



## EE6601-00

### Tri-Band Wireless BE19000 10G Ethernet VoIP Gateway with SFP+

The Zyxel EE6601-00 Tri-Band Wireless BE19000 10G Ethernet VoIP Gateway with SFP+ leverages the latest wireless 802.11be (Wi-Fi 7) technology to optimize bandwidth utilization, effectively boosting network capacity with ultra-fast connectivity. This translates to an improved user experience with exceptionally low latency. Additionally, using the 10G internet port for Ethernet and fiber offers your subscribers a flexible and seamless wireless experience.

#### Benefits

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

Supporting the latest Wi-Fi 7 (802.11be) standard and rated as BE19000\*, the EE6601-00 delivers tri-band Wi-Fi with exceptional performance. With Multi-Link Operation (MLO) technology, the EE6601-00 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.



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



Zero-wait DFS for instant channel switching without downtime



Zyxel MPro Mesh® Solutions (Compliant with EasyMesh Standards)



Remote management via TR-069/TR-369



SFP+ cage enables 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

## **Commitment to sustainability**

The EE6601-00 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.

## **Power consumption monitoring**

By integrating the power monitoring chip, the EE6601-00 ensures optimal energy efficiency, enhancing Wi-Fi connection performance. This feature facilitates effortless power consumption tracking for service providers, offering the ability to activate/deactivate power-saving mode and access current and historical device power consumption records.

## **Dedicated Multi-Gig internet access and flexible WAN options**

With one 10GbE WAN port, the EE6601-00 extends premium 10G service to subscribers' homes. In addition to the standard three 1GbE LAN ports, the EE6601-00 built-in a SFP+ cage, offering flexible XGS-PON/GPON (P2M) or 10 Gigabit active fiber (P2P) configuration to meet bandwidth-intensive needs and seamlessly deployed in the existing copper or fiber network infrastructure.

## **MPro Mesh® kills the dead zones**

Featuring EasyMesh fully compliant Zyxel MPro Mesh® Solutions\*\*\*, the EE6601-00 enhances your subscribers' experience by providing self-adapting, easy-to-manage whole-home Wi-Fi coverage, while reducing your service OPEX.

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

Compliant with TR-369/TR-069 standards, the EE6601-00 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.

## **Superior flexibility and faster time-to-market with Zyxel OPAL firmware**

The EE6601-00 is available with Zyxel OPAL – our mature, modular software platform. The software incorporates a set of field-proven applications and allows you to easily manage your customer's premium services or seamlessly migrate and upgrade them to new technology – all with the advantage of reduced development time for you and great service for your customers.

# 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
- IEEE 802.11 ax/be 6 GHz

### Wireless transfer rates

- Transmit:
  - 802.11be (2.4 GHz): up to 1376 Mbps
  - 802.11be (5 GHz): up to 5764 Mbps
  - 802.11be (6 GHz): up to 11530 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

### VoIP/phone features

- Codec: G.711 a/u, G.722, G.726
- DTMF tone: detection and generation
- Internal call
- T.30/T.38/G.711 fx 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

### VPN pass-through

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

## Hardware specifications

### VoIP

- Two FXS ports RJ-11 (6P2C)

### Wireless

- 2.4 GHz: 4x4 internal antennas
- 5 GHz: 4x4 internal antennas
- 6 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
- Three 1GbE RJ-45 ports

### LEDs indicators

- Front panel
  - Power
  - Status
  - Internet
  - Wi-Fi
- Back panel
  - 10G LAN (LAN 1)
  - LAN 2-4

### Button

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

## Power consumption

- 12 V DC/3.5 A
- 42 Watt max

## Physical specifications

- Item dimensions (LxWxH): 190 x 80 x 234.5 mm (7.48" x 3.15" x 9.23")
- Item weight: 961.4 g (2.12 lb.)
- Packing dimensions (LxWxH): 272 x 120 x 240 mm (10.71" x 4.72" x 9.45")
- Packing weight: 1530 g (3.37 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
- Wi-Fi Alliance (WFA) certification

