



## EX3501/EX3500-T0 Series

### Dual-Band Wireless AX3000 Gigabit Ethernet IAD/Gateway

The Zyxel EX3501/EX3500-T0 Series Dual-Band Wireless AX3000 Gigabit Ethernet IAD/Gateway supports the latest Wi-Fi 6 (11ax) technology for optimized bandwidth utilization to increase network capacity and the number of simultaneous streams, which allows more subscribers to enjoy superior connectivity with extremely low latency.

#### Benefits

##### Wi-Fi 6 technology for superior lag-free performance

Supporting the latest Wi-Fi 6 (11ax) standard, the Series delivers speeds up to up to 2400 Mbps\* in the 5 GHz band and 600 Mbps\* in the 2.4 GHz band. The uplink MU-MIMO, Orthogonal Frequency Division Multiple Access (OFDMA) and beamforming technologies empower the EX3501/EX3500-T0 Series to deliver high-speed internet for multi-streaming data access and optimal Wi-Fi experience without dead zones.

##### Quality of Service (QoS) support

With QoS features, service providers can freely design their QoS policies and prioritize mission-critical services such as IPTV on their service plan offerings. This improves network efficiency and productivity that enable service providers to offer a real multi-play solution to meet the residential user needs.



Wi-Fi 6 (11ax) 2x2+2x2 for superior performance and coverage with 160 MHz in 5 GHz



Remote management via TR-369/TR-069/TR-181



NAT, firewall with SPI and DoS for better security



Comprehensive QoS for enhanced triple-play experience



Multiple SSIDs for various service deployment scenarios



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

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

Compliant with TR-369/TR-069 standards, the Series 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 faster time-to-market

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

## Specification matrix

| Model                       | EX3501-T0                                                                                                                                                                                                                                                                                                                  | EX3500-T0                                          |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|
| Product name                | Dual-Band Wireless AX3000 Gigabit Ethernet IAD                                                                                                                                                                                                                                                                             | Dual-Band Wireless AX3000 Gigabit Ethernet Gateway |
| Hardware                    |                                                                                                                                                                                                                                                                                                                            |                                                    |
| WAN interface               | 1 RJ-45/GbE                                                                                                                                                                                                                                                                                                                | 1 RJ-45/GbE                                        |
| Ethernet port (10/100/1000) | 3 RJ-45/GbE                                                                                                                                                                                                                                                                                                                | 3 RJ-45/GbE                                        |
| FXS port                    | 2                                                                                                                                                                                                                                                                                                                          | -                                                  |
| USB port                    | 1 (USB 2.0)                                                                                                                                                                                                                                                                                                                | 1 (USB 2.0)                                        |
| LED indicators              | <ul style="list-style-type: none"><li>• Power</li><li>• Internet</li><li>• LAN</li><li>• 2.4 GHz/WPS</li><li>• 5 GHz/WPS</li><li>• Phone (EX3501-T0)</li></ul>                                                                                                                                                             |                                                    |
| Button                      | <ul style="list-style-type: none"><li>• Power on/off</li><li>• WPS &amp; Wi-Fi on/off</li><li>• Reset pinhole</li></ul>                                                                                                                                                                                                    |                                                    |
| System Specifications       |                                                                                                                                                                                                                                                                                                                            |                                                    |
| Firewall                    | <ul style="list-style-type: none"><li>• IPv4/IPv6 stateful Packet Inspection (SPI)</li><li>• Denial-of-Service (DoS) attack prevention</li><li>• ICMP blocking</li></ul>                                                                                                                                                   |                                                    |
| WLAN features               | <ul style="list-style-type: none"><li>• Auto channel selection</li><li>• Wi-Fi Multimedia (WMM)</li><li>• Wireless scheduling</li><li>• Wireless output power management</li><li>• Multiple SSID up to 4</li><li>• Wi-Fi Protected Setup (WPS)</li><li>• Intra-BSS traffic block</li><li>• MAC address filtering</li></ul> |                                                    |
| Routing                     | <ul style="list-style-type: none"><li>• IPv4/IPv6</li><li>• NAT</li><li>• Port forwarding</li><li>• WAN connection type: DHCP, PPPoE</li><li>• DHCP option 60/121/125</li><li>• DHCP server on LAN</li><li>• IGMP v1/v2</li><li>• IGMP proxy</li><li>• Dynamic DNS</li></ul>                                               |                                                    |
| VPN pass-through            | <ul style="list-style-type: none"><li>• PPTP</li><li>• L2TP</li><li>• IPSec</li></ul>                                                                                                                                                                                                                                      |                                                    |
| VLAN                        | <ul style="list-style-type: none"><li>• 802.1q tag/Tag based VLAN</li><li>• VLAN to ETH port mapping</li><li>• Bridged/routed VLAN support</li></ul>                                                                                                                                                                       |                                                    |

