OLT1404B-IA/OLT1408B-IA

1U Pizza Box 4/8-port GPON OLT

The Zyxel OLT1404B-IA/OLT1408B-IA 1U Pizza Box 4/8-port GPON OLT provides up to 500/1K FTTH subscribers with 4/8 ITU-T G.984 GPON fiber links. Support various interfaces including SFP and 10G SFP+, the OLT1404B-IA/OLT1408B-IA delivers flexibility and unified management to integrate more services together.

Benefits

Flexible FTTH applications

The OLT1404B-IA/OLT1408B-IA 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 class C+ for 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.

Numerous interfaces for network applications

The 1U OLT supports interfaces including 8 Gigabit SFP and 4 10G SPF+ interfaces. 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.

- Four/eight ITU-T G.984-compliant GPON ports; each port supports up to 128 ONTs

- Four 10G and eight 1G/2.5G uplink ports

- Field-proven IGMP snooping and proxy for IPTV deployments

- Sophisticated OAM&P features

- Comprehensive QoS for network efficiency

- Compact size and front access design for easy installation and deployment

- Temperature-hardened for flexible installation

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High reliability network deployment

The Zyxel OLT1404B-IA/OLT1408B-IA 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, OLT1404B-IA/OLT1408B-IA is equipped with battery charger function. Customer doesn't need an additional Switch Module Rectifier (SMR) for powering the OLT1404B-IA/OLT1408B-IA and charging backup battery at the same time. It will reduce CAPEX and easier for installation.
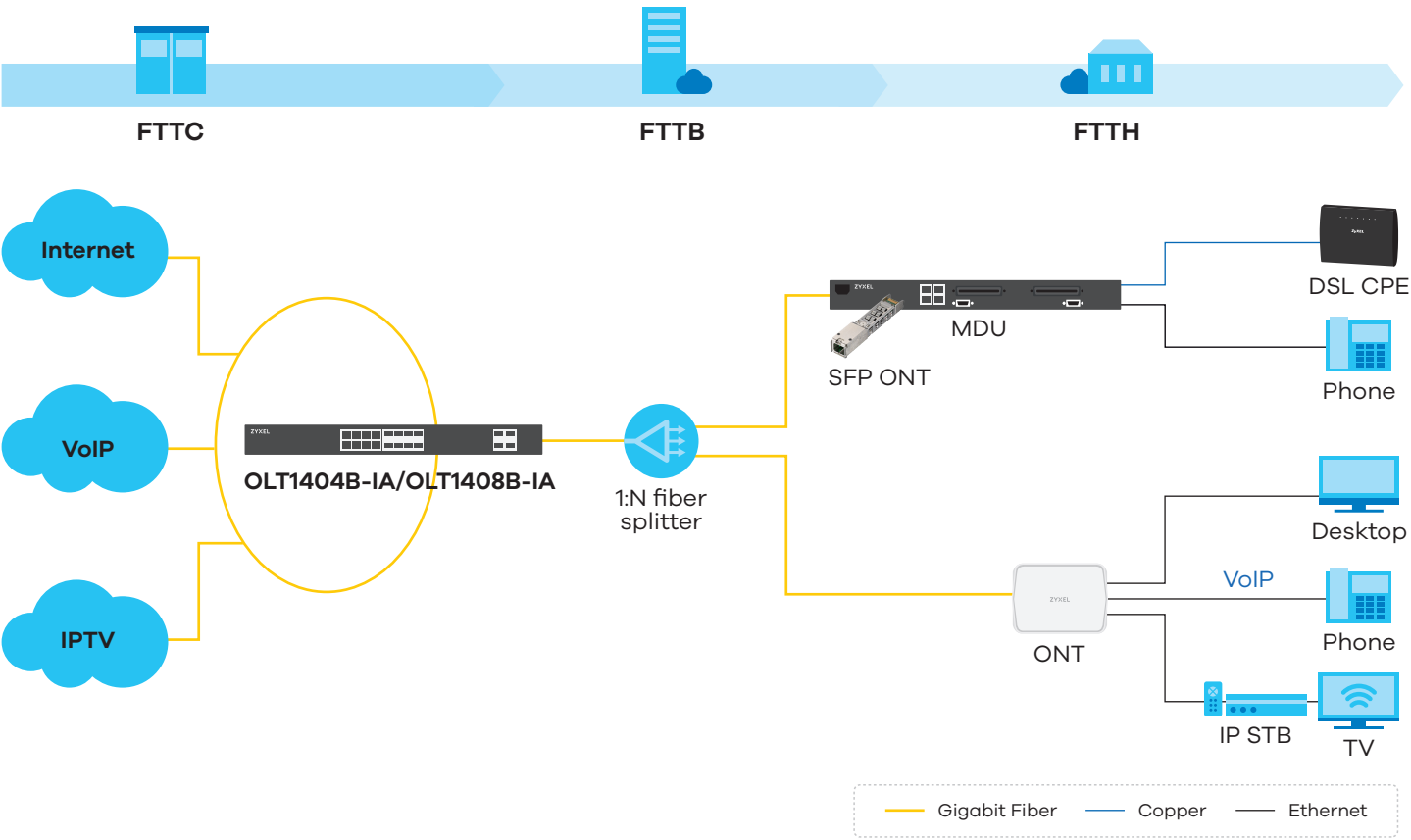
Advanced triple play and mass deployment functionalities