## Package contents

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

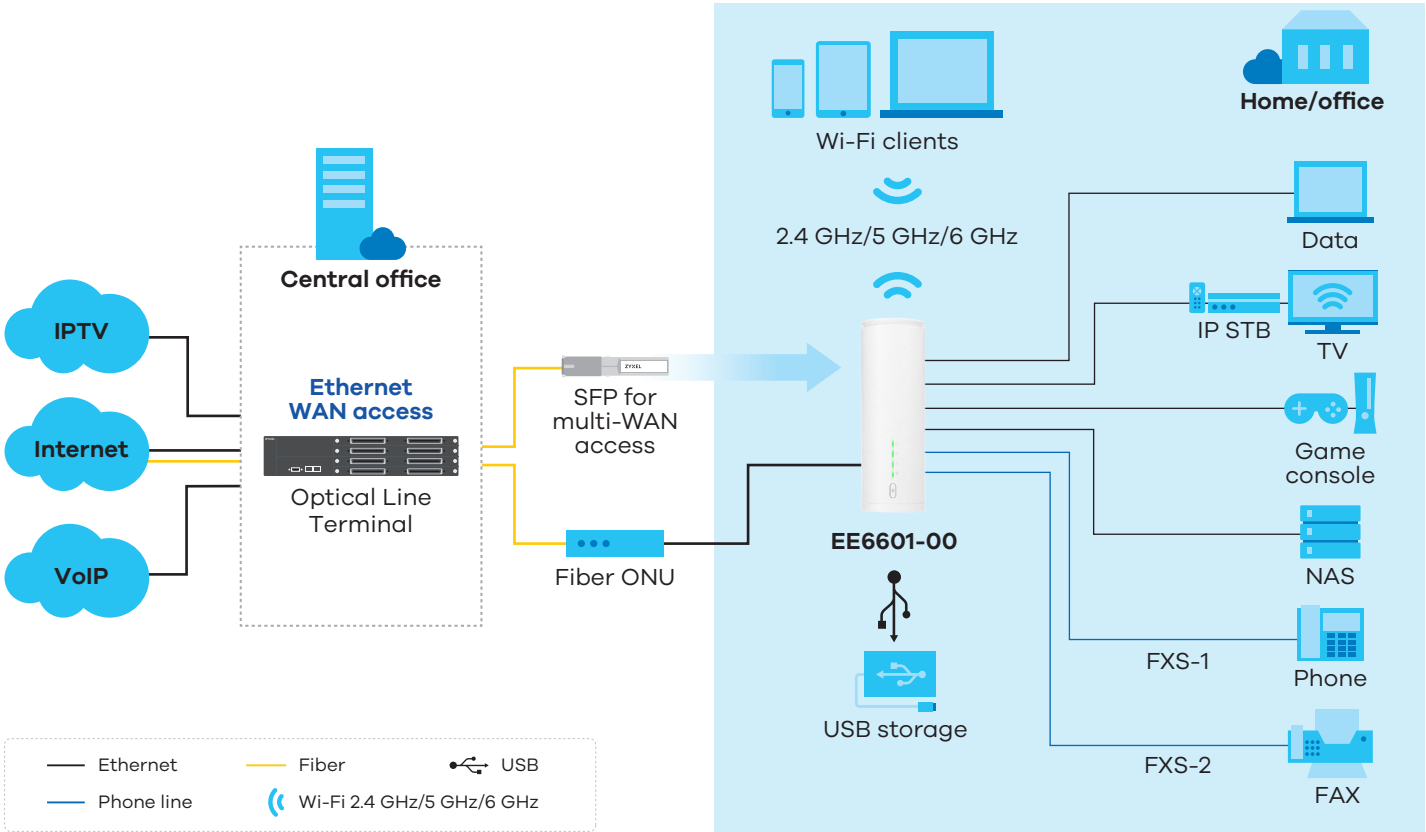
\* The maximum wireless data transfer rate is derived from IEEE Standard 802.11 specifications. Actual data transfer rate will vary from network environment including distance, network traffic, building site materials/construction, interference from other wireless devices, and other adverse conditions.

