

ZYXEL



OLT1404A/OLT1408A

1U Pizza Box 4/8-port GPON OLT

Benefit

Flexible FTTH applications

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

Various interfaces for network applications

The 1U OLT supports various interfaces including 8 Gigabit Ethernet optical interfaces, 8 Gigabit Ethernet RJ-45 interfaces, and 4 10G interfaces. The 8 GE optical interfaces support P2P service for enterprise users to guarantee bandwidth. The RJ-45 GE interfaces facilitate the connection of local servers for vertical application, or aggregate access network technologies like MSAN, VoIP AG, etc. Customer can have more flexibility and unified management to integrate more services together. The 10G interfaces can be used with ERPS function for ring protection or cascading another GPON devices without sacrifice the bandwidth.

High Reliability network deployment

The Zyxel OLT1404A/OLT1408A is a temperature-hardened remote system with a power supply compatible with either AC or DC sources and an extra battery charger function. The OLT can operate in the environment with temperature from -40°C to 65°C, which meets various deployment environment conditions worldwide. Furthermore, OLT1404A/OLT1408A is equipped with battery charger function. Customer doesn't need an additional Switch Module Rectifier (SMR) for powering the OLT1404A/OLT1408A and charging backup battery at the same time. It will reduce CAPEX and easier for installation.



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 Managed via Zyxel EMS NetAtlas

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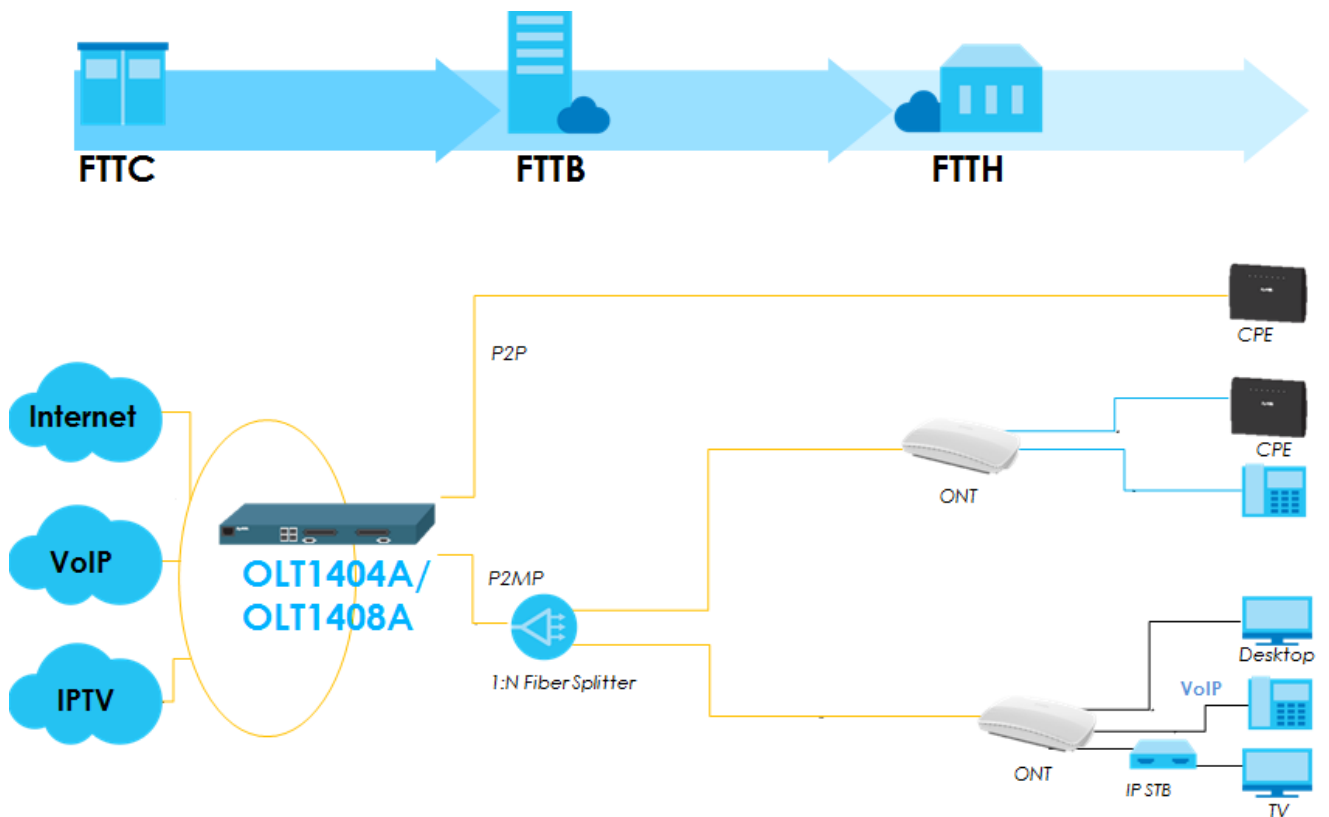
Advanced Triple-Play and mass deployment functionality

The OLT1404A/OLT1408A supports QoS, security and multicast functionalities; it also supports IGMP snooping to prevent unnecessary forwarding of multicast traffics to all subscribers and thus 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 a video stream.

Sophisticated OAM&P features

The OLT1404A/OLT1408A provides various management methods: local console port, Telnet and SNMP v1/v2/v3-based EMS (NetAtlas EMS) and 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 reasons. OLT1404A/OLT1408A supports user-friendly web GUI that allows operators to manage through any browser on any PC, laptop or smart phone.

Application Diagram



Specifications

Hardware Specifications

OLT1404A/OLT1408A

- 1U
- 19" rack mountable
- Front Access
- 4x PON port(OLT1404A)/8x PON port(OLT1408A)
- 4x 10G/2.5G/1G port (SFP+/SFP, fiber)
- 8x GE 1/2.5G port (SFP, fiber)
- 8x 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 100~240VAC
 - DC input -36V~-72VDC
- Battery Charger
 - +12V VDC battery

System Specifications

GPON Compliant

- ITU-TG.984.1/2/3/4 standard compliant
- 1:128 ONT support per PON port
- GPON Type-B Protection
- Rogue ONT detection
- ONT FW upgrade through OLT
- Maximum 60 Km PON transmission distance

Topology protocols

- IEEE802.1D Spanning Tree Protocol
- IEEE802.1s Rapid Spanning Tree Protocol
- IEEE802.1w Multiple Spanning Tree Protocol
- LACP to comply with IEEE802.3ad

Switch function

- 4094 IEEE 802.1Q compliant VLAN tagging
- IEEE802.1ad VLAN stacking (Q-in-Q)
- VLAN translation 1:1
- VLAN translation N:1
- Mirroring by port
- Mirroring by VLAN
- Port isolation

QoS

- IEEE 802.1p QoS with 8 priority queues per port
- Broadcast, multicast, unknown flooding storm control
- Queue scheduling includes : SPQ, WFQ
- Limit packet rate by ACL

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
- DDoS

Multicast

- Multicast VLAN Registration (dynamic / compatible mode)
- IGMPv2 & v3, snooping & proxy
- IGMP filter profile setting
- IGMP fast leave
- MLDv1 & MLDv2 snooping and proxy
- MVR

OAM&P

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

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
- CSA60950-1
- UL60950-1
- IEC60950-1

• EMC:

- EN 55032:2012/AC:2013
- EN55024:2010
- ETSI 300 386 V1.6.1
- FCC part 15 class A