



EE5301-00

Dual-Band Wireless BE7200 10G Ethernet VoIP Gateway with SFP+

The Zyxel EE5301-00 Dual-Band Wireless BE7200 10G Ethernet VoIP Gateway with SFP+ utilizes the latest wireless 802.11be (Wi-Fi 7) technology to deliver high-speed performance and optimize bandwidth utilization. Built-in an SFP+ cage, the EE5301-00 offers flexible XGS-PON (P2M) or 10 Gigabit active fiber (P2P) configuration, seamlessly integrating with existing copper or fiber network infrastructure to meet bandwidth-intensive needs.

Benefits

Unleash peak performance with Wi-Fi 7 (802.11be)

Supporting the latest Wi-Fi 7 (802.11be) standard and rated as BE7200*, the EE5301-00 delivers dual-band Wi-Fi with exceptional performance. With Multi-Link Operation (MLO) technology, the EE5301-00 not only optimizes reliability and maximizes data speeds but also significantly reduces latency. By intelligently utilizing multiple frequency bands simultaneously, MLO provides a smoother, low-latency experience—ideal for real-time applications such as gaming and video streaming. The addition of extra antennas enables Zero-wait DFS, ensuring seamless connectivity by monitoring radar channels without interrupting data transmission. It also increases signal sensitivity and delivers broader coverage, reducing dead zones and improving performance across larger spaces.

Premium MPro Mesh® for whole-home Wi-Fi coverage

Featuring EasyMesh fully compliant Zyxel MPro Mesh® Solutions**, the EE5301-00 enhances your subscribers' experience by providing self-adapting, easy-to-manage whole-home Wi-Fi coverage, while reducing your service OPEX.



Wi-Fi 7 (11be) dual-band 4x4 + 4x4 for superior performance and coverage



Zero-wait DFS for instant channel switching without downtime



Remote management via TR-069/TR-369



Zyxel MPro Mesh® Solutions (Compliant with EasyMesh Standards)



SFP+ cage enables up to 10G active fiber (P2P) and XGS-PON (P2M) deployments



MLO (Multi-Link Operation) optimizes reliability and maximizes data speed



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



Circular economy product design



Dedicated Multi-Gig internet access and flexible WAN options

With one 10GbE WAN port, the EE5301-00 extends premium 10G service to subscribers' homes. In addition, the EE5301-00 built-in an SFP+ cage, offering flexible XGS-PON (P2M) or 10 Gigabit active fiber (P2P) configuration to meet bandwidth-intensive needs and seamlessly deployed in the existing copper or fiber network infrastructure.

Zyxel OPAL firmware achieves superior flexibility and shortens time to market

Compliant with the same OPAL firmware trunk applied to all Zyxel CPEs, the EE5301-00 inherits a rich, field-proven feature set for guaranteed same user experience after migrating to new devices.

TR-369/TR-069 remote management for lower OPEX

Compliant with TR-369/TR-069 standards, the EE5301-00 significantly simplifies deployment complexity and lowers operating and maintenance costs with its remote management capabilities. 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.

Commitment to sustainability

The EE5301-00 is crafted from 100% recycled plastics*** and features an easily removable case, simplifying refurbishment to extend its lifespan. Its packaging is designed with recycled paper and printed using VOC-free vegetable oil ink, minimizing waste and harmful substances while eliminating single-use plastics.

Specifications

System specifications

Wireless standards

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

Wireless transfer rates

- Transmit:
 - 802.11be (2.4 GHz): up to 1376 Mbps
 - 802.11be (5 GHz): up to 5764 Mbps

Wireless features

- Auto channel selection
- Wi-Fi Multimedia (WMM)
- Wireless output power management
- Multiple SSIDs up to 4
- Wi-Fi Protected Setup (WPS)
- Intra-BSS traffic block
- MAC address filtering
- WPS
- Zero-wait DFS (ZWDIFS)

