

4/8/16 Port GPON OLT

Datasheet V1.0

COMCAST GROUP



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Product overview

- ✓ **Open to any brand of ONT**
- ✓ **Power backup**
- ✓ **Easy to manage and friendly interface**

OLT1600G series GPON OLT products are 1U height 19 inch rack mount products. The features of the OLT are small, convenient, flexible, easy to deploy, high performance. It is appropriate to be deployed in compact room environment. The OLTs can be used for “Triple-Play”, VPN, IP Camera, Enterprise LAN and ICT applications.

| Product | PON Port | Unlink interface |
|-----------|-----------|---------------------------------|
| OLT1604G0 | 4 x GPON | 4*GE+2*GE(SFP)/10GE(SFP+) |
| OLT1608G1 | 8 x GPON | 4*GE + 2*GE(SFP) + 2*10GE(SFP+) |
| OLT1616G2 | 16 x GPON | 8*GE + 4*GE(SFP)/10GE(SFP+) |

Functional Characteristics

Satisfactory standard

- ◆ Meet ITU-T G984/G.988 standards
- ◆ Meet China's relevant GPON standards

Easy to manage

- ◆ Friendly EMS/Web/Telnet/CLI management
- ◆ CLI command style similar to mainstream manufacturers

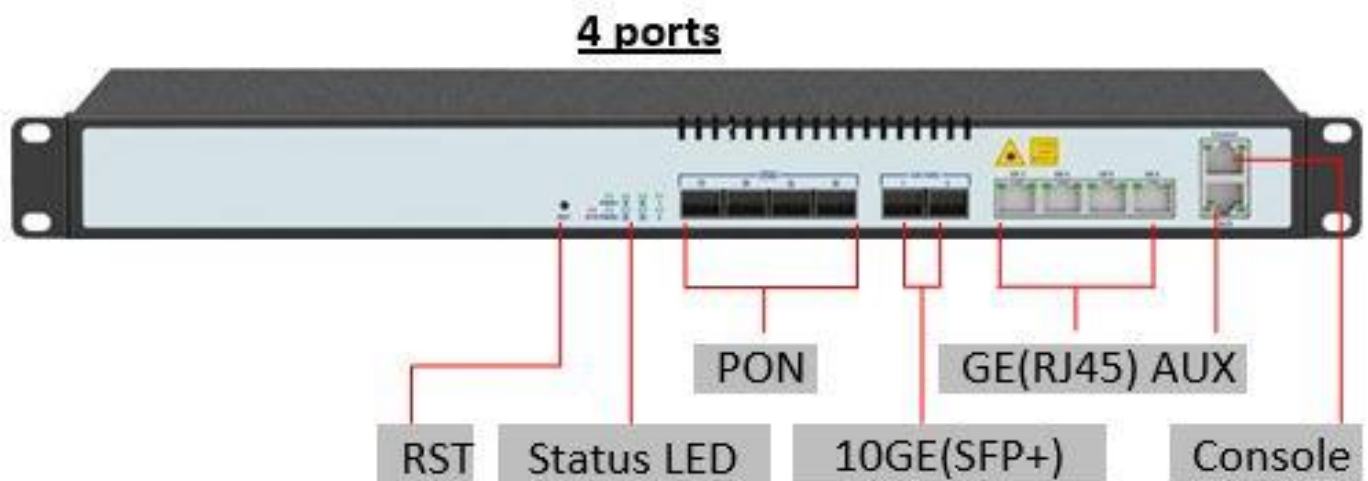
Fully open platform

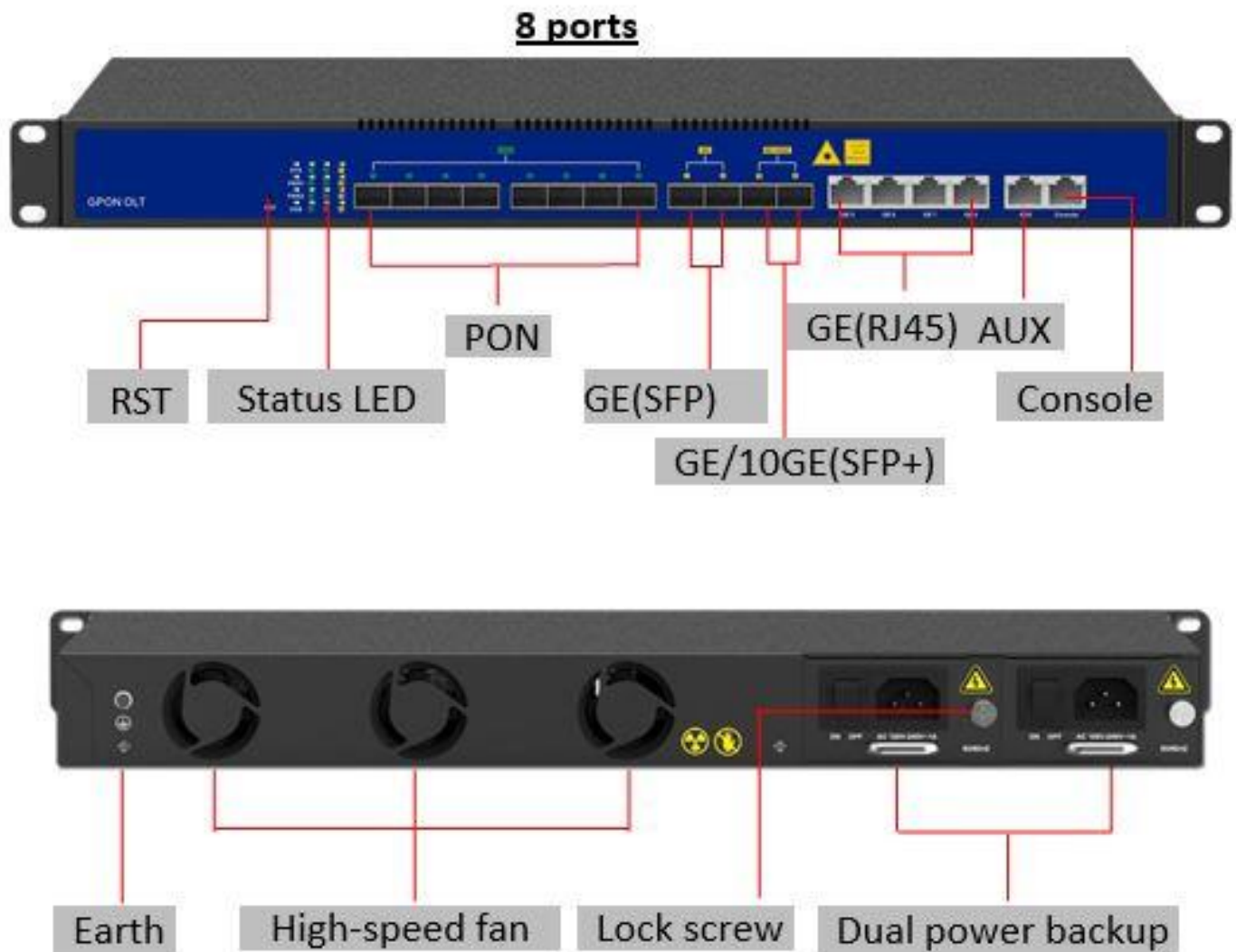
- ◆ Open to any brand of ONT

High performance cost

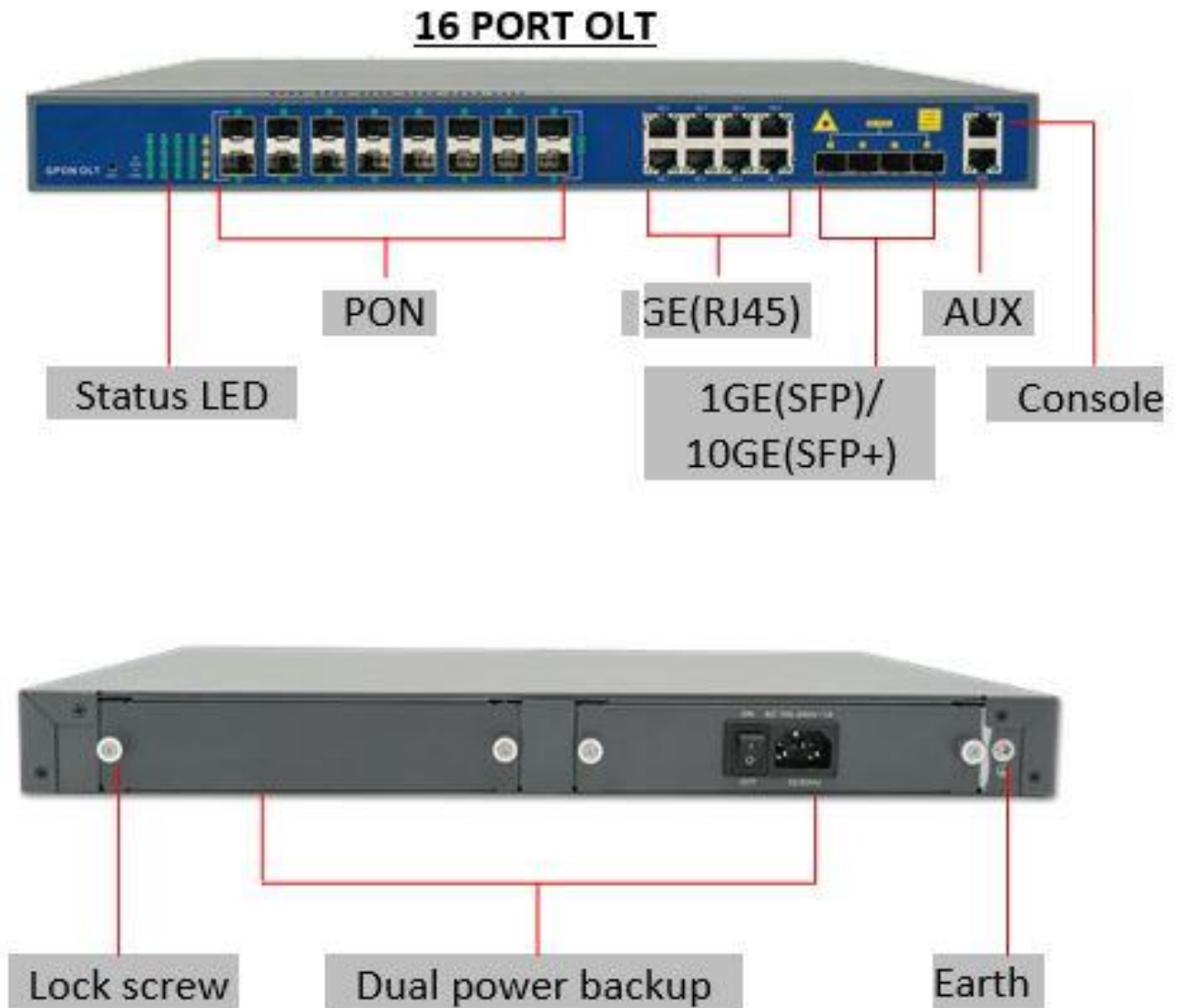
- ◆ 1U height compact design
- ◆ Adopt mainstream chip scheme

Product appearance features 4/8 Ports





Product appearance features 16 PORT OLT



Technical indicator

| Item | | OLT1604G0 | OLT1608G0 | OLT1616G0 |
|---|--|--------------------------------------|-----------|-----------|
| Chassis | Rack | 1U 19 inch standard box | | |
| 1G/10G Uplink Port | QTY | 6 | 8 | |
| | Copper 10/100/1000M auto-negotiation | 4 | 4 | |
| | SFP 1GE | 2 | 2 | |
| | SFP+ 10GE | 2 | 2 | |
| GPON Port | QTY | 4 | 8 | 16 |
| | Physical Interface | SFP Slot | | |
| | Connector Type | Class C+ | | |
| | Max splitting ratio | 1:128 | | |
| Management Ports | 1*10/100BASE-T out-band port, 1*CONSOLE port | | | |
| PON Port Specification(Class C+ module) | Transmission Distance | 20KM | | |
| | GPON port speed | Downstream 2.488G Upstream 1.244G | | |
| | Wavelength | TX 1490nm, RX 1310nm | | |
| | Connector | SC/UPC | | |
| | Fiber Type | 9/125μm SMF | | |
| | TX Power | +3~+7dBm | | |
| | Rx Sensitivity | -30dBm | | |
| | Saturation Optical Power | -12dBm | | |
| Dimension(L*W*H) | | 442*220*43.6mm | | |
| Weight | | 2.8kg | | |

| | | |
|--------------------------------|---------------------|-------------------------|
| AC Power Supply | | AC:100～240V, 47/63Hz |
| DC Power Supply(DC:-48V) | | √ |
| Double Power Module Hot Backup | | √ |
| Power Consumption | | 45W |
| Operating Environment | Working Temperature | 0～+50℃ |
| | Storage Temperature | -40～+85℃ |
| | Relative Humidity | 5～90%(non-conditioning) |

