



ZYXEL



# **EX3501/EX3500-TO 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 WiFi 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.



#### WiFi 6 technology for superior lag-free performance

Supporting the latest WiFi 6 (11ax) standard, the EX3501/EX3500-TO 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-TO Series to deliver high-speed internet for multi-streaming data access and optimal WiFi 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.



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



Remote management via TR-069, TR-369 and TR-181 i2



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-069/TR-369/TR-181 issue-2 remote management for lower OPEX

Compliant with TR-069/TR-369/TR-181 issue-2 standards, the EX3501/EX3500-TO Series significantly simplifies deployment complexity and lowers operating and maintenance costs with its remote management capabilities.

# Zyxel OPAL firmware achieves superior flexibility and faster time-to-market

Compliant with the same OPAL firmware trunk applied in all Zyxel CPEs, the EX3501/EX3500-T0 Series inherits a rich, field-proven feature set for guaranteed unchanged user experience even after migrating to the new devices.

# **Specification matrix**

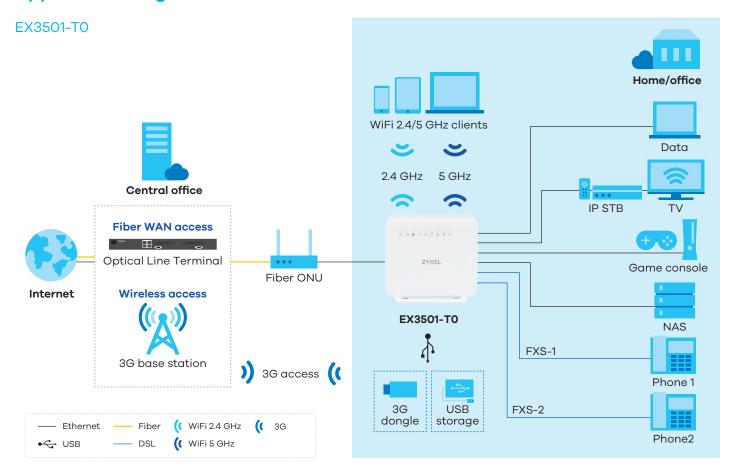
Model	EX3501-T0	EX3500-T0
Product name	Dual-Band Wireless AX3000 Gigabit Ethernet IAD	Dual-Band Wireless AX3000 Gigabit Ethernet Gateway
Hardware		
WAN interface	1 RJ-45/GbE	1RJ-45/GbE
Ethernet port (10/100/1000)	3 RJ-45/GbE	3 RJ-45/GbE
FXS port	2	
USB port	1 (USB 2.0)	1 (USB 2.0)
LED indicators	<ul> <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><li>Power on/off</li><li>WPS &amp; WiFi on/off</li><li>Reset pinhole</li></ul>	
System Specifications		
Firewall	<ul> <li>IPv4/IPv6 stateful Packet Inspection (SPI)</li> <li>Denial-of-Service (DoS) attack prevention</li> <li>ICMP blocking</li> </ul>	
WLAN features	<ul> <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> <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	• PPTP • L2TP • IPSec	
VLAN	<ul><li>802.1q tag/Tag based VLAN</li><li>VLAN to ETH port mapping</li><li>Bridged/routed VLAN support</li></ul>	

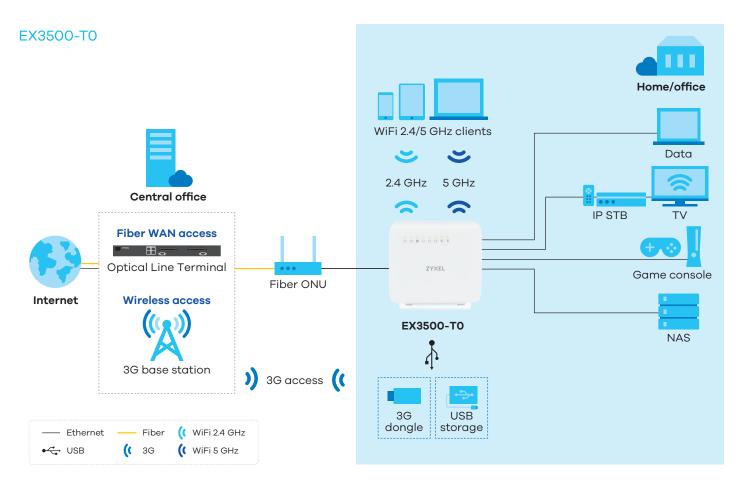
Model	EX3501-T0	EX3500-T0
System Specifications		
USB	<ul> <li>File sharing</li> <li>Cellular backup with external 3G/4G USB dongle**</li> </ul>	
Management	<ul> <li>Web GUI (HTTP/HTTPS)</li> <li>TR-369/TR-069/TR-098/TR-181</li> <li>SNMP v1/v2c &amp; MIB II</li> <li>Firmware upgrade through GUI/TR-06</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 Switch between 2 active calls	Yes	-
Wireless		
Standard	<ul><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> <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><li>Power supply: DC 12V/1.5A</li><li>Power consumption: 18 Watt max</li></ul>	
Physical specifications		
Item	<ul> <li>Dimensions (WxDxH): 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> <li>Dimensions (WxDxH): 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	• 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	<ul><li>CE</li><li>UKCA</li><li>RoHS (Restriction of Hazardous Substances) Directive certification</li></ul>	
Package contents	<ul> <li>Device</li> <li>Power adapter</li> <li>Ethernet cable</li> <li>Phone cable (EX3501-T0)</li> <li>Quick Start Guide</li> </ul>	

<sup>\*</sup> 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.

 $<sup>^{**}</sup>$  4G dongle support is limited to certain brand models and can be expanded per request.

### **Application diagram**





## **Hardware interface**

#### Front panels

#### EX3501-T0

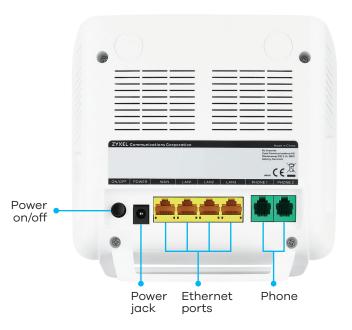


#### EX3500-T0

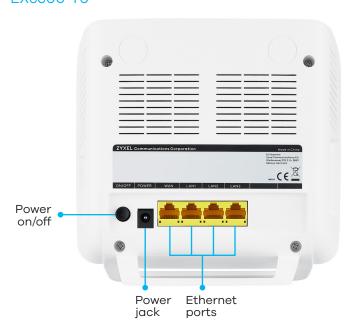


#### **Rear panels**

#### EX3501-T0



#### EX3500-T0



#### Side panels

### EX3501-T0/EX3500-T0









11/08/23