

# **Powerful High-gain with Flexible Routing Mode for Seamless Wireless Connectivity**



Application Guide

LTE Outdoor IAD - LTE7410



The evolution of mobile broadband has been changing people's behavior on the Internet – no matter they're at home or in the office. People nowadays get used to stay connected with the Internet anytime, anywhere to look for information, receive pushed email or play games.

ZyXEL Communications, a world-class networking company that excels in providing innovative, reliable CPE solutions for telecommunications service providers, is now introducing various mobile broadband solutions that integrate its knowledge and experience with 3G/4G RF capabilities to lead the world to enter the smart broadband era.



To go beyond traditional wired broadband access, ZyXEL mobile broadband solutions have been designed to provide seamless wireless experience for home and business users to stay connected with the world. The evolution of all-IP wireless networks also opens the door for operators and service providers to enhance the existing services as well as to introduce rich, innovative multimedia services.

# **Product Info**



# **Up-to-date LTE technology**

Utilizing 3GPP release 9, category 4 technology – the most popular industry trend, ZyXEL's LTE7410 Series is able to reach downlink data rates of up to 150 Mbps and 50 Mbps uplink for you to enjoy ultra-fast mobile broadband applications.

# Built-in multi-band, high-gain antenna

The ZyXEL LTE7410 Series of LTE outdoor IAD provide multi-band, high-gain antennas of up to 10 dBi that work equally effective even in harsh environments. The outdoor design makes them possible to work in near non-line-of-sight conditions to improve coverage and bandwidth as well as to eliminate edge corners having difficulty getting good signals.

# Robust mechanical design – IP67

As an outdoor CPE to resist harsh weather conditions, the LTE7410 Series has been designed to meet IP67 Ingress Protection level to offer all-aspect protection against dust and water immersion depth of 15 cm to 1 m. With the solid construction, the ever-changing weather is no longer a challenge.

# Software upgrades over-the-air

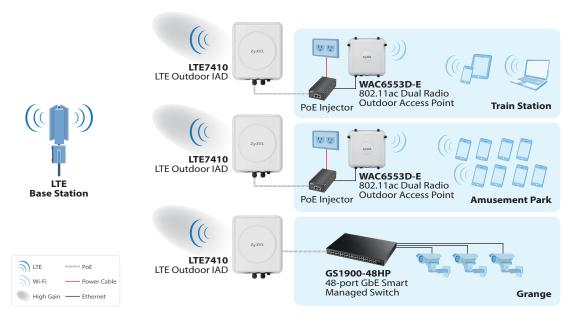
Through the LTE radio interface, the LTE7410 Series supports TR-069 to be fully configurable and software upgradeable through events triggered by operators.

# Flexible support of bridge or router mode

With the popularity of Internet connection, many users already own their full-function gateway devices, and they may need another WAN for backup or different connectivity options. The LTE7410 Series supports both bridge and router modes, so you can select bridge mode to make it a simple WAN for your existing gateway, or use router mode to handle routing functionalities without an additional router.

# Solution for Massive Coverage Improvement in Challenging Suburban Areas

# **Suburban**



# Challenge

Many suburban areas have a common challenge to deploy networks in remote sites where Internet connection is difficult to reach indoor/outdoor hot spots for desirable coverage. These sites include train stations, amusement parks, airports, shopping malls, farms and walls, among others. The difficulties operators encounter could be weak signals in remote sites, varied access media, remote power supply (PoE) and Internet cablings that are relatively hard to deploy.

The ZyXEL LTE outdoor IAD provides a low-band (band 20), built-in high-gain antenna that offers high performance and steady transfer quality. LTE infrastructures that enable great network capability and efficiency not only reduce the need for costly construction but also significantly improve coverage and capacity on a massive scale in most challenging outdoor environments.

# **Performance Features**

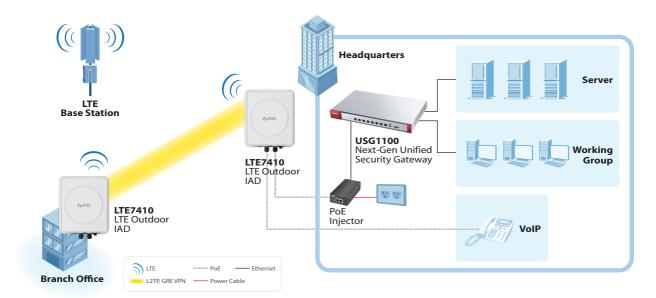
- LTE multi-band support
- High-gain, multiple-band antenna
- Robust IP67 mechanical design for harsh environments
- Bridge or router mode support
- Remote management through TR-069

# **Application Benefits**

- Expand Internet coverage in weak signal strength areas
- Reinforce or deploy in Wi-Fi dead spots
- Ultra-fast broadband access in wide public venues
- Cost-effective coverage in large places and remote regions
- Resistance to harsh outdoor environments
- Multi-band, high-gain antennas for long-range signals

# Flexible, Modern Business Solution with Networking Architecture

# **Small Businesses**



# Challenge

Business networks become more and more complex today as the IT staff deploys different network applications such as VoIP, network infrastructures and remote connectivity at the same time to satisfy people calling for higher Internet speeds. All these lead to even more network construction, cost, operation and maintenance issues.

The answer to the complicated internet structure is the LTE outdoor IAD that provides both router mode and bridge mode, so the IT staff has a flexible option to operate

in diversified network architectures; and LTE also helps addressing key challenges such as construction, cost, operation and maintenance difficulties during network modernization process.

LTE services also include smart QoS for VoIP to ensure streaming performance. The expected improvements of both service quality and availability are bound to provide abundant bandwidth for growing business applications.

# **Performance Features**

- LTE multi-band support
- Robust IP67 mechanical design for harsh environments
- SIP-based VoIP communications
- Bridge or router mode support
- L2TP, GRE VPN with site-to-site tunnel capability
- Remote management through TR-069

# **Application Benefits**

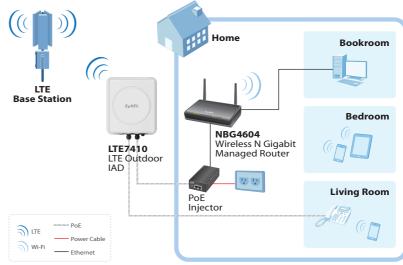
- Enhanced network capacity and coverage
- Efficient network operations
- Optimized business-network deployments
- Powerful embedded VPN solution for connecting offices and remote sites
- Cost-effective integration of VoIP communication services
- Smart QoS for high-quality VoIP performance



# Cost-effective, High-quality Solution with Better Coverage for Residential Applications

# Home





# Challenge

As home subscribers demand diverse, high-quality applications on computers and other home devices, operators need to offer more than just bandwidth for not only improved network accessibility and high-speed Internet access, but also stable quality and reduced latency.

As a WAN backup alternative, LTE provides cost-effective, rapidly deployable, reliable and secure primary or backup connectivity to maintain uninterrupted service in case of unstable Internet connection.

The ZyXEL LTE outdoor IAD with high-band (band 3 and 7) built-in is especially adequate for buildings with solid walls thanks to its strong power of penetration. The cost-effective LTE can improve network capacity and range to deliver the best indoor coverage possible for home applications.

# **Performance Features**

- Robust IP67 mechanical design for harsh environments
- SIP-Based VoIP communications
- Supports bridge or router mode support
- Remote management through TR-069

# **Application Benefits**

- Improved user experience
- Provides users with simple, secure and high-speed access
- Reduce the cost of delivering mobile networks
- Optimizes home-network deployments
- Cost-effective integration of VoIP communication services



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