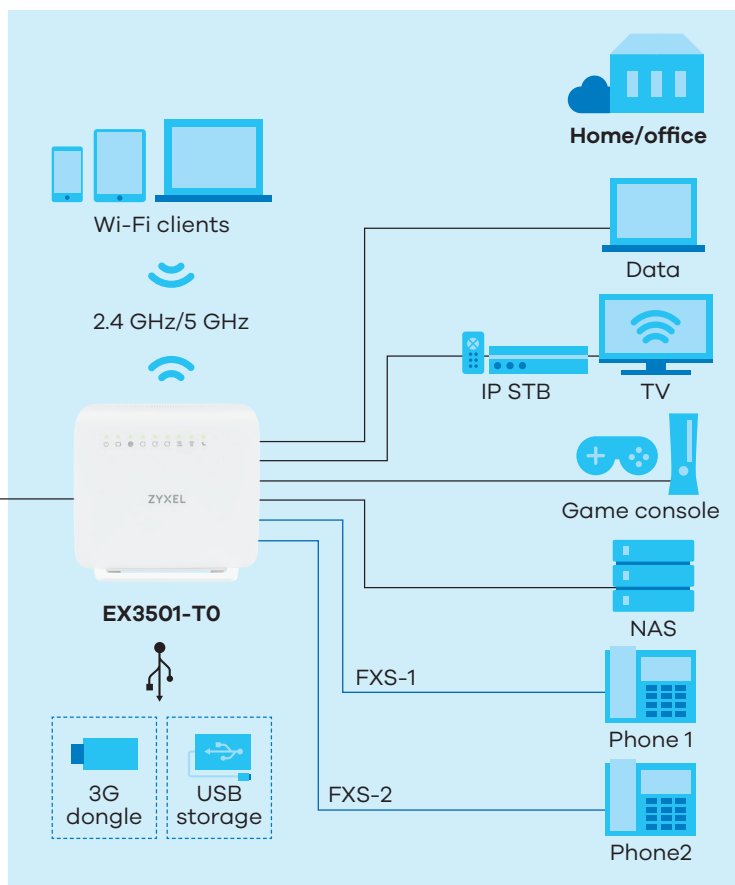
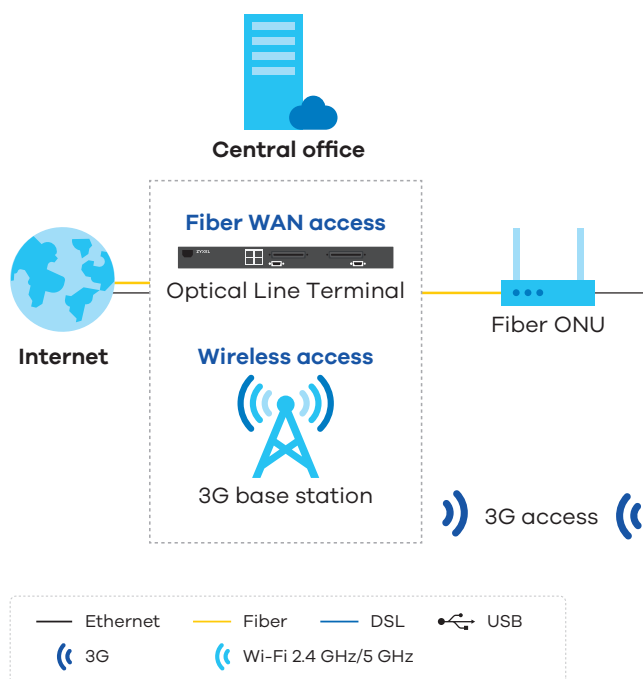
| Model                               | EX3501-T0                                                                                                                                                                                                                                                                           | EX3500-T0 |
|-------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| System Specifications               |                                                                                                                                                                                                                                                                                     |           |
| USB                                 | <ul style="list-style-type: none"><li>• File sharing</li><li>• Cellular backup with external 3G/4G USB dongle**</li></ul>                                                                                                                                                           |           |
| Management                          | <ul style="list-style-type: none"><li>• Web GUI (HTTP/HTTPS)</li><li>• BBF TR-069/TR-369 via TR-098/TR-181i2 data model</li><li>• SNMP v1/v2c &amp; MIB II</li><li>• Firmware upgrade via web GUI/TR-369/TR-069 protocol</li><li>• 2-tier level access and administration</li></ul> |           |
| Voice                               |                                                                                                                                                                                                                                                                                     |           |
| Codec                               | G.711 a/u, G.722, G.726                                                                                                                                                                                                                                                             | -         |
| DTMF detection                      | Yes                                                                                                                                                                                                                                                                                 | -         |
| Internal call                       | Yes                                                                                                                                                                                                                                                                                 | -         |
| T.30/T.38/G.711 fax mode            | Yes                                                                                                                                                                                                                                                                                 | -         |
| Call waiting                        | Yes                                                                                                                                                                                                                                                                                 | -         |
| Call hold/call retrieve             | Yes                                                                                                                                                                                                                                                                                 | -         |
| Call forwarding                     | Yes                                                                                                                                                                                                                                                                                 | -         |
| Caller ID                           | Yes                                                                                                                                                                                                                                                                                 | -         |
| Call transferring                   | Yes                                                                                                                                                                                                                                                                                 | -         |
| Three way conference                | Yes                                                                                                                                                                                                                                                                                 | -         |
| Second call/adding an outgoing call | Yes                                                                                                                                                                                                                                                                                 | -         |
