



EX5510-B0

AX6000 WiFi 6 Multi-Gigabit Ethernet Gateway

The Zyxel EX5510-B0 supports dual-band wireless AX with 2.5 Giga Ethernet Internet access to give you delightful wireless experiences in your ultra-connected home.

Based on the 11AX (WiFi 6) technology, the Zyxel EX5510-B0 delivers speeds of up to 4.8 Gbps* on the 5 GHz band and 1.1 Gbps* on 2.4 GHz with an average throughput faster than 11ac. Besides, AX WiFi also optimizes bandwidth utilization to increase network capacity and the number of simultaneous streams, which allow more users to enjoy connection with extremely low latency.

Benefits

Lightning-fast next-generation technology

The Zyxel EX5510-B0 AX6000 WiFi 6 Multi-Gigabit Ethernet Gateway supports the 802.11ax (WiFi 6) standard to offer lightning-fast throughputs of up to 6000 Mbps*. The performance enables operators to provide UHD 4K/8K services to subscribers and hybrid high-throughput applications in homes for a true IoT lifestyle.



WiFi 6 (11ax) for superior performance and coverage



Auto-provisioning and remote management through TR-069



Multiple SSIDs for various service deployment scenarios



Supports OFDMA for maximized network efficiency

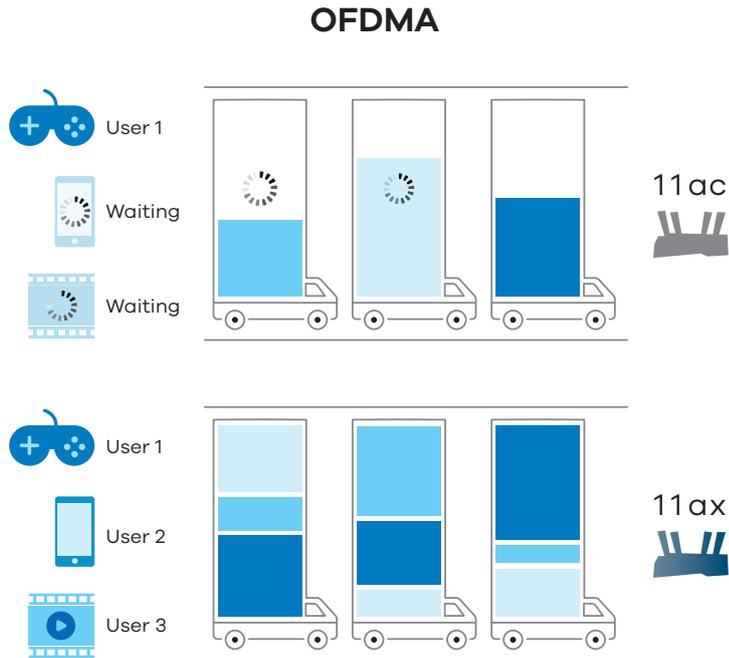


In-house developed OPAL realizes the flexibility and faster time to market



Maximize network capacity for more devices

Supported by revolutionary Orthogonal Frequency Division Multiple Access (OFDMA), the Zyxel EX5510-B Series improves average throughputs to considerably shorten latency and increase network efficiency.



Multi-Gig Internet access

The Zyxel EX5510-B0 supports one 2.5 Giga Ethernet WAN and four Gigabit LAN ports for multiple user connection in the area; and it also delivers wireless speeds of up to 4.8 Gbps* on the 5 GHz band and 1.1 Gbps* on 2.4 GHz.

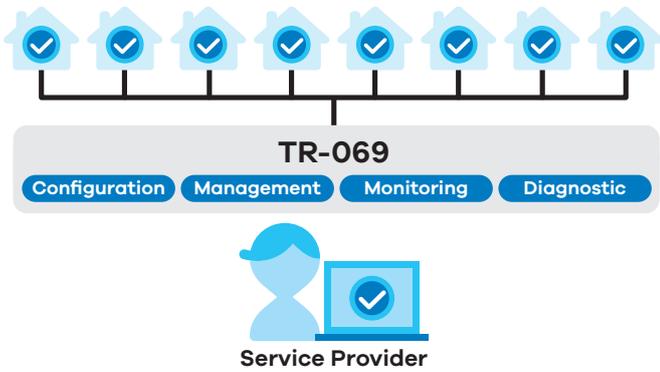


CAF II performance testing support

The Zyxel EX5510-B0 supports optimized TR-143 protocol to facilitate FCC mandated CAF II performance testing.

TR-069 remote management

With the TR-069 standard management specifications, the Zyxel EX5510-B0 allows service providers to manage, configure, monitor and diagnose client devices remotely without interfering end users. This unique feature not only offers true "plug-and-play" experience but also reduces deployment complexity, and it also saves operating as well as maintenance costs for service providers.