OLT1600G0: LED information

| LED | ON | Blink | OFF |
|----------|-------------------------------------|---|--|
| PWR | The device is powered up | — | The device is powered down |
| SYS | Device is starting | Device is running normal | Device is running abnormal |
| PON | ONT is registered to the PON system | ONT is registering to the PON system | ONT is not registered to the PON system or ONT do not connect to OLT |
| SFP/SFP+ | The device is connected to the port | The device is ongoing data transmission | The device is not connected to the port |

| | | | |
|---|--|--|--|
| Ethernet (green-- ACT) | — | Port is sending or/and receiving data | — |
| Ethernet (yellow-- Link) | The device is connected to the port | — | The device is not connected to the port |

Software function

Management Mode

- SNMP、Telnet、CLI、WEB;

Management Function

- Fan Group Control;
- Port Status monitoring and configuration management;
- Online ONT configuration and management;
- User management;
- Alarm management;

Layer2 Switch

- 16K Mac address;
- Support 4096 VLANs;
- Support port VLAN and protocol VLAN;
- Support VLAN tag/Un-tag ,VLAN transparent transmission;
Support VLAN translation and QinQ;
- Support storm control based on port;
- Support port isolation;
- Support port rate limitation;
Support 802.1D and 802.1W;
- Support static LACP;
- QoS based on port, VID, TOS and MAC address;

Multicast

- IGMP snooping;
- 256 IP Multicast Groups;

DHCP

- DHCP server;
- DHCP relay;
- DHCP snooping;

GPON Function

- Tcont DBA;
- Gempport traffic
- In compliant with ITUT984.x standard;
- Up to 20KM transmission Distance;
- Support data encryption, multi-cast, port VLAN, separation, RSTP, etc;
- Support ONT auto-discovery/link detection/remote upgrade of software;
- Support VLAN division and user separation to avoid broadcast storm;

- Support power-off alarm function, easy for link problem detection;
- Support broadcasting storm resistance function;
- Support port isolation between different ports;
- Support ACL and SNMP to configure data packet filter flexibly;
- Specialized design for system breakdown prevention to maintain stable system;
- Support RSTP, IGMP Proxy;

Layer 3 Feature

- ARP proxy, 1024 hardware Host Routes, 512 hardware Subnet Routes;
- Support static route;
- Optional Support Dynamic route RIP v1/v2, RIPng; Optional Support OSPF v2/v3:

Security Management

- Support IEEE802.1x, Radius, Tacacs+
- Support DHCP Snooping,DHCP Opiton82,IP Source Guard
- Support Https,SSHv1/v2

Support IPv6

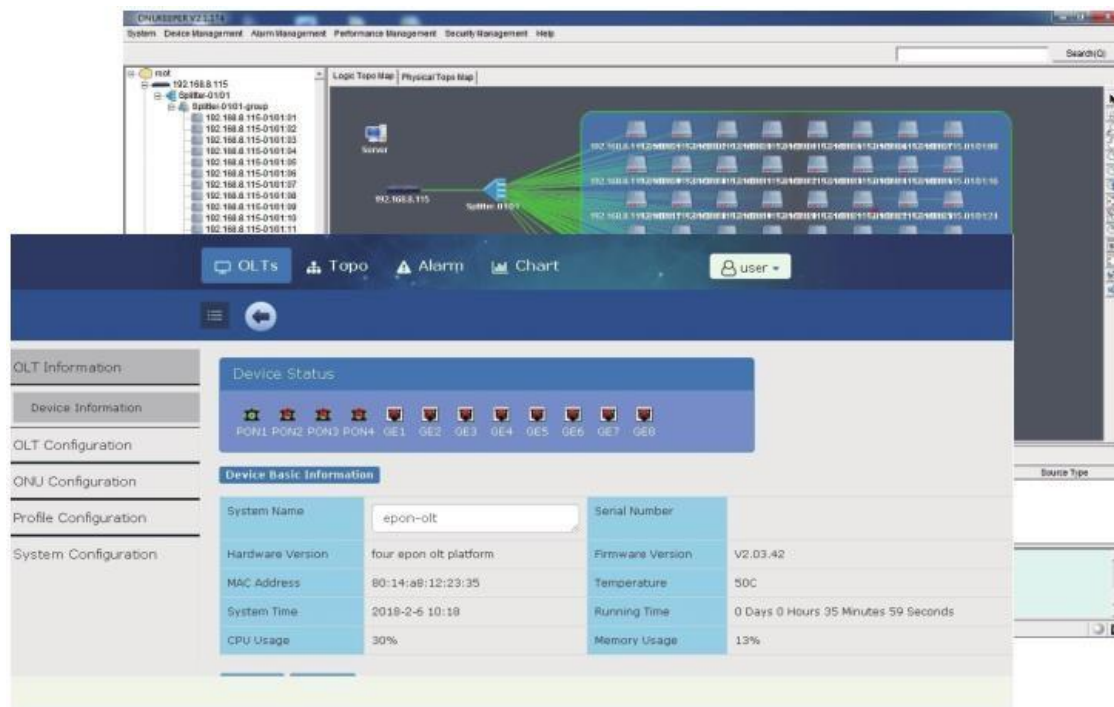
- Support IPv6 Neighbor Discovery ,SLAAC Snooping
- Support DHCPv6 Server,DHPCv6 Relay,DHCPv6 Snooping
- Support IPV6 Static Route
- Support IPV6 Dynamic Route Protocol: RIPng,OSPF6
- Support MLD V1/V2
- Support IPv6 ACL
- Support IPv6 SNMP,Telnet,Https,SSH management

