



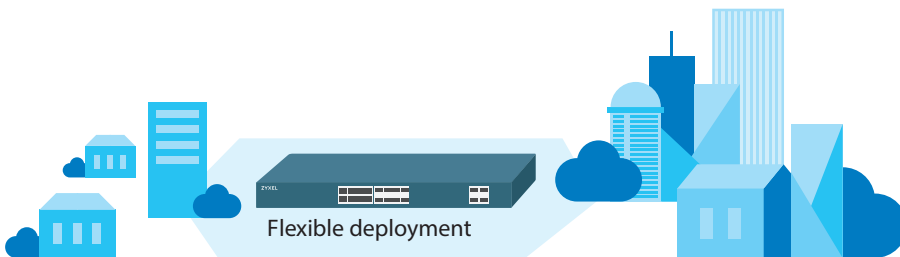
OLT1404A/OLT1408A

1U Pizza Box 4/8-port GPON OLT

Benefits

Flexible FTTH applications

The Zyxel OLT1404A/OLT1408A 4/8-port GPON OLT provides up to 500/1K FTTH to subscribers with 4/8 ITU-T G.984 GPON fiber links. The GPON OLT supports split ratios of up to 1:128, while each SFP slot supports both class C+ and class B+ transceivers for different service reaches. The 4/8-port pizza box OLT is a cost-effective solution in thinly populated regions, and the 1U design makes installation easier thanks to its small size and compact design.



Cost-effective solution with compact design



Temperature-hardened



Comprehensive QoS to enhance users' triple-play experience



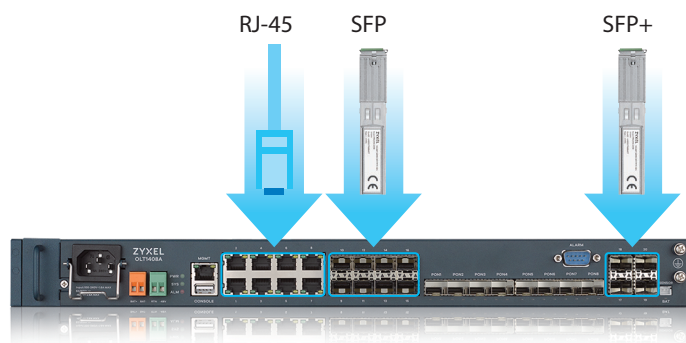
Field-proven IGMP snooping and proxy for IPTV deployments



Full Management via Zyxel EMS NetAtlas

Various interfaces for network applications

The Zyxel 1U OLT supports various interfaces including eight Gigabit Ethernet optical interfaces, eight Gigabit Ethernet RJ-45 interfaces and four 10G interfaces. The 8 GE optical interfaces support P2P services for enterprise users to enjoy guaranteed bandwidth. The RJ-45 GE interfaces facilitate local server connections for vertical applications or aggregate access network technologies like MSAN, VoIP AG and more. Customers can have more flexibility and unified management to smoothly integrate even more services. The 10G interfaces can be used with ERPS function for ring protection or to cascade other GPON devices without sacrificing bandwidth.



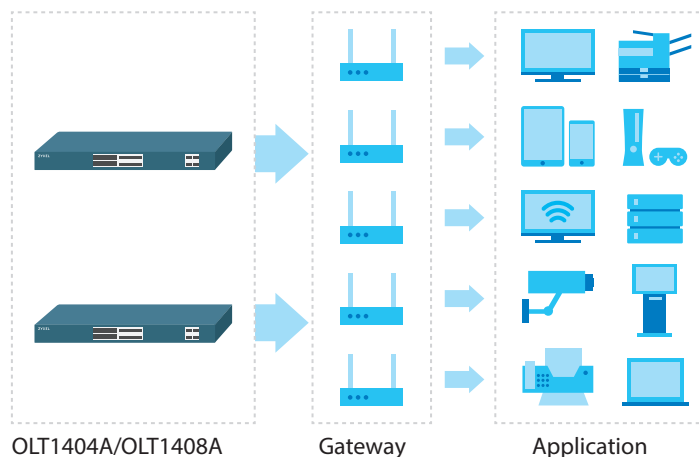
High-reliability network deployments

The Zyxel OLT1404A/OLT1408A is a temperature-hardened remote system with a power supply compatible with either AC or DC power sources and an extra battery charger function. The OLT can operate in environments with temperature ranging from -40°C to 65°C, which allows it to meet various environment conditions worldwide. Since the OLT1404A/OLT1408A comes with battery charger function, customer doesn't need an additional Switch Module Rectifier (SMR) to power the OLT1404A/OLT1408A as well as to charge the backup battery at the same time. It not only reduces CAPEX, but is also easier to deploy.



