



PM7510-R0

XGS-PON Bridge ONT with 10G LAN

Zyxel's PM7510-R0 XGS-PON Bridge ONT with 10G LAN supports a symmetric 10/10G profile. This allows service providers to upgrade existing GPON networks for 10 Gigabit broadband access with minimal CAPEX investment.

Benefits

Next-gen PON offers seamless network migration

The PM7510-R0 gives service providers the scalability and flexibility to upgrade the existing network. With a 10G WAN and LAN interface, the PM7510-R0 enables symmetric, unblocking 10/10G data access to meet subscribers' quickly evolving bandwidth demands.

Excellent user experience with customized product combinations

Adding Zyxel PM7510-R0 to a network as a Layer-2 ONT helps service providers meet a range of subscriber demands, leaving room for further customization by adding any Layer-3 device based on deployment needs.

Longer infrastructure lifecycle

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



Integrated internet services via symmetric 10G fiber



One 10GbE LAN port for optimized bandwidth utilization



Remote management via OMCI

Specifications

System specifications

XGS-PON compliance

- Complies with ITU-T G.9807.1 XGS-PON standard
- Complies with 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 input: -28 dBm
- Physical distance reach to 20 km
- Supports Dynamic Bandwidth Allocation (DBA)
- Supports AES and FEC configuration
- GPON encapsulation method (GEM) supports Ethernet packet
- Supports GEM header removal/insertion and data extraction/SDU fragmentation
- 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

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)
- Reset: one reset/restore factory default button
- UPS: one UPS connector for UPS power supply
- LEDs indicators:
 - Power
 - UPS
 - Passive Optical Network (PON)
 - 10G LAN port

Power consumption

- Power supply: 12 V DC/1 A
- 12 watt max

Physical specifications

- Item dimensions (WxDxH): 145 x 125 x 45 mm (5.71" x 4.92" x 1.77")
- Item weight: 368 g (0.81 lb.)
- Packing dimensions (WxDxH): 233 x 170 x 53 mm (9.17" x 6.69" x 2.09")
- Packing weight: 664 g (1.46 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)

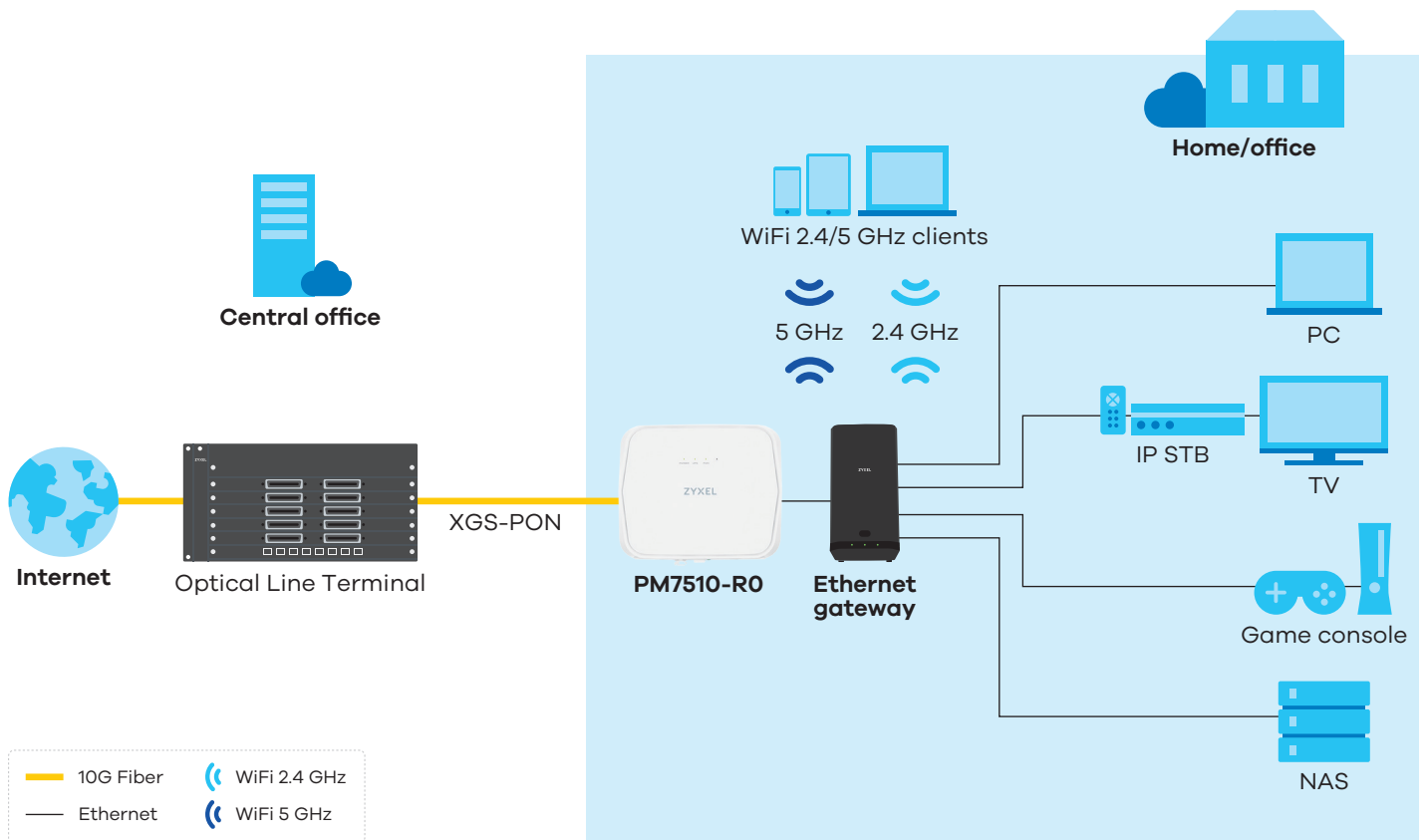
Certification

- EMC: FCC
- Safety: FDA

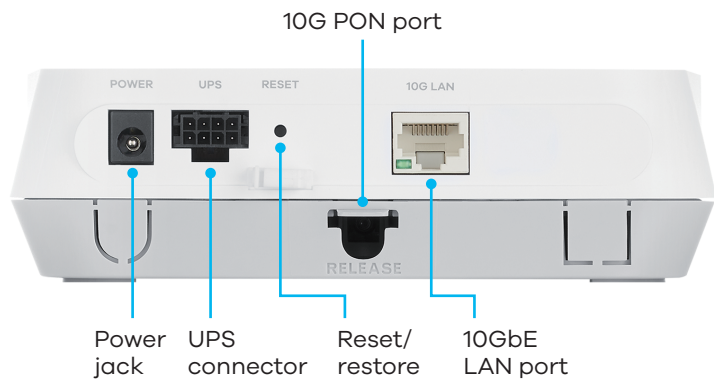
Package contents

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

Application diagram



Hardware description





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

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Datasheet [PM7510-R0](#)



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