



EX7501-B0

Dual-Band Wireless AX6000 10G Ethernet IAD

The Zyxel EX7501-B0 Dual-Band Wireless AX6000 10G Ethernet IAD supports the latest dual-band wireless WiFi 6 (11ax) technology for optimized bandwidth utilization to increase network capacity and the number of simultaneous streams, which allow more subscribers to enjoy superior connectivity with extremely low latency.

Benefits

WiFi 6 technology for superior lag-free performance

Supporting the latest WiFi 6 (11ax) standard, the EX7501-B0 delivers speeds up to up to 4804 Mbps* in the 5 GHz band and 1148 Mbps* in the 2.4 GHz band. The uplink MU-MIMO, Orthogonal Frequency Division Multiple Access (OFDMA) and beamforming technologies empower the EX7501-B0 to deliver premium speed for multi-streaming data access and optimal WiFi experiences without dead zones.

Premium MPro Mesh® for whole-home coverage

Featuring EasyMesh fully compliant Zyxel MPro Mesh® Solutions, the EX7501-B0 enhances your subscribers' experience by providing self-adapting, easy-to-manage whole-home WiFi coverage, while reducing your service OPEX.

Dedicated 10GbE WAN and LAN port for Multi-Gig internet access

With one 10GbE WAN port, the EX7501-B0 is perfect for extending premium fiber service to subscribers' homes. Besides lightning fast WiFi 6 technology and the standard four 1GbE LAN ports, the EX7501-B0 is equipped with one additional 10GbE LAN port that satisfies subscribers' bandwidth-intensive needs with optimized bandwidth utilization.

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WiFi 6 (11ax) 4x4+4x4 for superior performance and coverage



Zyxel MPro Mesh® Solutions (compliant with EasyMesh standards)



10GbE WAN port for premium fiber-grade service



10GbE LAN port for optimized bandwidth utilization



Remote management via TR-069 and TR-181 i2



Zyxel-developed OPAL for superior flexibility and faster time to market



Zyxel Execution Environment (ZyEE) for Linux Containers

TR-069/TR-181 issue-2 remote management for lower OPEX

Compliant with TR-069, the EX7501-B0 significantly simplifies deployment complexity and lowers operating and maintenance costs. The additional support to the latest TR-181 issue-2 data model also enhances service providers' visibility on subscriber LAN networks to offer improved customer assistance.

Zyxel OPAL firmware achieves superior flexibility and shortens time to market

Compliant with the same OPAL firmware trunk applied to all Zyxel CPEs, the EX7501-B0 inherits a rich, field-proven feature set for guaranteed same user experience after migrating to new devices.

Delivering secure and future-proof services with Zyxel ZyEE Linux kernel-based container

Zyxel ZyEE is a secure and future-proof Linux kernel-based execution environment, also known as a container. ZyEE creates a predictable environment isolated from other applications for software developers and service providers to develop, enable, install, and uninstall third-party applications without risking the core operating system. ZyEE's portability and scalability enhance software development agility by providing broader compatibility with various hardware environments. In addition, the compact and structurally simple ZyEE optimizes system computing resources. With ZyEE, service providers can deliver new features to subscribers with reduced time-to-market while remotely managing services through existing ACS servers.

Specifications

System specifications

Wireless standards

- IEEE 802.11 b/g/n/ax 2.4 GHz
- IEEE 802.11 a/n/ac/ax 5 GHz

Wireless transfer rates

- Transmit:
 - 802.11ax (2.4 GHz): up to 1148 Mbps*
 - 802.11ax (5 GHz): up to 4804 Mbps*

Wireless security

- WPA2-PSK

WLAN features

- Auto channel selection
- WiFi Multimedia (WMM)
- Wireless output power management
- Multiple SSIDs up to 4
- WiFi Protected Setup (WPS)
- Intra-BSS traffic block
- MAC address filtering
- WPS 2.0

Firewall

- IPv4/IPv6 firewall (Stateful Packet Inspection)
- Denial-of-Service (DoS) attack prevention
- ICMP blocking

Routing

- IPv4/IPv6
- NAT
- Port forwarding
- WAN connection type: DHCP, PPPoE
- DHCP option 60/121/125

- DHCP server on LAN
- IGMP v2/v3
- IGMP proxy
- Dynamic DNS

VoIP

- Voice functionality:
 - Codec: G.711 a/u, G.722, G.726
 - DTMF tone: detection and generation