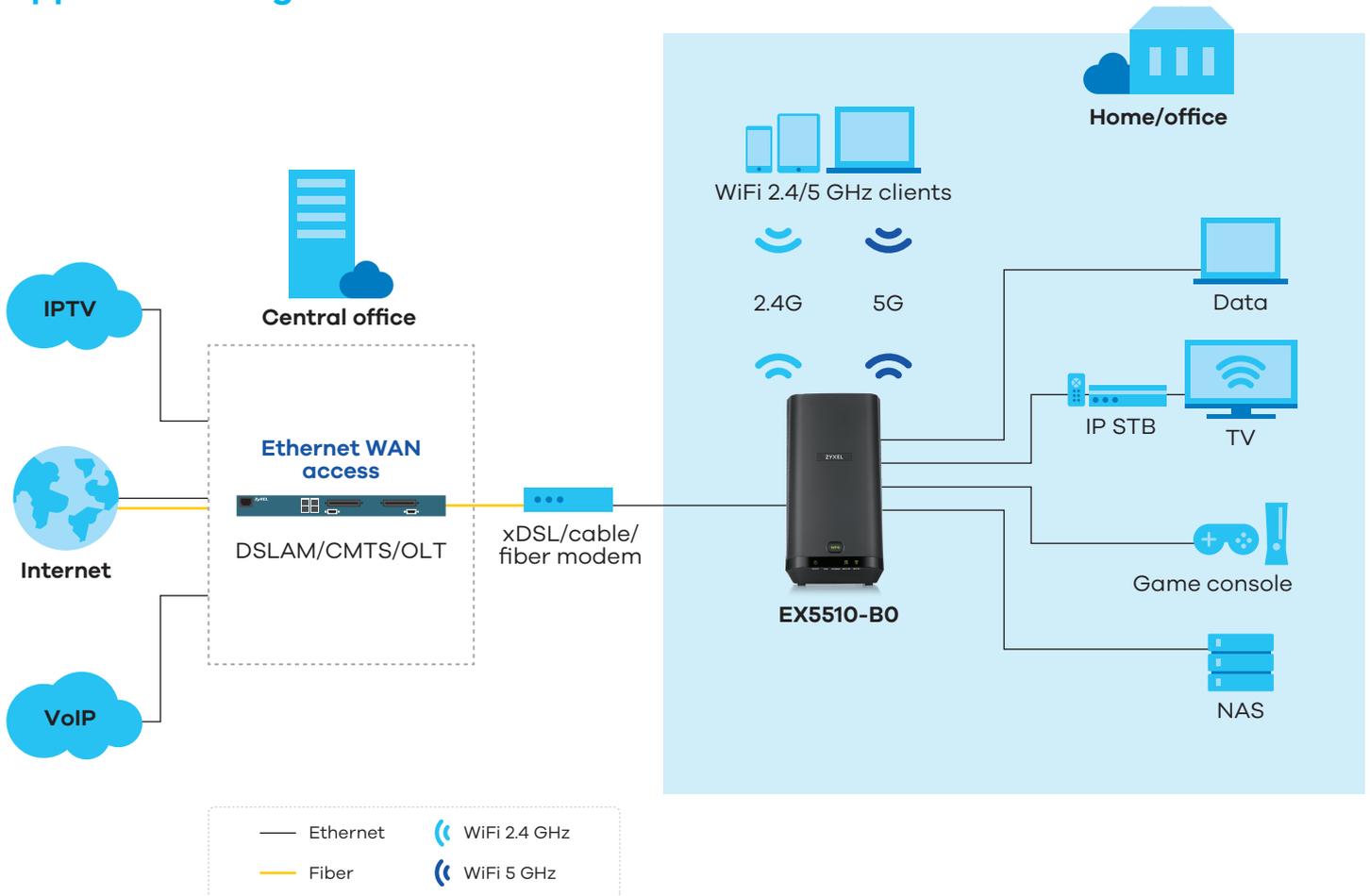


Zyxel OPAL firmware realizes the flexibility and faster time to market

Compliant with the same OPAL firmware trunk applied in all Zyxel CPEs, the EX5510-B0 inherits a rich, field-proven feature set including TR-069 and more. Service providers can ensure the same user experience, after migrating to new devices.



Application diagram



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 SSID up to 4
- WiFi Protected Setup (WPS)
- Intra-BSS traffic block
- MAC address filtering
- WPS 2.0
- MPro Mesh™**

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 43/60/121/125
- DHCP server on LAN
- IGMP v2/v3
- IGMP proxy
- Dynamic DNS

VPN pass-through

- PPTP
- L2TP
- IPSec

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

Hardware specifications

WAN

- One 1/2.5GbE RJ-45 port

LAN

- Four 1GbE RJ-45 ports

USB

- One USB 3.0 host

LED indicators

- Power
- Ethernet WAN
- Internet
- WiFi 2.4G
- WiFi 5G
- WPS

Buttons

- WPS
- Reset

Power consumption

- 12 V DC, 3.5 A
- 37.8 Watt max

Physical specifications

- Item dimensions (WxDxH): 118 x 120 x 225 mm (4.64" x 4.72" x 8.85")
- Item weight: 793 g (1.75 lb.)
- Packing dimensions (WxDxH): 263 x 180 x 136 mm (10.35" x 7.08" x 5.35")
- Packing weight: 1387 g (3.06 lb.)

Environmental specifications

Operating environment

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

Storage environment

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

Certification

- FCC, IC

Package contents

- Gigabit Ethernet gateway
- Power adapter
- Ethernet cable
- Quick Start Guide

* 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.

** Under development. Function will be supported through firmware upgrade

Hardware interface





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

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Datasheet [EX5510-B0](#)

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