# **ZYXEL**





# LTE7461-M602

# 4G LTE-A Outdoor Router

The Fixed Wireless Access (FWA) is an alternative means to provide Internet connectivity that utilizes wireless network technology rather than fixed lines. With a fixed wireless access offering, network operators can supply a vast amount of new customers with broadband Internet connectivity.

Zyxel LTE7461-M602 4G LTE-A Outdoor Router is 3GPP Cat. 6 router, with CA (Carrier Aggregation) to increase data rates and better network quality delivered by an LTE-A based solution. By delivering broadband over mobile networks, operators can rapidly increase revenue from the untapped markets.

The Zyxel LTE7461-M602 4G LTE-A Outdoor Router supports a routing mode with both bridge and router functions, high-gain antenna for better signal performance and robust IP68 outdoor hardware designed for harsh environments – all the necessary features that benefit the critical "second WAN" design. No matter you have a router or not, the LTE7461-M602 can be easily deployed and integrated into your existing environment.

You can set 4G LTE-A as your main connection or use LTE7461-M602 as a backup in case the performance of the main fixed internet connection drops. The LTE7461-M602 is good for any venue like suburban areas, public locations, homes, and offices. Enjoy LTE technology with minimum effort with the LTE7461-M602.



Download speeds of up to 300 Mbps\*, UE Cat. 6



Built-In 2x2 MIMO, high-gain antenna of up to 8 dBi per element



Standard IEEE 802.3af/at Power over Ethernet (PoE)



IP68 hardened enclosure with industrial-grade components



Embedded bridge/router modes



Remote throughput testing

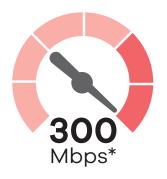


Mobile app (iOS and Android)

# **Benefits**

# **Lightning-fast Internet connectivity**

The Zyxel LTE7461-M602 4G LTE-A Outdoor Router employs 3GPP UE Category 6 – the best-practice LTE technology with downlink data rates of up to 300 Mbps\* through 4 Spatial Streams on two component carriers.



# Built-In 2x2 MIMO high-gain antenna

The Zyxel LTE7461-M602 LTE-A Outdoor Router provides 2x2 MIMO high-gain antennas of up to 8 dBi per element that work effectively in outdoor environments. The outdoor design enables it to work under near non-line-of-sight conditions to increase coverage and bandwidth as well as to eliminate edge corners having difficulty accessing good signals.



# **Easy installation**

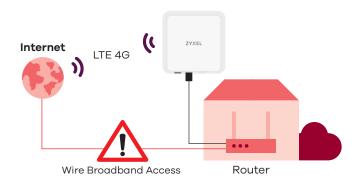
Easy installation is realized with flexible wall or pole mounting kit, integrated IEEE 802.3af/at PoE injector support, dedicated WiFi interface with mobile apps content graphics for donor eNB alignment.





# Non-stop connectivity with LTE 2nd WAN for failover

The wireless LTE allows you to take advantage of the 2nd WAN without a cabling plan. As long as the gateway supports "Multi-WAN failover", you can just connect Zyxel LTE7461-M602 to the existing gateway and set LTE as the failover WAN and relieves the risk of network outage due to the dependence on a single WAN connection.