VLAN

- 802.1q tag/tag based VLAN
- VLAN to ETH port mapping
- Bridged/routed VLAN support

Management

- Web GUI (HTTP/HTTPS)
- TR-069/TR-098/TR-181
- Firmware upgrade through GUI/TR-069
- 2-tier level access and administration

Phone features

- Internal call
- T.30/T.38/G.711 fax mode, call waiting, call forwarding (no condition, busy, no answer)
- Call transferring (blind, consult OnHold, attendant)
- Call hold/call retrieve
- Three-way conference
- Second call/adding an outgoing call
- Switch between 2 active calls

Hardware specifications

Wireless

- Four internal antennas (2.4 GHz)
- Four internal antennas (5 GHz)

WAN

- One 100 Mbps/1G/2.5G/5G/10 Gbps Ethernet RJ-45 port

LAN

- One 100 Mbps/1G/2.5G/5G/10 Gbps Ethernet RJ-45 port
- Four 100/1000 Mbps Ethernet RJ-45 ports

VoIP

- Two FXS ports RJ-11 (6P2C)

USB

- One USB 3.0 host

LED indicators

- Power
- 10GbE WAN
- Internet
- 10GbE LAN
- LAN 1-4
- WiFi 2.4G
- WiFi 5G
- Phone
- USB

Buttons

- Power on/off button
- WLAN on/off button
- WPS on/off push button
- Reset button

Power consumption

- 12 V DC 3.5 A
- Max 42 watt

Physical specifications

- Item dimensions (WxDxH):
250 x 187 x 32 mm
(9.84" x 7.36" x 1.26")
- Item weight: 473 g (1.043 lb.)
- Packing dimensions (WxDxH):
273 x 207 x 92 mm
(10.75" x 8.15" x 3.62")
- Packing weight: 1084 g (2.390 lb.)

Environment specification

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
(-4°F to 158°F)
- Humidity: 10% to 95% RH
(non-condensing)

Certification

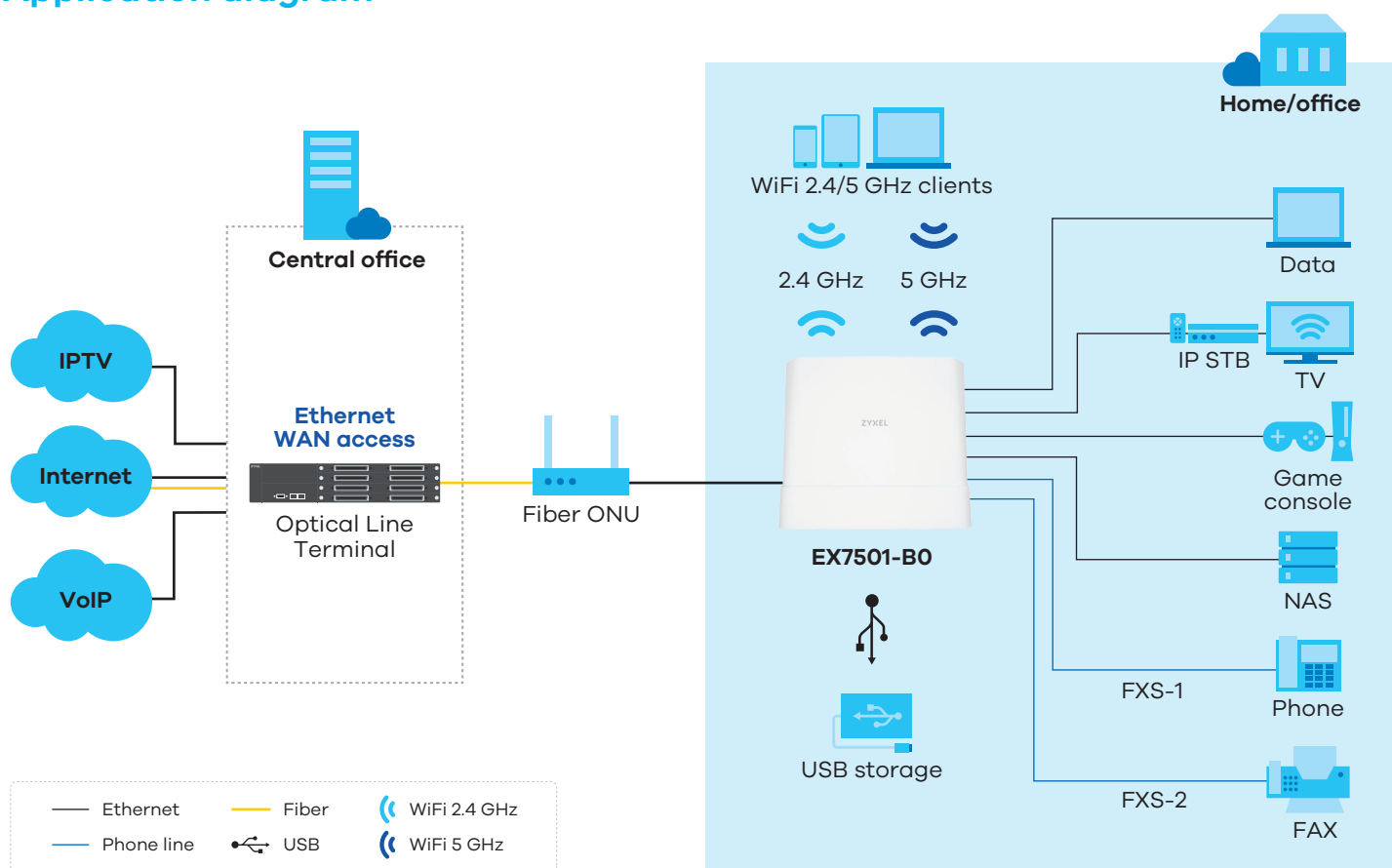
- CE
- RoHS (Restriction of Hazardous Substances) Directive certification