| | | |
|--------------------|----------------|--|
| License Management | ONT limit | Limit the number of ONT registration, 64-1024, step 64. When the number of ONT reach the max number permit, add new ONT to system will be refused. |
| | Time limit | Limit system used time, 31days. Equipment trial license, after 31days of running time, all ONTs be set offline. |
| PON mac table | | A MAC table of PON, including MAC address, VLAN id, PON id, ONT id, gemport id for easier services checking, troubleshooting. |
| ONU management | Profile | Including ONT, DBA, TRAFFIC, LINE, SERVICE, ALARM, PRIVATE profiles. All ONT features can be configured by profiles. |
| | Auto learn | ONT automatically discovery, register, online. |
| | Auto configure | All features can be automatically configured by profiles when ONT auto online—plug and play. |
| | Auto upgrade | The ONT firmware can be auto upgraded. Download ONT firmware to OLT from web/tftp/ftp. |
| | Remote config | The powerful private OMCI protocol provides remote HGU configuration including WAN, WiFi, POTS, etc. |

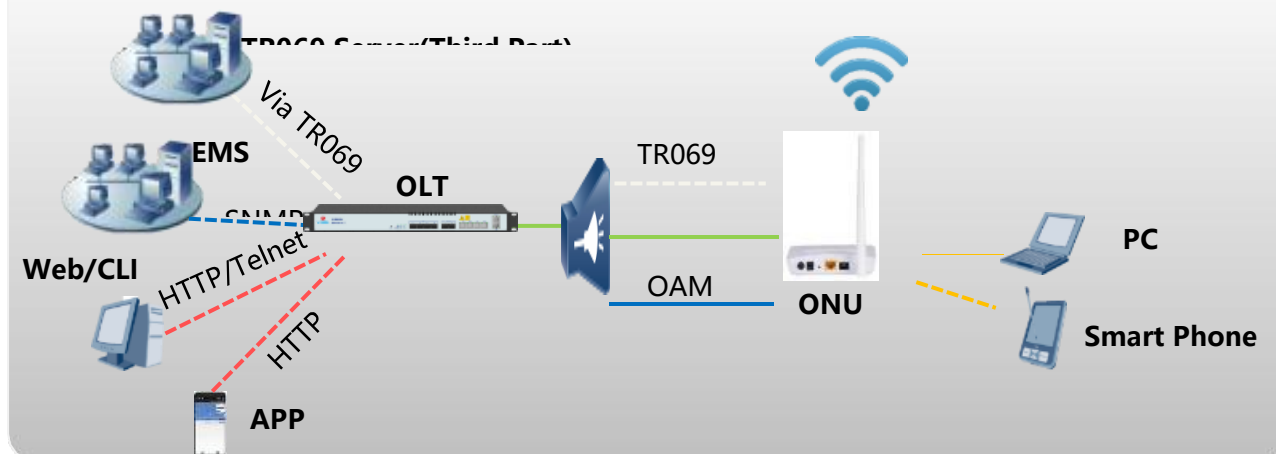
EMS

Key Features

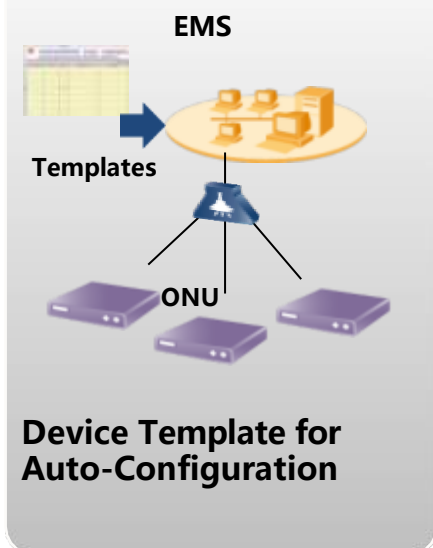
- ✓ Support C/S & B/S architecture
- ✓ Support auto topology or modify manually
- ✓ Add Trap Server to detect ONT automatically
- ✓ EMS can add and configure ONT automatically
- ✓ Add ONT position information



