

1RU Compact GEAPON OLT Solution



AP9001 Series

- **1RU GEAPON OLT for FTTx Application**
- **2, 4, 8 PON ports**
- **up to 512 ONUs**
- **802.3ah Compliant**
- **Advanced QoS, Multicast and Security**
- **IPTV and Video Overlay Supported**
- **Selectable Optic SFP and Copper uplink**

ACT AP9001 GEAPON OLT series Platform is a compact one RU high performance OLT optical line terminal equipment which provides Network Operators and Services Providers with a flexible and starting point for Gigabit Ethernet Passive Optical Network (GEAPON) services in Fiber to The Home/Business (FTTH & FTTB) networks.

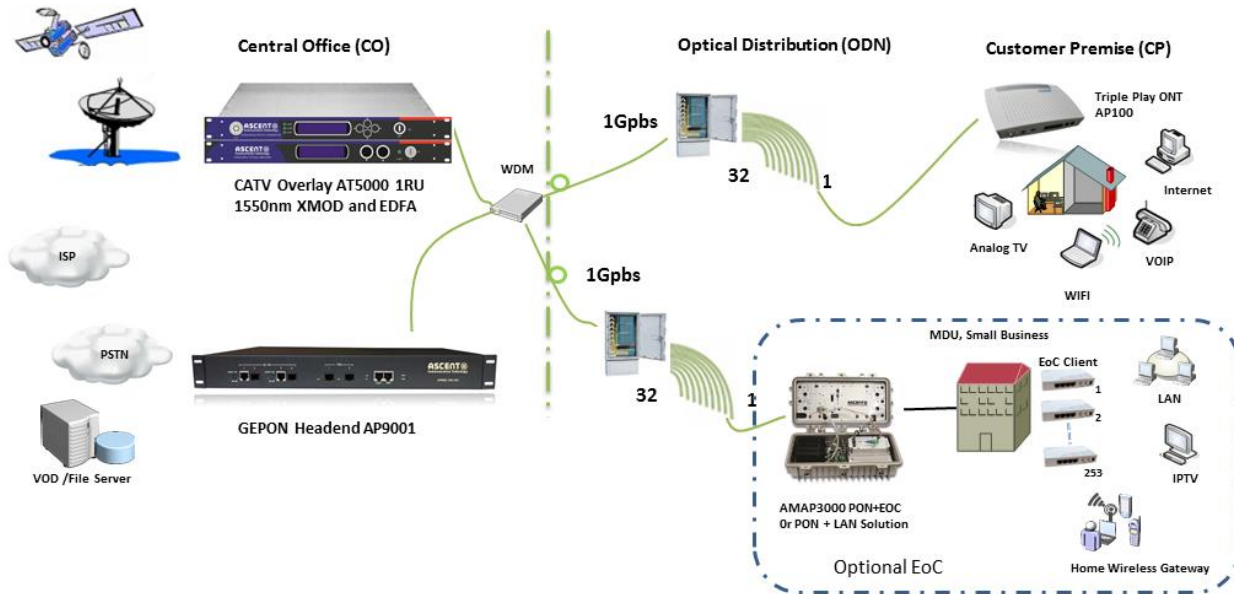
AP9001 fits into the standard 19 inch rack. AP9001 model supports two, four or eight GEAPON PON ports and can connect up to 1:64 optical splitters in the field. It also provides 2/4/8 uplink optic SFP and 2/4/8 uplink RJ45 ports. The platform has built-in switch modules, supporting full - duplex forwarding and powerful layer 2 protocols. AP9001 OLT platform has built - in management modules, supporting various types of management modes, such as out - band, in - band, CLI, and SNMP based EMS GUI software to manage the system locally and remotely.

AP9001 series GEAPON platforms seamless cooperate with ACT routing and switching products. Combined with ACT Video Overlay package, the AP9001 can provide perfect end-to-end FTTx solution in offering advanced Video, Voice, and Data services, especially in small and medium networks.

Key Features

- Flexible Gigabit Ethernet PON platform supports up to 128 subscribers per chassis
- Supports L2 switching protocols (4096 VLAN, 802.3dd Trunk, RSTP, QoS, VID, IGMP, 802.x flow control)
- Built in internal switching supports full duplex forwarding
- Up to 8 x 1Gbps uplinks with optic SFP or RF45 ports
- Supports stable and efficient dynamic bandwidth allocation (DBA)
- Supports each ONU to configure various LLID, allocating various priority
- Schedules queues to insure high priority service
- ONU auto-detection and registration
- Auto link loop back test function for a single link
- Supports VLAN based on port protocol; LGMP and Snooping function;
- Supports ACL packet filter and classify function
- Supports port flow control and flow shaping
- Shelf management for monitoring and control via network. CLI and SNMP access
- Upgrading single or multiple ONUs at the same time
- Supporting backbone optical-fiber protection, “1+1” protection, switchover delay of less than 50ms
- RADIUS-based broadband management and customer SLA control
- Low Power consumption to save maintenance and services cost

Application Diagram



Specifications

AP9001 1RU Gigabit Ethernet PON Platform - 19"

PON wavelength	Downlink 1490nm; Uplink 1310nm
Rate	Symmetric uplink and downlink: 1.25G
PON TX power	+2dbm to +7dbm
PON RX level (Low)	-27dBm
Max PON Coupling Ratio	1:64
EMS manager	SNMP (Simple Network Management Protocol), Telnet, CLI (Command Line Interface)
Power supply	AC 90-240Vac, 50/60 Hz
Operating temperature	0 to 50 °C optimal performance 15 to 35 °C
Storage temperature	-40 to 85 °C
Relative humidity	10% to 90% no condensation
Dimensions (W x D x H)	440x260x44 mm
Weight	Fully loaded chassis: 3 kg
Ship weight	4 kg

Height (RU)	AP9001 1
PON OLT port quantity	2, 4, 8 x1000Base PON SFP Ports
Uplink Optic SFP ports 1G quantity	2, 4, 8 x1000Base LX, GE SFP,
Uplink RJ45 Electric ports 1G quantity	2, 4, 8 x10/100/1000M auto negotiable
Console panel quantity	1
Max Power consumption	16W, 30W, 45W

Ordering Information

AP9001 Series 1RU GEAPON	Description
AP9001-2PON-AC	AP9001 1RU OLT chassis, 2 PON ports, 2 uplink SFP and RJ45 ports, 1 console, 1 management port, AC power supply
AP9001-4PON-AC	AP9001 1RU OLT chassis, 4 PON ports, 4 uplink SFP and RJ45 ports, 1 console, 1 management port, AC power supply
AP9001-8PON-AC	AP9001 1RU OLT chassis, 8 PON ports, 8 uplink SFP and RJ45 ports, 1 console, 1 management port, AC power supply

Check with ACT sales representative for DC power version

AP9000 Series SFP Modules

SFP-PG-SP-4931-C	SFP Plug-in, GEAPON OLT 1.25Gbps, 1:32 distance 20Km, 1:64 distance 10Km, SC, TX1490nm,RX1310nm
SFP-AG-LP-4931	Uplink SFP Plug-in, 1Gbps, 20km, BIDI, TX=1490nm, RX=1310nm, LC/PC Blue

AP9000 Series EMS Software

AP9001-NMS	AP9001 Modular GEAPON Switch chassis Network Management System
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