

1RU Compact GEAPON OLT Solution



AP9100 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**
- **SNMP based GUI EMS Management**

ACT AP9100 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.

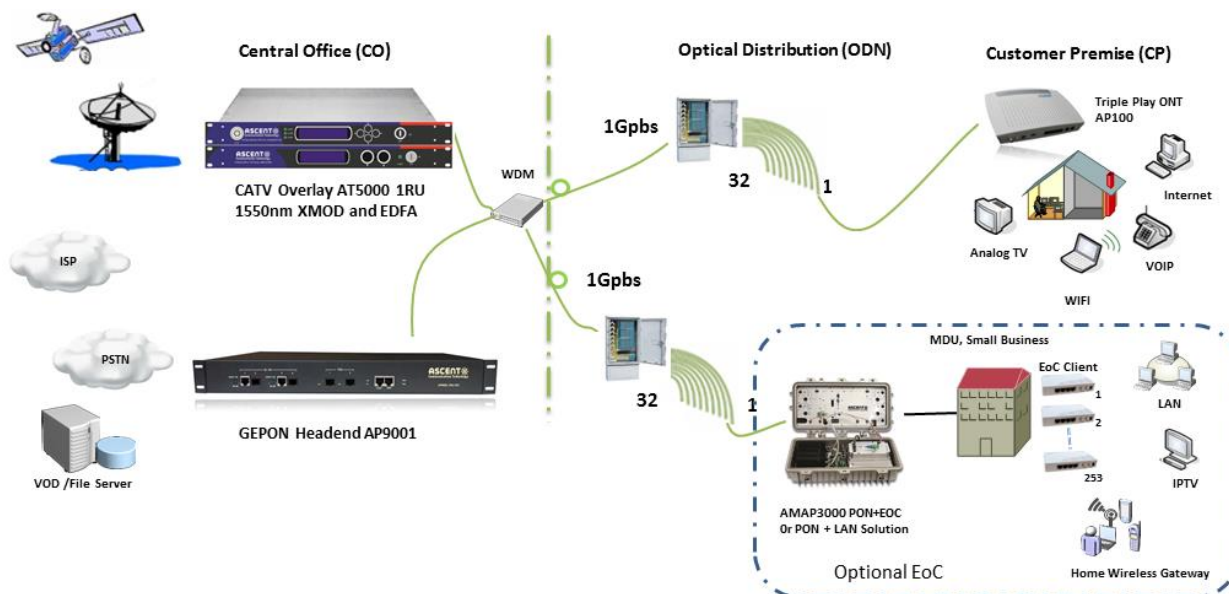
AP9100 fits into the standard 19-inch rack. AP9100 model supports two GEAPON PON ports and can connect up to 128 ONUs by 1:64 optical splitters in the field. It also provides 2 uplink optic SFP and 2 uplink RJ45 ports. The platform has built-in switch modules, supporting full - duplex forwarding and powerful layer 2 protocols. AP9100 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.

AP9100 series GEAPON platforms seamless cooperate with ACT routing and switching products. Combined with ACT Video Overlay package, the AP9100 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 < 50 ms
- RADIUS-based broadband management and customer SLA control
- Low Power consumption to save maintenance and services cost

Application Diagram



Specifications

AP9100 1RU Gigabit Ethernet PON Platform - 19"

| Item | Description |
|--|--|
| 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) | 440×260×44 mm |
| Weight | Fully loaded chassis: 3 kg |
| Ship Weight | 4 kg |
| Height (RU) | 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

AP9100 Series 1RU GEAPON

AP9100-2PON-AC

Description

AP9100 1RU OLT chassis, 2 PON ports, 2 uplink SFP and RJ45 ports, 1 console, 1 management port, AC power supply

AP9100-4PON-AC

AP9100 1RU OLT chassis, 4 PON ports, 4 uplink SFP and RJ45 ports, 1 console, 1 management port, AC power supply

AP9100-8PON-AC

AP9100 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

AP9100-NMS

AP9100 Modular GEAPON Switch chassis Network Management System

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