| Switch between 2 active calls       |                                                                                                                                                                                                                                                                                     |           |
| Wireless                            |                                                                                                                                                                                                                                                                                     |           |
| Standard                            | <ul style="list-style-type: none"><li>• IEEE 802.11 b/g/n/ax 2.4 GHz</li><li>• IEEE 802.11 a/n/ac/ax 5 GHz</li></ul>                                                                                                                                                                |           |
| Transfer rate                       | <ul style="list-style-type: none"><li>• 802.11ax (2.4 GHz): up to 600 Mbps</li><li>• 802.11ax (5 GHz): up to 2400 Mbps</li></ul>                                                                                                                                                    |           |
| Security                            | WPA2-PSK, WPA3-SAE                                                                                                                                                                                                                                                                  |           |
| Power consumption                   | <ul style="list-style-type: none"><li>• Power supply: DC 12V/1.5 A</li><li>• Power consumption: 18 Watt max</li></ul>                                                                                                                                                               |           |
| Physical specifications             |                                                                                                                                                                                                                                                                                     |           |
| Item                                | <ul style="list-style-type: none"><li>• Dimensions (LxWxH): 170 x 165 x 30 mm (6.69" x 5.0" x 1.18")</li><li>• Weight: 288 g (0.635 lb.)</li></ul>                                                                                                                                  |           |
| Packing                             | <ul style="list-style-type: none"><li>• Dimensions (LxWxH): 186 x 171.5 x 82.5 mm (7.32" x 6.75" x 3.25")</li><li>• Weight: 557 g (1.23 lb.)</li></ul>                                                                                                                              |           |
| Environmental specifications        |                                                                                                                                                                                                                                                                                     |           |
| Operating environment               | <ul style="list-style-type: none"><li>• Temperature: 0°C to 40°C (32°F to 104°F)</li><li>• Humidity: 10% to 90% (Non-condensing)</li></ul>                                                                                                                                          |           |
| Storage environment                 | <ul style="list-style-type: none"><li>• Temperature: -30°C to 70°C (-22°F to 158°F)</li><li>• Humidity: 10% to 95% (Non-condensing)</li></ul>                                                                                                                                       |           |
| Certification                       |                                                                                                                                                                                                                                                                                     |           |
|                                     | <ul style="list-style-type: none"><li>• CE</li><li>• UKCA</li><li>• RoHS (Restriction of Hazardous Substances) Directive certification</li><li>• Wi-Fi Alliance (WFA) certification</li></ul>                                                                                       |           |
| Package contents                    |                                                                                                                                                                                                                                                                                     |           |
|                                     | <ul style="list-style-type: none"><li>• Device</li><li>• Power adapter</li><li>• Ethernet cable</li><li>• Phone cable (EX3501-T0)</li><li>• Quick Start Guide</li></ul>                                                                                                             |           |