Package contents

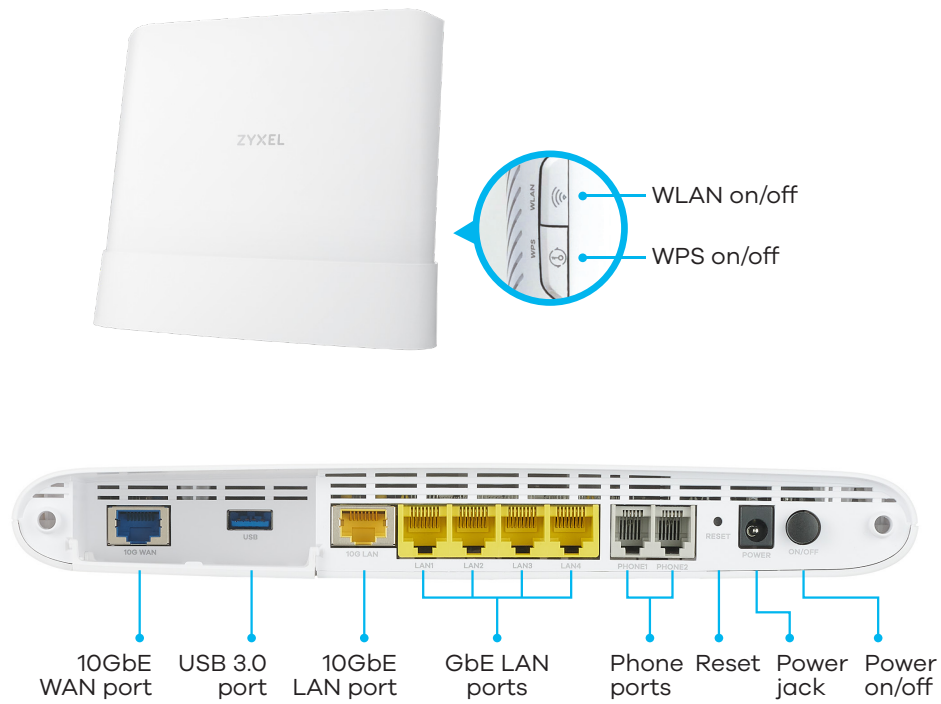
- 10G IAD
- Power adapter
- Ethernet cable
- Quick Start Guide
- Safety warning card
- Wall mount screw

* The maximum wireless data transfer rate is derived from IEEE Standard 802.11 specifications. Actual data transfer rate will vary from network environment including: distance, network traffic, building site materials/construction, interference from other wireless devices, and other adverse conditions.

Application diagram



Hardware interface



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

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