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
- QoS support

VLAN

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

Management

- Web GUI (HTTP/HTTPS)
- TR-069 via TR-098/TR-181 i2 data model
- TR-369 via TR-181i2 data model
- Firmware upgrade via web GUI/TR-369/TR-069 protocol
- 2-tier level access and administration
- Zyxel One APP management

MPro Mesh® features

- Auto-configuration
- Band steering
- Multi-AP roaming
- Backhaul priority

VoIP/Phone features

- Codec: G.711u, G.711a, G.729, G.726-24, G.726-32, G.722

- DTMF tone: detection and generation
- Fax (G.711 Pass-through, T.38 Relay)
- Call waiting (reject waiting call, disconnect existing call, keep existing call)
- Call forwarding (unconditional, busy, no answer)
- Call transferring (attended, unattended)
- Caller-ID display (on the LCD of the telephone set)
- Call hold/recover
- Three-way conference
- Second call (adding an outgoing call)
- Switch between 2 ongoing calls

Hardware specifications

VoIP

- One FXS port RJ-11 (6P2C)

Wireless

- 2.4 GHz: 4x4 internal antennas
- 5 GHz: 4x4 internal antennas

USB

- One USB 3.0 host

WAN

- One 1/2.5/5/10 GbE RJ-45 port
- One SFP+ cage

LAN

- One 1/2.5/5/10 GbE RJ-45 port
- Two 1GbE RJ-45 ports

LEDs indicators

- Front panel
 - Power
 - Status
 - Internet
 - WPS and Wi-Fi 2.4 GHz/5 GHz
- Back panel
 - LAN 1-2
 - 10G LAN (LAN 3)

Button

- WPS
- Wi-Fi on/off
- Reset button
- Power on/off switch
- Power jack

Power consumption

- 12 V DC/3 A
- 36 Watt max

Physical specifications

- Item dimensions (LxWxH):
190 x 65 x 200.5 mm
(7.48" x 2.56" x 7.89")
- Item weight: 1059 g (2.33 lb.)
- Packing dimension (LxWxH):
240 x 95 x 236 mm
(9.45" x 3.74" x 9.29")
- Packing weight: 1367 g (3.01 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:
-40°C to 70°C (-40°F to 158°F)
- Humidity:
10% to 95% (Non-condensing)