The OLT1404B-IA/OLT1408B-IA 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 OLT1404B-IA/OLT1408B-IA also supports the multicast VLAN feature that distributes the source to all VLANs requesting a video stream.

Sophisticated OAM&P features

The OLT1404B-IA/OLT1408B-IA provides various management methods: local console port, Telnet, SNMP v1/v2/v3, web GUI and from Zyxel NetAtlas EMS. The management functions include alarm and status surveillance, configuration management, performance management and fault management. OLT1404B-IA/OLT1408B-IA supports user-friendly web GUI that allows operators to manage through any browser on any PC, laptop or smart phone. The NetAtlas EMS also provides view-based MIB management that partial MIB objects can be defined and accessed for customization and security reasons.
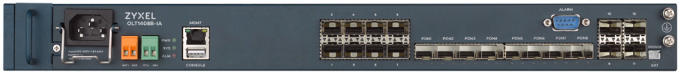
Application diagram

FTTC   FTTB   FTTH

Internet

VoIP

IPTV

OLT1404B-IA/OLT1408B-IA

1:N fiber splitter

SFP ONT

MDU

DSL CPE

Phone

Desktop

VoIP

Phone

ONT

IP STB

TV

| —— Gigabit Fiber | —— Copper | —— Ethernet |

Front panel

OLT1404B-IA

OLT1408B-IA

Specifications

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

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

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

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

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

Hardware specifications

OLT1404B-IA/OLT1408B-IA
- 1U
- 19" rack mountable
- Front access
- 4x PON port (OLT1404B-IA)/8x PON port (OLT1408B-IA)
- 4x 10G/2.5G/1G port (SFP+/SFP, fiber)
- 8x 1/2.5G port (SFP, fiber)
- 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 V to 240 V AC
  - DC input -36 V to -72 V DC
- Battery charger
  - +12 V VDC battery

Power consumption
- OLT1404B-IA: 85 W
- OLT1408B-IA: 90 W

Physical specifications

OLT1404B-IA
- Item dimensions (WxDxH): 440 x 250 x 44 mm (17.32" x 9.84" x 1.73")
- Item weight: 4 kg (8.82 lb.)

OLT1408B-IA
- 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
- EN62368-1
- IEC62368-1
- AS/NZS 62368.1
- CSA C22.2 No. 62368-1-14
- UL 62368-1

EMC
- EN 55032/BS EN 55032 class A
- EN 55035/BS EN 55035
- EN IEC 61000-3-2/BS EN IEC 61000-3-2
- EN 61000-3-3/BS EN 61000-3-3
- ETSI EN 300 386
- AS/NZS CISPR 32 class A

18/11/22

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