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

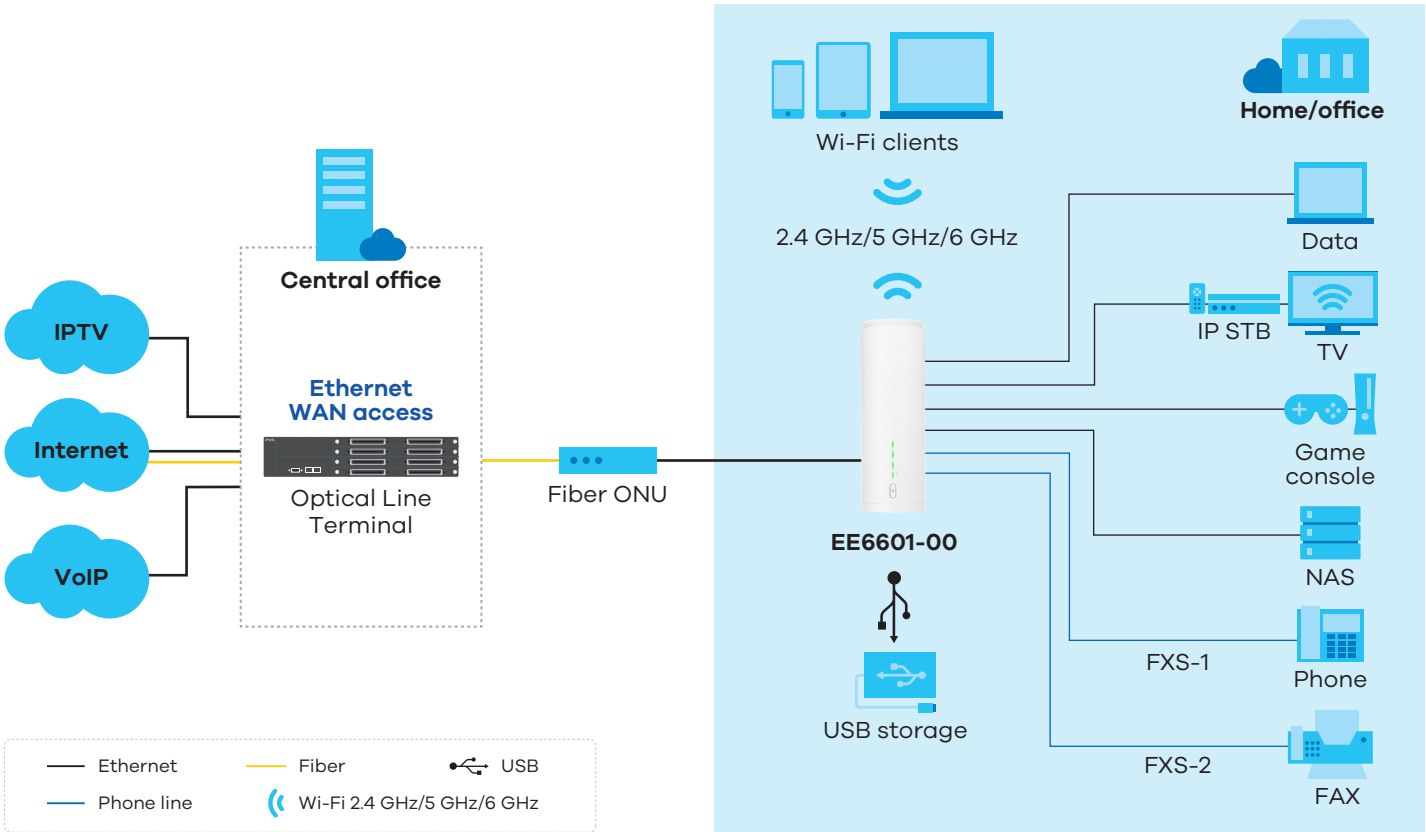
\*\*\* Pairing the EE6601-00 with a compatible wireless extender is recommended for optimal mesh network performance.