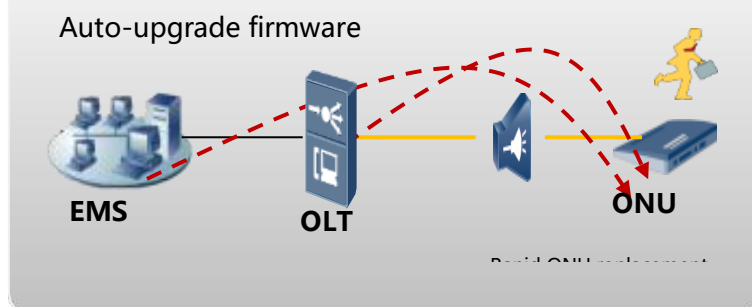
Support EMS/Web/Telnet(CLI)/TR069 Configuration



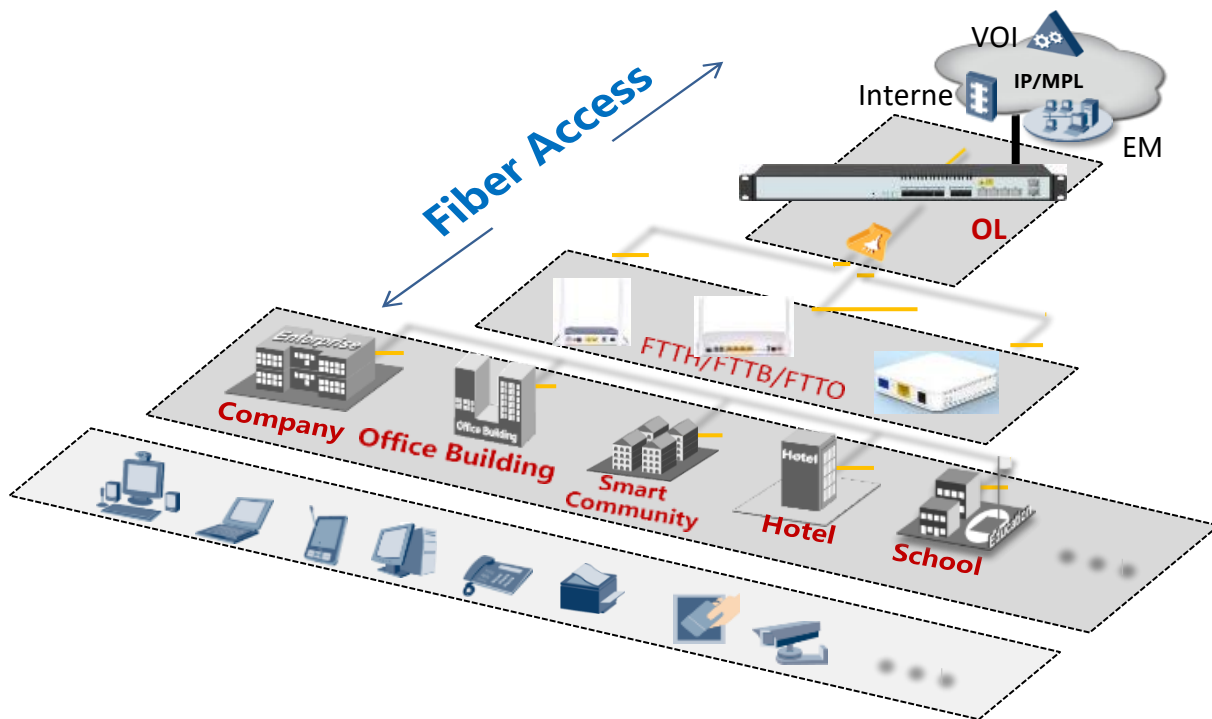
Support ONUs Plug&Play



Rapid operation and maintenance



Typical application diagram



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