\* 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.

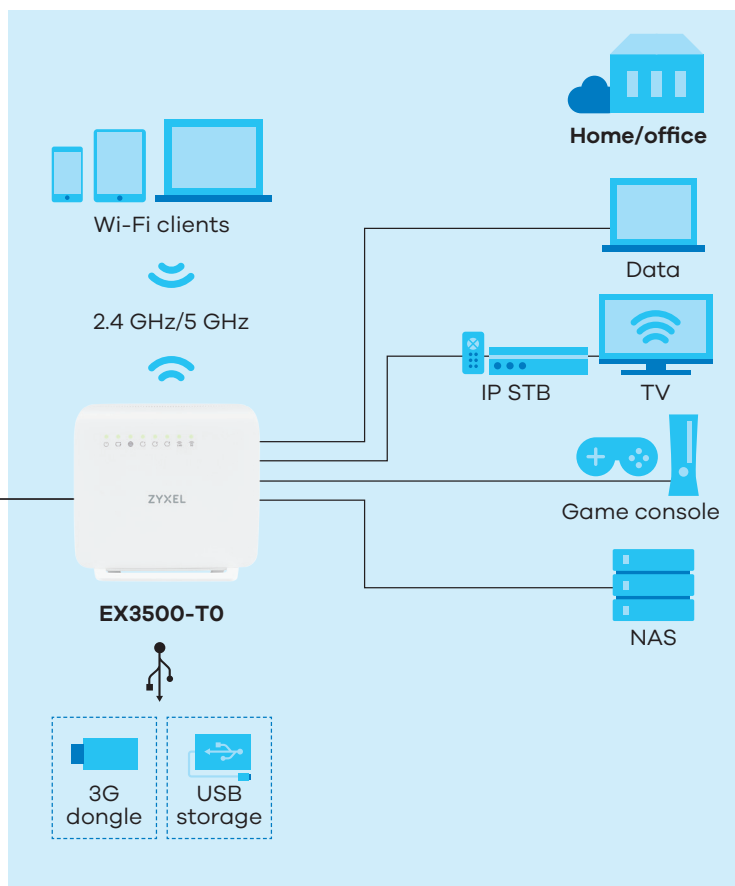
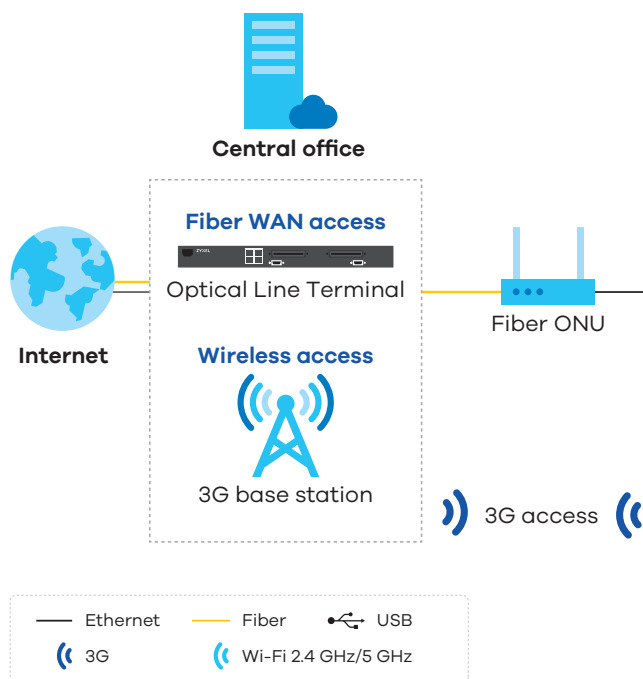
\*\* 4G dongle support is limited to certain brand models and can be expanded per request.