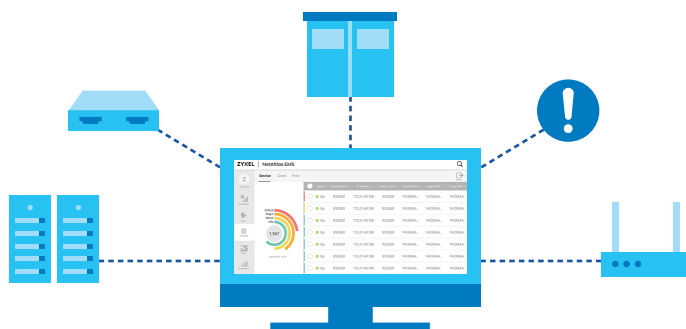
Advanced triple-play and mass deployment functionalities

The Zyxel OLT1404A/OLT1408A supports QoS, security and multicast functionalities; it also features IGMP snooping to prevent unnecessary multicast forwarding to all subscribers, which optimizes bandwidth utilization for multicast applications such as broadcast video. The OLT1404A/OLT1408A also supports the multicast VLAN feature that distributes the source to all VLANs requesting video streams.

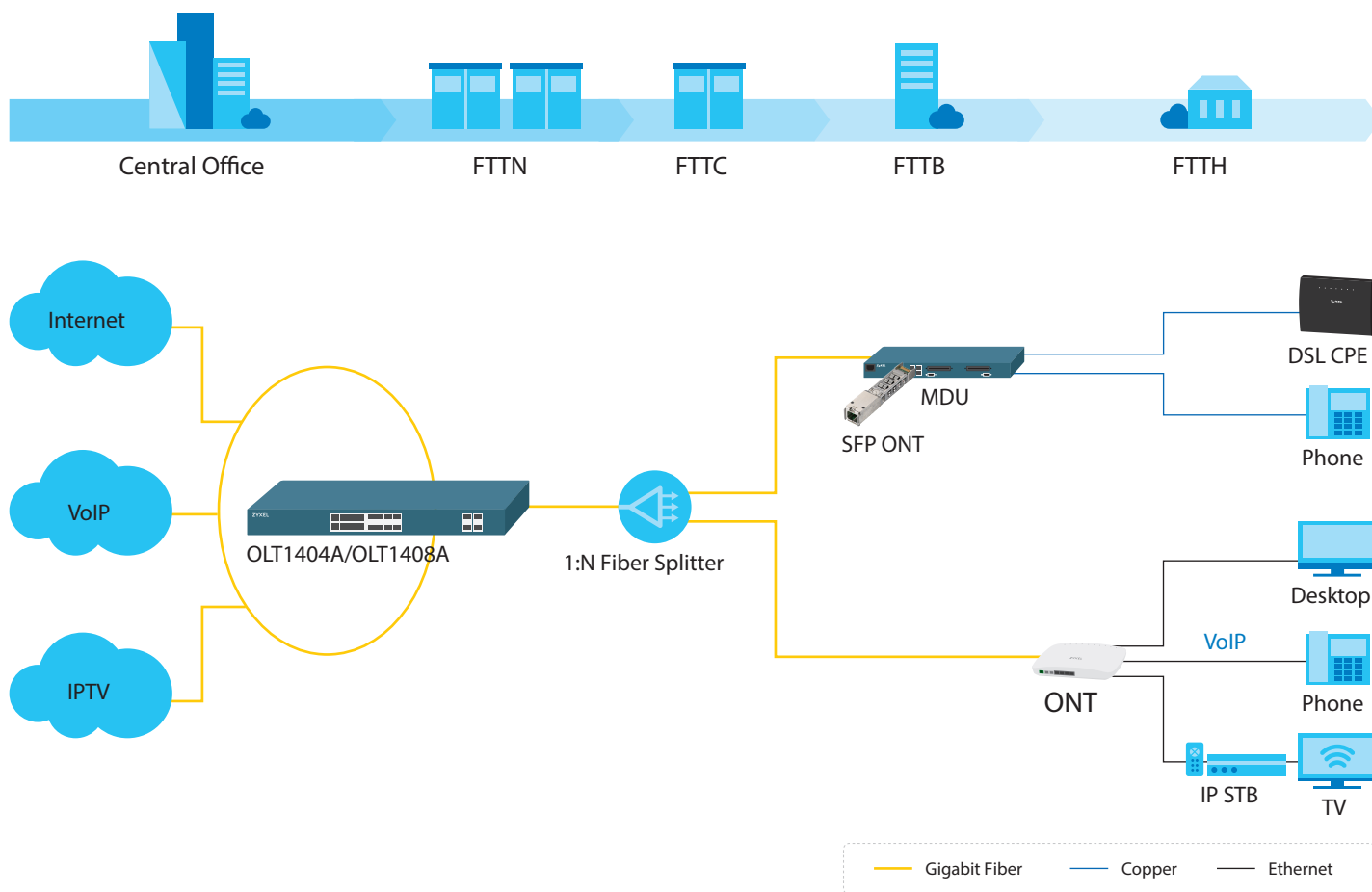


Sophisticated OAM&P features

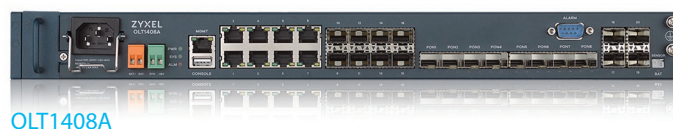
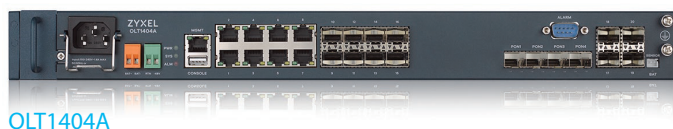
The Zyxel OLT1404A/OLT1408A provides various management methods, such as local console port, Telnet and SNMP v1/v2/v3-based EMS (NetAtlas EMS) along with a web GUI. The management functions include alarm and status surveillance, configuration management, performance management and fault management. The NetAtlas EMS also provides view-based MIB management that partial MIB objects can be defined and accessed for customization and security purposes. The OLT1404A/OLT1408A offers a user-friendly web GUI that allows operators to manage through any browser on any PC, laptop or smart phone.



Application Diagram



Front Panel



Specifications

System Specifications

GPON Compliance

- ITU-TG.984.1/2/3/4 standard compliant
- Supports up to 128 ONTs per PON port
- GPON type-B protection
- Rogue ONT detection
- ONT FW upgrade through OLT
- Maximum 60 km PON transmission distance

Topology Protocols

- IEEE 802.1D spanning tree protocol
- IEEE 802.1s rapid spanning tree protocol
- IEEE 802.1w multiple spanning tree protocol
- LACP to comply with IEEE 802.3ad

Switch Functions

- IEEE 802.1q VLAN
- IEEE 802.1ad VLAN stacking
- VLAN translation 1:1
- VLAN translation N:1
- Mirroring by port
