



PM7516-R0

XGS-PON VoIP Bridge ONT with 10G LAN

The Zyxel PM7516-R0 XGS-PON VoIP Bridge ONT with 10G LAN features high bandwidth with symmetric 10/10G profile, which aims to upgrade the existing GPON network to 10 Gigabit broadband access with minimized CAPEX investments.

Benefits

Next-gen PON offers seamless triple-play services

10G PON technologies offer the scalability, flexibility and reliability to support constantly evolving bandwidth-consuming applications. With symmetric 10G WAN and LAN interface, the PM7516-R0 enables service providers to deliver premium triple-play services to the subscribers.

Excellent user experience with customized product combinations

Adding the Zyxel PM7516-R0 into the network as a Layer-2 ONT can help service providers meet different subscribers' demands as it leaves room for further customization by adding any Layer-3 device based on the deployment needs.

Longer infrastructure lifecycle

The fiber tray design prevents the damage of the fiber cables, increases the infrastructure management efficiency and reduces the cost of on-site support by shielding, well protecting and distributing the fiber cables.



Integrated internet services via symmetric 10G fiber



One 10GbE LAN



One VoIP port*



Remote management via OMCI

Specifications

System specifications

XGS-PON compliance

- Complies with ITU-T G.9807.1 XGS-PON standard
- Complies with ITU-T G.988 OMCI standard
- DS/US speeds: 9.95328/9.95328 Gbps
- Wavelength: 1575~1580 nm (Rx) & 1260~1280 nm (Tx)
- Tx output: 4~9 dBm, RX sensitivity: -28 dBm
- Physical distance reach to 20 km
- Supports up to 8 T-CONs each with priority queues (US)
- Supports up to 32 GEM ports
- Flexible mapping between T-CONT and GEM port

Layer 2 networking features

- MAC address learning
- MAC filtering
- Multicast transparent
- IPv6 address transparent

Multicast

- IGMP v2/v3 snooping
- IGMP immediate leave
- IPv6 MLD v1/v2 snooping

VLAN functional specifications

- VLAN IEEE 802.1Q
- Supports protocol-based VLAN
- 1:1 VLAN, N:1 VLAN, VLAN transparent bridge
- LAN port-based VLAN tag add and tag removal
- QinQ VLAN

QoS

- 802.1p priority with 8 queues
- Classification based on VLAN ID, 802.1p, VLAN ID + 802.1p
- Scheduling mode: strict priority, WRR

Management

- Standard OMCI (ITU-T G. 988)
- SSH (CLI)
- Web GUI (HTTPS)
- Firmware upgrade via HTTPS/OMCI

VoIP*

- SIP (Section Initiating Protocol, RFC 3261)
- Codec: G.711 a/μ (64K), G.726 (24/32K), G.722
- Fax/modem detection and pass-through
- Voice Active Detector (VAD) (silence suppression)
- Comfort Noise Generation (CNG)
- Supports fax T.38
- Dynamic jitter buffer
- DTMF detection and generation
- DTMF relay by in-band and out-of-band (RFC 2833, SIP INFO)
- SIP account (URL type included)
- Caller ID
- Call forwarding (no condition, busy, no answer)
- Call transferring (attended, unattended)
- Call hold/call retrieve
- Three-way conference (local mixer)
- Call waiting

Hardware specifications

- WAN: one XGS-PON (with SC/APC connector)
- LAN: one RJ45 port (with 100 Mbps, 1 Gbps, 2.5 Gbps, 5 Gbps, 10 Gbps data rates)
- VoIP: one RJ11 port*
- Reset: one reset button
- UPS: one 8-pin Molex connector for UPS power supply
- LEDs indicators:
 - Power
 - UPS
 - PON
 - VoIP

Power consumption

- 12 V DC/1 A
- 12 watt max

Physical specifications

- Item dimensions (WxDxH): 145 x 125 x 45 mm (5.7" x 4.9" x 1.8")
- Item weight: 345 g (0.76 lb.)
- Packing dimensions (WxDxH): 233 x 170 x 53 mm (9.2" x 6.7" x 2.1")
- Packing weight: 620 g (1.36 lb.)

