PON port supports up to 128 GPON ONU or 64 EPON ONU
	Supports five types of bandwidth profile
	Supports multiple ONU authentication mechanism: LOID, SN (GPON) or MAC (EPON), Password, or related combination.
	Supports DBA (Dynamic Bandwidth Allocation)
Ethernet Features	
VLAN	Supports 4K VLAN entries
	Supports QinQ based on port or service flow
	Supports VLAN add, remove, translate per ONU service flow based
Spanning Tree	Supports IEEE 802.1D Spanning Tree Protocol (STP)
	Supports IEEE 802.1w Rapid Spanning Tree Protocol (RSTP)
	Supports IEEE 802.1s Multiple Spanning Tree Protocol instances (MSTP)
Port	Supports bi-directional bandwidth control
	Supports static link aggregation and dynamic LACP(Link Aggregation Control Protocol)
	Supports port mirroring and traffic mirroring
Multicast	Static multicast IGMPv1/v2/v3
	IGMP Snooping/Proxy

	IGMP fast leave
Ethernet Features	
QoS	Supports rate-limit based on port or self-defined service flow Supports priority remark based on port or self-defined service flow and provide 802.1P, DSCP priority and Remark Supports QoS scheduling based on port and self-defined service flow, support of 8 priority queues, scheduler algorithm is SP, WRR, or SP plus WRR. Supports congestion avoid mechanism
Security Features	
User Security	Supports anti-ARP-spoofing Supports anti-ARP-flooding Supports port isolation and ONU isolation control Supports binding among IP, MAC, VLAN and port
Device Security	Supports anti-DOS attack Supports hierarchical management and password protection
Network Security	Supports port-based broadcast/multicast suppression Supports L2 to L7 ACL flow filtration mechanism on the 80 bytes of the head of user-defined packet
Network Management	CLI (Command Line Interface) NMS (Network Management System) via SNMP interface

Ordering Information

Product name	**Product description**
AP8810-CH	AP8810 series 10RU GPON OLT 14 services slots, 2 × main control slots, 1 × hot plug fan disk, no main control boards, no power supply)
AP8810-MSU-A0	main control board, 1+1 Switching and System Controller, with 4x10GE uplink port
AP8810-PWR-AC	AP8810, 750W AC power supply module
AP8810-FAN	AP8810 FAN tray module with air filter
AP8810-GP-16MA	AP8810 GPON line card, 16 × GPON SFP port
AP8810-UL-40G	AP8810 4 × 10G Uplink Port card

Contact Information

Ascent Communication Technology Ltd

AUSTRALIA
140 William Street, Melbourne
Victoria 3000, AUSTRALIA
Phone: +61-3-8691 2902

CHINA
Unit 1933, 600 Luban Road
200023, Shanghai CHINA
Phone: +86-21-60232616

EUROPE
Pfarrer-Bensheimer-Strasse 7a
55129 Mainz, GERMANY
Phone: +49 (0) 6136 926 3246

HONG KONG SAR
Unit 9, 12th Floor, Wing Tuck Commercial Centre
177 Wing Lok Street, Sheung Wan, HONG KONG
Phone: +852-2851 4722

USA
2710 Thomes Ave, Cheyenne
WY 82001, USA
Phone: +1-203 816 5188

VIETNAM
15 /F TTC Building, Duy Tan Street, Cau Giay
Hanoi, VIETNAM
Phone: +84 243 795 5917

WEB: www.ascentcomtec.com **EMAIL:** sales@ascentcomtec.com

Ver. ACT_AP8810_GPON_OLT_Datasheet_V1b_Oct_2017