# Application diagram

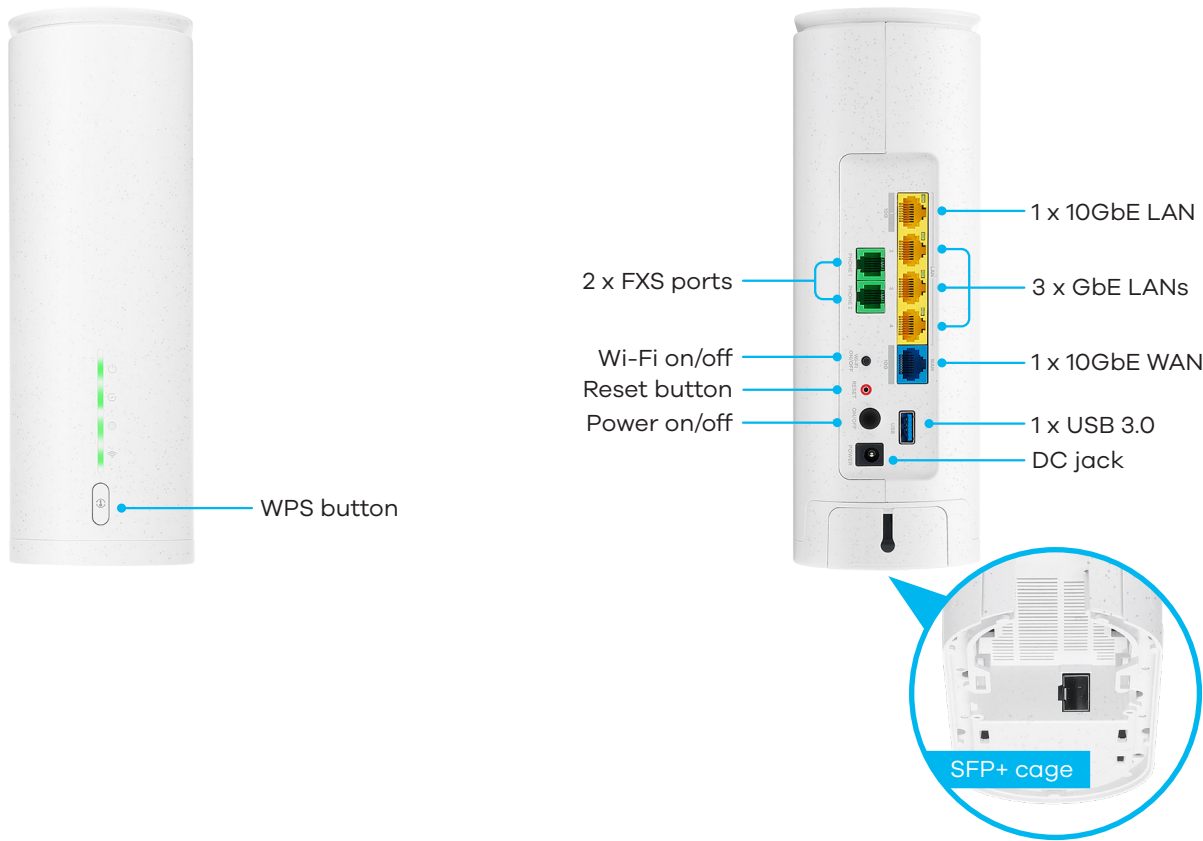
## Active/passive fiber application



## Ethernet application



Hardware interface





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

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Datasheet [EE6601-00](#)



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