Certification

- CE
- UKCA

Package contents

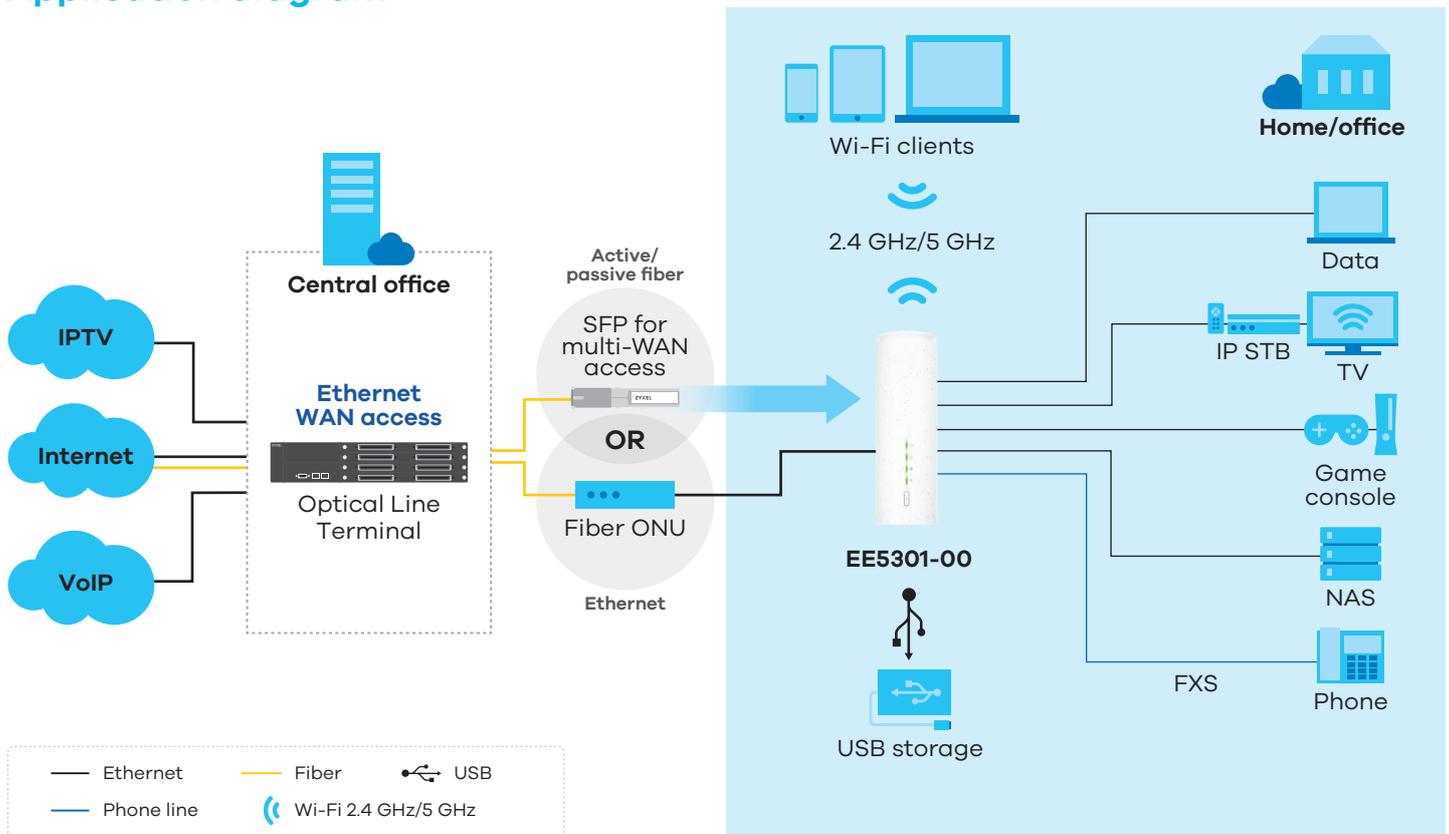
- Device
- Power adapter
- Ethernet cable
- Quick Start Guide
- Safety warning card

* 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.

** Pairing the EE5301-00 with a compatible wireless extender is recommended for optimal mesh network performance.

*** 5% additives and solvents are necessary to be added to the recycled polymers to achieve the desired technical characteristics of the material.

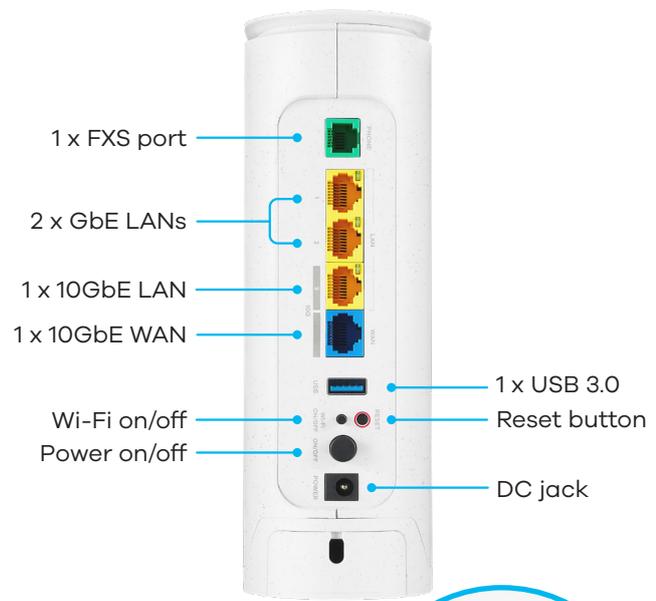
Application diagram



Hardware interface



WPS button



1 x FXS port

2 x GbE LANs

1 x 10GbE LAN

1 x 10GbE WAN

Wi-Fi on/off

Power on/off

1 x USB 3.0

Reset button

DC jack



SFP+ cage

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

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Datasheet [EE5301-00](#)



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