



## PM7513-R0

### XGS-PON VoIP Bridge ONT with 10G LAN

The Zyxel PM7513-R0 XGS-PON VoIP Bridge ONT with 10G LAN features high bandwidth with symmetric 10G/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 PM7513-R0 enables service.

#### Excellent user experience with customized product combinations

Adding Zyxel PM7513-R0 into the network as a Layer-2 ONT can help service providers to meet different subscribers' demands as it leaves room for further customization by adding any Layer-3 device based on the deployment needs.



Integrated internet services via symmetric 10G fiber



One 10GbE LAN



One VoIP port



Remote management via OMCI & TR-069

# 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: 4~6 dBm, Rx sensitivity: -28 dBm
- Physical distance reach to 20 km
- Supports up to 8 T-CONTs 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
- 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) & TR-069
- SSH (CLI)
- Web GUI (HTTPS)
- Firmware upgrade via HTTPS/OMCI

## VoIP

- SIP (Session Initiating Protocol, RFC 3261)
- Codec: G.711 a/μ (64K), G.726 (32K), G.722, G.729
- Fax/modem detection and pass-through
- Voice Activity Detection (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 W max.

## Physical specifications

- Item dimensions (LxWxH): 130 x 115 x 30 mm ( 5.12" x 4.53" x 1.18")
- Item weight: 214 g (0.47 lb.)
- Packing dimensions (LxWxH): 236 x 150 x 42.5 mm (9.29" x 5.91" x 1.67")
- Packing weight: 458 g (1.01 lb.)

## Environmental 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)

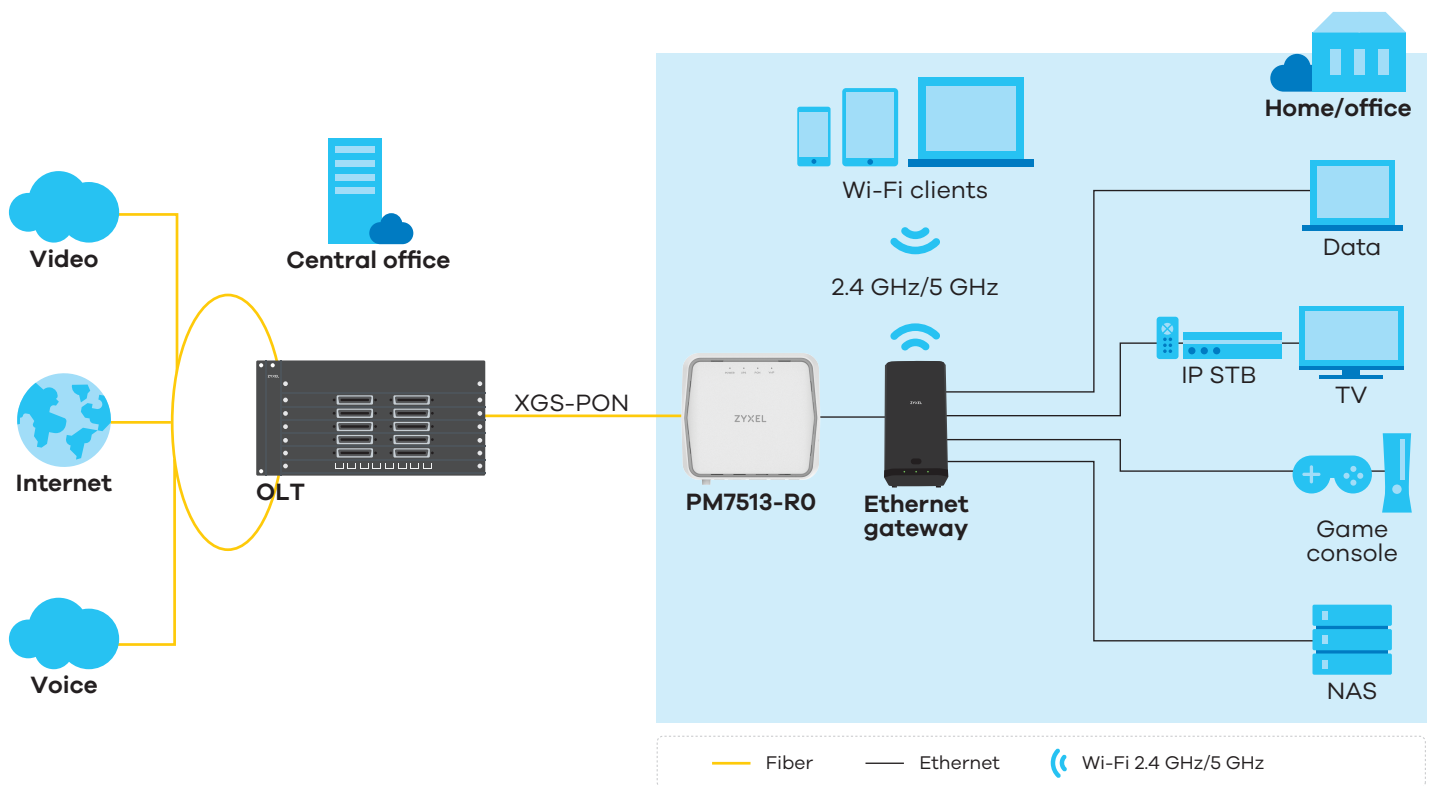
## Certification

- EMC: FCC
- Safety: FDA

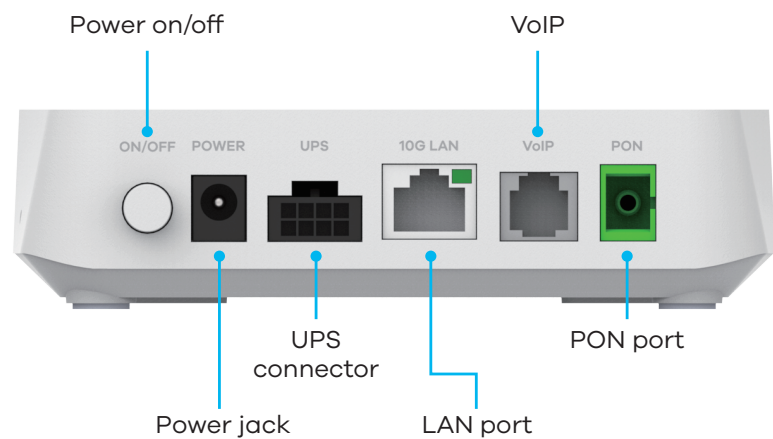
## Package contents

- Device
- Power adapter
- Ethernet cable
- Quick Start Guide

## Application diagram



## Hardware description





For more product information, visit us on the web at <https://www.zyxel.com/service-provider>

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15/04/26

Datasheet [PM7513-R0](#)