# Application diagram

## EX3501-T0



## EX3500-T0



Hardware interface

Front panels

EX3501-T0

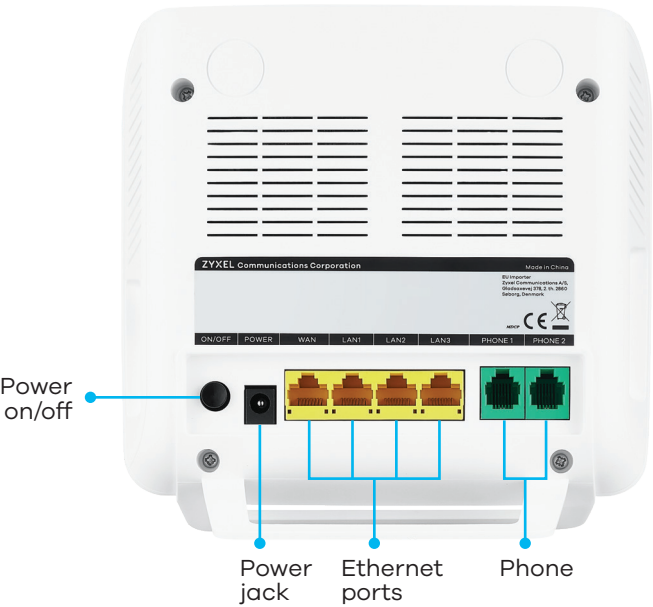


EX3500-T0

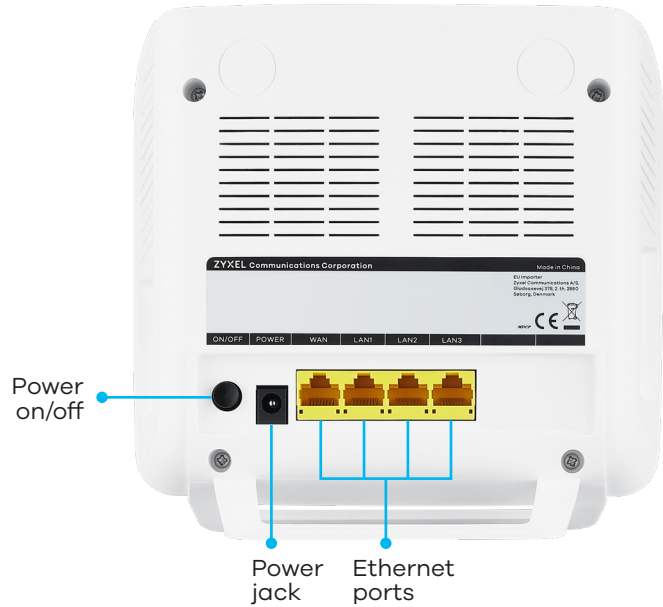


Rear panels

EX3501-T0

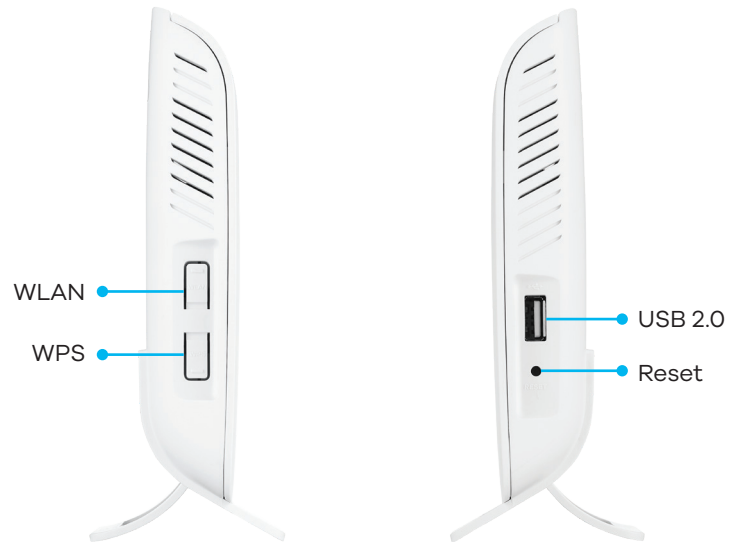


EX3500-T0



## Side panels

EX3501-T0/EX3500-T0



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Datasheet [EX3501/EX3500-T0 Series](#)



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