- Mirroring by VLAN
- Port isolation

Multicast

- Multicast VLAN registration
- IGMPv2 & v3, snooping & proxy
- IGMP filter profile setting
- IGMP fast leave
- MLDv1 & MLDv2 snooping and proxy

Security

- DHCP relay agent
- PPPoE IA
- Static MAC
- Access Control List (ACL)
- MAC limit per port
- Storming control
- Anti MAC spoofing
- Prevent DHCP attack
- Prevent ARP spoofing

QoS

- IEEE 802.1p QoS with 8 priority queues per port
- Broadcast, multicast, unknown flooding storm control
- Scheduling algorithm SP, SP+WFQ, WFQ
- Limit packet rate by ACL

OAM&P

- Serial console
- Command Line Interface (CLI)
- Telnet
- SNMP
- FTP
- Web GUI

Hardware Specifications

OLT1404A/OLT1408A

- 1U
- 19" rack mountable
- Front access
- 4 x PON port (OLT1404A)/8 x PON port (OLT1408A)
- 4 x 10G/2.5G/1G port (SFP+/SFP, fiber)
- 8 x GE 1/2.5G port (SFP, fiber)
- 8 x FE/GE port (RJ-45, copper)
- One console port, USB type-A interface
- One management port, RJ-45 interface
- One alarm port, D-SUB 9-pin male connector
- One swappable fan module

Power

- AC and DC dual power (Power redundancy):
 - AC input 100 to 240 V AC
 - DC input -36 to -72 V DC
- Battery charger:
 - +12 V DC battery

Power Consumption

- OLT1404A: 85 W
- OLT1408A: 90 W

Physical Specifications

OLT1404A

- Item dimensions (WxDxH): 440 x 250 x 44 mm (17.32" x 9.84" x 1.73")
- Item weight: 4 kg (8.82 lb.)

OLT1408A

- Item dimensions (WxDxH): 440 x 250 x 44 mm (17.32" x 9.84" x 1.73")
- Item weight: 4 kg (8.82 lb.)

Environmental Specifications

Operating Environment

- Temperature: -40°C to 65°C (-40°F to 149°F)
- Humidity: 10% to 95% (Non-condensing)

Storage Environment

- Temperature: -40°C to 70°C (-40°F to 158°F)
- Humidity: 10% to 95% (Non-condensing)

Certification

Safety

- EN60950-1
- EN62368-1

EMC

- EN55022 class A
- EN55024 class A
- ETSI 300 386 V2.1.1