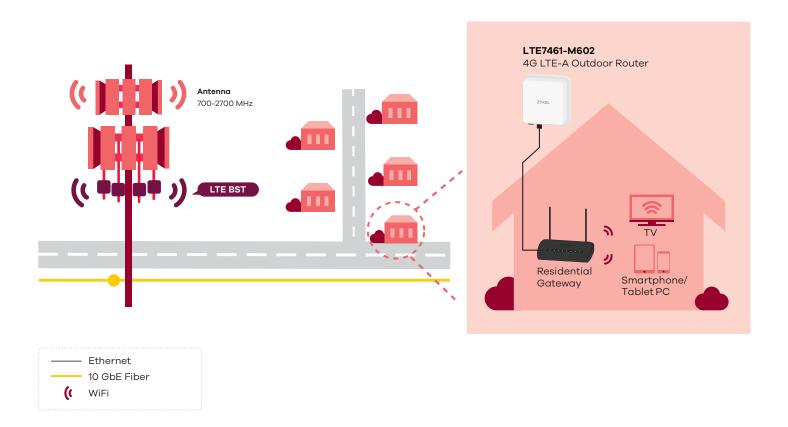


### Remote management, TR-069, HTTP/Web GUI and FTP

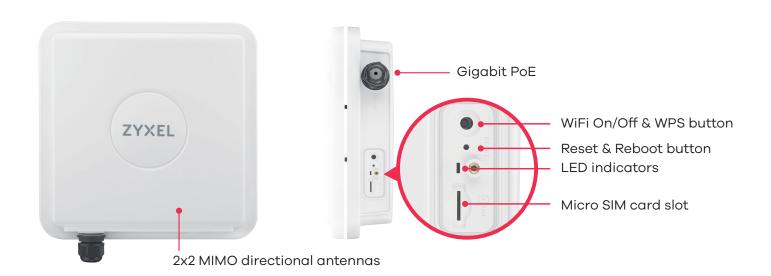
Through the LTE radio interface, the Zyxel LTE7461-M602 supports TR-069, remote GUI and remote FTP to be fully configurable and software upgradeable through events triggered by the operators. Thanks to TR-143 remote throughput testing, the troubleshooting can be performed remotely with better efficiency. Additional support TR-069 with TR-181 issue-2 data model also enhances service providers' visibility on subscriber LAN networks for improved customer assistance.



# **Application Diagram**



# **Interface description**



# **Specifications**

# **System Specifications**

#### **IP Networking**

- Supports IPv4/IPv6 dual-stack (NDP IPv6)
- DHCP server
- ICMP supported
- Virtual Private Network (VPN) passthrough
- Supports NAT/NAPT
- Supports DMZ
- Supports port forwarding/triggering
- Supports ALG

#### Routing

- Supports bridge/router modes
- Supports dynamic DNS for first APN
- Supports remote management under bridge mode

#### **IP Firewall**

- Firewall can be enabled or disabled via GUI
- DoS attack detection
- Supports SPI
- Application-level Firewall
- Filters LAN MAC address
- Filters LAN IP address
- Filters URLs

#### Management

- Supports local/remote device management and firmware upgrade via TR-069 and Web GUI
- APN management
- PIN/PUK management
- Network selection
- Network preference
- Operating frequency band selection
- CLI/SSH (local and remote SSH access)
- Supports UPNP IGD
- Supports SSH with key access
- Supports bandwidth management
- Supports mobile app (iOS and Android)
- Supports remote throughput testing (TR-143)

## **Hardware Specifications**

#### LTE Interface

- Standard-compliant: 3GPP UE Category 6
- Supports LTE bands: 2/4/5/7/12/13/25/26/29/66
- Supports WCDMA bands: 2/4/5
- Peak data rate: LTE-FDD: max 300 Mbps (DL) max 50 Mbps (UL)\*
- 2 DL Carrier Aggregation combination: B2+B2/B5/B12/B13/B26/B29; B4+B4/ B5/B12/B13/B26/B29; B7+B5/B7/B12/ B13/B26/B29; B25+B5/B12/B13/B25/ B26/B29; B66+B5/B12/B13/B26/B29/ B66; (B29 is only for secondary component carrier)
- LTE antennas: 2 embedded directional antennas of up to 8 dBi/ element (2x2 MIMO)
- Supports DL modulation QPSK, 16-QAM, 64-QAM
- Supports UL modulation QPSK and 16-QAM
- Max EIRP 30 dBm

## **Power Consumption**

• 13 watt (peak) - at PoE

# **Physical Specifications**

#### **Hardware Interface**

- One GbE RJ-45 PoE LAN port
- One tri-color LED indicator for
  - Power status
  - Internet status
  - WiFi status
- One WiFi On/Off and WPS button
- One 3FF micro SIM card slot
- One Reset & Reboot default button

### **Power Interface**

• Standard IEEE 802.3af/at PoE PD support compatible

#### WiFi Interface for Management

- 802.11 n/g/b, 2.4 GHz
- Hidden SSID
- MAC address filtering
- 2x2 embedded antennas
- For local management purpose only

#### **Physical Specification**

- Dimensions (WxDxH): 254 x 255 x 58 mm (9.99" x 10.03" x 2.28")
- Weight: 1100 g (2.43 lb.)
- Package dimensions (WxDxH): 420 x 280 x 108 mm (16.54" x 11.02" x 4.25")
- Package weight: 3050 g (6.72 lb.)

# **Environmental Specifications**

#### **Ingress Protection Rating**

• IP68

### **Lightning Protection**

• K.21 enhanced mode, 6 kV

#### **Operating Environment**

- Temperature:  $40^{\circ}\text{F to }140^{\circ}\text{F (-}40^{\circ}\text{C to }60^{\circ}\text{C )}$
- Humidity: 5% to 95% (non-condensing)

#### **Storage Environment**

- Temperature: -40°F to 158°F (-40°C to 70°C)
- Humidity: 5% to 95% (non-condensing)

#### Certification

• FCC/IC/AT&T/Verizon

### **Package Contents**

- Gigabit PoE injector with LED indicator
- Ethernet cable
- Power cord
- Cable gland
- Quick start guide
- Wall/pole mounting kit
- \* The maximum wireless data transfer rate is derived from 3GPP specifications close to UE Category 6. The 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.

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

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Datasheet LTE7461-M602

