# ZYXEL



## LTE7461-M602

High Performance UE Cat-6 Outdoor Router with Flexible Bridge Mode for Seamless Wireless Fixed Access

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. By delivering broadband over the existing LTE mobile networks, operators can rapidly increase revenue from the untapped markets.

The Zyxel LTE7461-M602 4G LTE-A Outdoor Router sports a routing mode with both bridge and router functions, high-gain antenna for better signal performance and robust IP66 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 as your main connection or use LTE as a backup when performance of the main connection drops. The Zyxel 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 400 Mbps\*, UE cat-6



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



Standard 802.3af PoE



IP66 hardened enclosure with industrial grade components



Embedded bridge/router mode



Remote throughput testing



Mobile apps (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 400 Mbps through 4 Spatial Streams on two component carriers.

#### **Easy Installation**

Easy Installation is made possible with the integrated IEEE 802.3at PoE support, dedicated WiFi AP with mobile apps content graphics and sounds for Donor eNB alignment.

#### Built-In 2x2 MIMO High-Gain Antenna

The Zyxel LTE7461-M602 4G 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 nonline-of-sight conditions to increase coverage and bandwidth as well as to eliminate edge corners having difficulty accessing good signals.

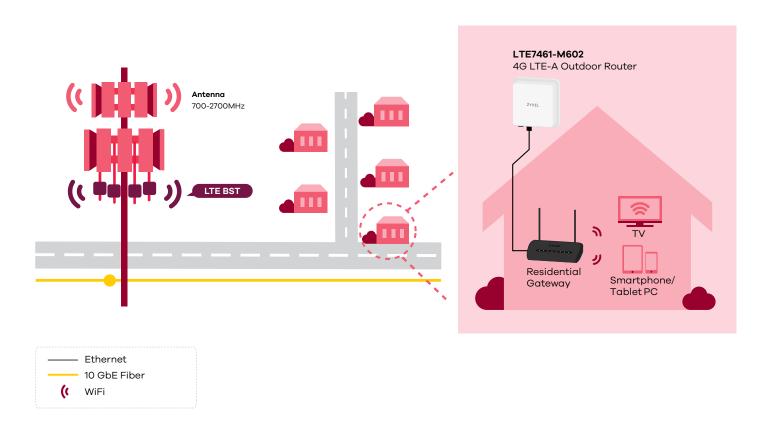
#### Remote Management, TR-069 and Web GUI

Through the LTE radio interface, the Zyxel LTE7461-M602 supports TR-069 and remote GUI to be fully configurable and software upgradeable through events triggered by the operators. Thanks to remote throughput testing, the trouble shooting can be performed locally or remotely with better efficiency.

## Non-stop Connectivity with LTE 2nd WAN for fail-over

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

### **Applications Diagram**



## **Interface Description**



## **Specifications**

#### **System Specifications**

#### **IP Networking**

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

#### Routing

- Support Bridge (Router) Mode
- Support Dynamic DNS for first APN
- Support Remote Management under Bridge mode

#### **IP Firewall**

- Firewall can be enabled or disabled via GUI
- DoS Attack Prevention
- Support SPI
- Application-Level Firewall
- Filters LAN MAC address
- Filters LAN IP address

#### Management

- Support Local/Remote device management and firmware upgrade via TR-069 and Web GUI
- APN management
- PIN management
- Network selection
- Network preference
- Operating frequency band selection
- CLI/SSH (Local and remote SSH access)
- Support UPNP IGD
- Support SSH with key access
- Support Bandwidth management
- Support mobile apps (iOS and Android)\*\*\*
- Support remote throughput testing (TR-143)

#### **Hardware Specifications**

#### LTE Interface

- LTE UE category 6
- Support LTE Band: 2/4/5/7/12/13/25/26/29/66
- Peak data rate:
  - LTE-FDD: Max 400Mbps (DL)/ Max 50Mbps (UL)
  - LTE-TDD: Max 286Mbps (DL)/ Max 10.2Mbps (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 Antenna: 2 internal antennas
- Support DL modulation QPSK, 16QAM, 64QAM and 256QAM\*
- Support UL modulation QPSK and 16QAM

#### LTE Antennas

• 2 embedded directional antennas of up to 8 dBi/element

#### **Power Interface**

- Standard 802.3 af/at Power over Ethernet and PoE PD compatible
- Power consumption at PoE: < 16 w

#### **WiFi AP Features**

- 802.11 n/g/b, 2.4 GHz, N300
- Hidden SSID
- MAC Address Filtering
- 2x embedded antennas
- For local management purpose only

## **Specifications**

#### **Hardware Interface**

- One 10/100/1000 Mbps Ethernet **RJ-45 PoE LAN ports**
- One Tri-color LED for Power status. Internet status and WiFi status
- · One 3FF format Micro SIM card
- · One WiFi On/Off button
- · One reset to default button

#### **Physical Specifications**

- Dimensions (WxDxH): 254 x 255 x 58 mm
- Weight: 1100 g
- Accessories include Gigabit PoE injector and mounting kits for wall and pole

#### **Environmental Specifications**

#### **Ingress Protection Rating**

IP66

#### **Lightning Protection**

• K.21 enhance mode, 6KV

#### **Operating Environment**

- Temperature: -40°F to 140°F (-40°C to 60°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

- \* Supports DL 256 QAM to reach 400Mbps DL speed
- \*\* 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.
- \*\*\* Under development

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