Environment specifications

Operating environment

- Temperature: 0°C to 40°C (32°F to 104°F)
- Humidity: 10% to 90% RH (non-condensing)

Storage environment

- Temperature: -30°C to 70°C (-22°F to 158°F)
- Humidity: 10% to 95% RH (non-condensing)

Certification

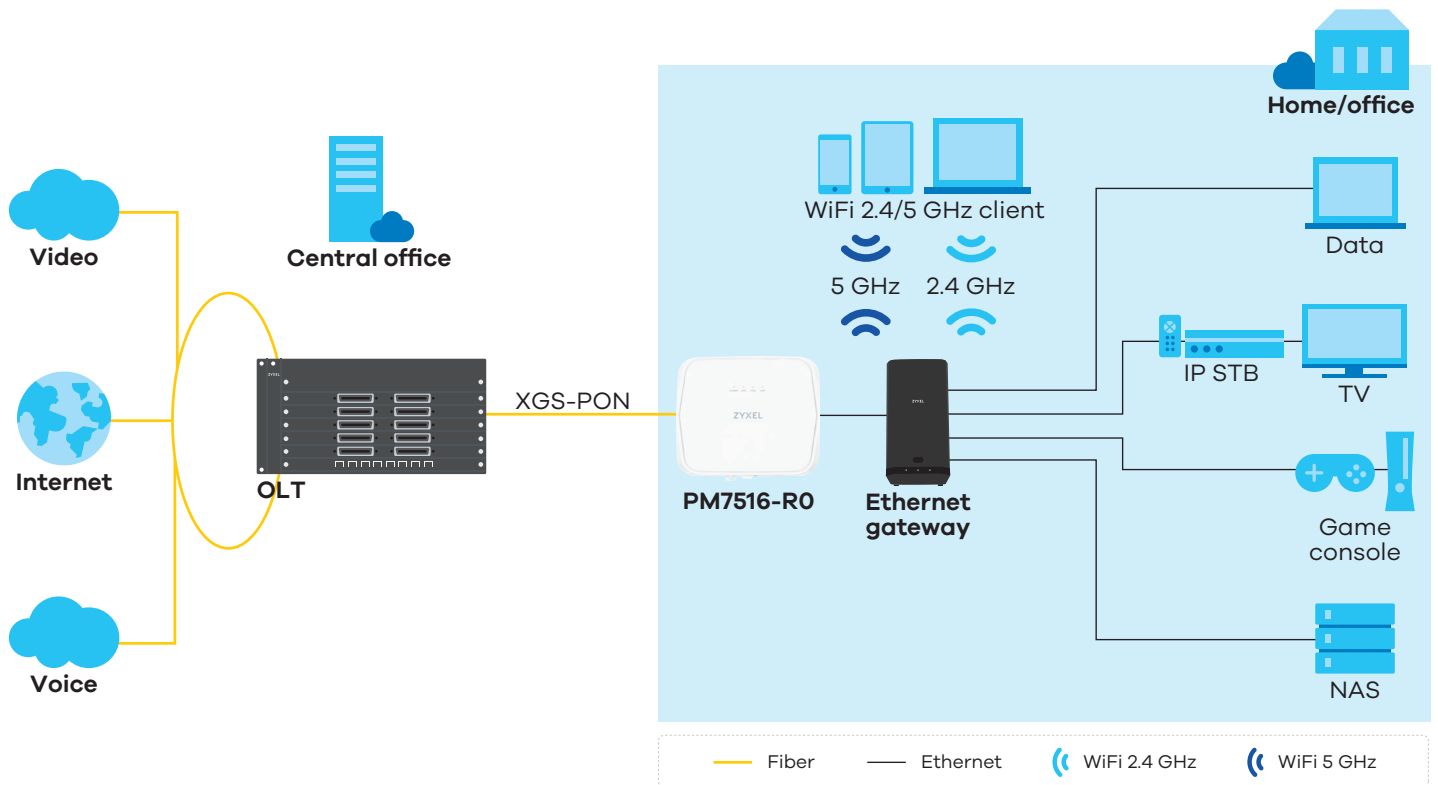
- EMC: FCC
- Safety: FDA, UL

Package contents

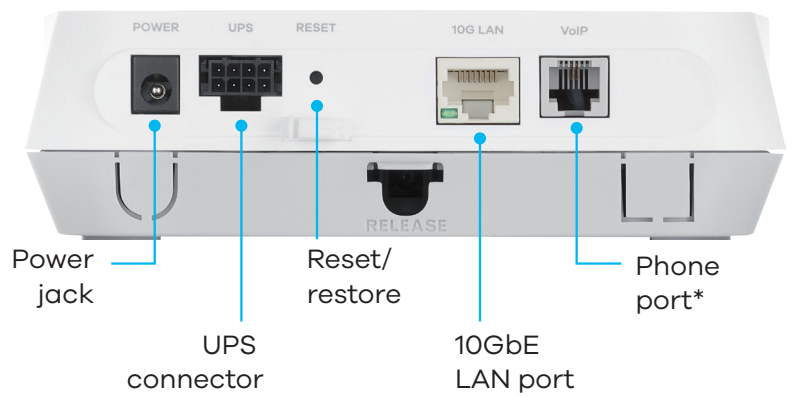
- Device
- Power adapter
- Ethernet cable Cat. 6
- Phone cable
- Quick Start Guide

* Under development for more details please contact local sales.

Application diagram



Hardware description





For more product information, visit us on the web at www.zyxel.com

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