LTE7490-M904

4G LTE-A Pro Outdoor Router

Zyxel LTE7490-M904 4G LTE-A Pro Outdoor Router supports Cat. 18 and perfect for the operators who are looking for 4G LTE FWA solutions to deliver ultra-fast and high-capacity premium broadband services with deployment flexibility.

Benefits

Lightning-fast internet connectivity

The Zyxel LTE7490-M904 4G LTE-A Pro Outdoor Router employs 3GPP UE downlink Category 18 – the top-level LTE technology with downlink data rates of up to 1.2 Gbps through 12 spatial streams on three component carriers.

Built-in 4x4 MIMO high-gain antenna

The Zyxel LTE7490-M904 4G LTE-A Pro Outdoor Router provides 4x4 MIMO high-gain antennas of up to 7 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.

Strengthen your competitive edge with Fixed Wireless Access (FWA)

Deploying LTE7490-M904 as part of FWA allows you to extend your 4G service coverage into subscribers' homes and workplaces without extra wire infrastructure. This secures the TCOs and increases business revenue by supporting a larger number of subscribers with a premium fixed-grade connection.

3GPP Release 12 Cat. 18/up to 1.2 Gbps/150 Mbps (DL/UL)

Built-in 4x4 MIMO, high-gain antennas of up to 7 dBi per element

Standard 802.3af/at Gigabit PoE

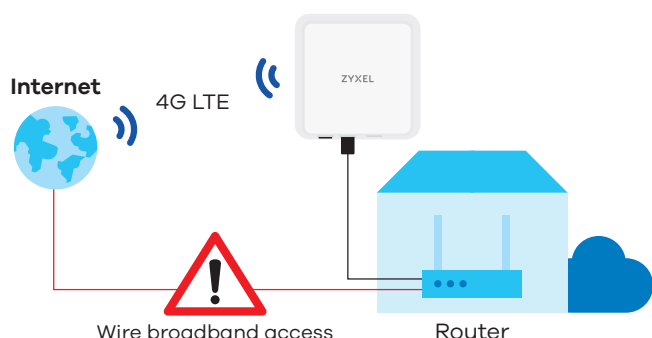Remote management via TR-069 (TR-181 and TR-143 speed test) HTTP/web GUI and FTP

IP68 hardened enclosure with industrial grade components

Zyxel mobile apps (iOS and Android)

Datasheet LTE7490-M904

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 "Dual-WAN Failover ", you can just connect Zyxel LTE7490-M904 to the existing gateway and set LTE as the failover WAN and relieve the risk of network outage.

Easy installation with Zyxel's mobile app

Easy Installation is realized with a flexible wall or pole mounting kit, integrated 802.3af/at PoE injector support, and dedicated WiFi interface. The LTE7490-M904 connects to Zyxel's mobile app with intuitive RF signal strength graphics for base station alignment.

Remote management, TR-069, HTTP/web GUI and FTP

With TR-069, TR-181 and TR-143 support, the Zyxel LTE7490-M904 effectively secures OPEX by reducing the frequency of on-site support and by providing simplified diagnostic, configuration and troubleshooting processes.

Environmentally-hardened

With IP68-compliant K.21 6 kV/300 A lightning protection, the Zyxel LTE7490-M904 guarantees high-quality connections, a longer device life despite the weather and natural challenges. The LTE7490-M904 can operate within a wide range of temperature and humidity, which supports your service deployed in wide territorial scopes.

Specifications

System specification

IP networking

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

Routing

- Supports router mode
- Supports bridge (IP pass-through) mode
- Supports dynamic DNS for first APN
- Supports remote management under bridge mode

IP firewall

- Firewall can be enabled or disabled via GUI
- DoS attack prevention
- Supports SPI
- Application-level firewall
- Filters LAN MAC addresses
- Filters URLs

Management

- Supports local/remote device management and firmware upgrade via TR-069, HTTP/web GUI and FTP
- APN management
- Account management
- PIN/PUK management
- Network selection
- Operating frequency band selection
- CLI/SSH (local and remote SSH access)
- Supports UPnP IGD
- Supports SSH with key access certification management
- Supports bandwidth/quota management

- Supports mobile apps (iOS and Android) for easy installation and local management only
- Supports remote throughput testing by TR-143
- WiFi Protected Setup (WPS)
- Hidden SSID

Hardware specifications

LTE interface
- Standard-compliant: 3GPP UE DL Category 18, UL Category 13
- Supports LTE bands : B1/B3/B5/B7/B8/B20/B28/38/40/41
- Supports DL transmission mode TM1/2/3/4/6/7/8/9
- LTE antennas: 4 embedded directional antennas of up to 7 dBi/ element (4x4 MIMO)
- Supports DL 5xCA**, 2x2 MIMO
- Supports DL 3xCA, 4x4 MIMO, B1/3/7**
- Supports DL modulations QPSK, 16-QAM, 64-QAM and 256-QAM
- Supports UL modulations QPSK, 16-QAM and 64-QAM
- Supports UL 2xCA** intra-band, B3/7/38/40/41
- Peak data rates:
  - DL: 1.2 Gbps within 100 MHz bandwidth
  - UL: 150 Mbps within 40 MHz bandwidth

UMTS Air interface
- Standard-compliant: WCDMA bands 1/3/5/8
- Supported frequencies:
  - HSPA+/UMTS: 2100/1800/900/850 MHz (bands 1/3/5/8)
  - WCDMA: 2100/1800/900/850 MHz
- HSPA+ downlink data rates up to 42 Mbps
- HSUPA uplink data rates up to 5.76 Mbps

WiFi Air interface***
- Wireless standards: 802.11 b/g/n, 2.4 GHz, 300 Mbps
- Wireless omni antennas:
  - WiFi 2.4 GHz: 2x2 internal antennas up to 3 dBi

Hardware Interface
- One Gigabit RJ-45 PoE LAN port
- One LED indicator for:
  - Power status
  - Internet status
  - LTE signal strength
  - WiFi status
  - LAN status
- One WiFi on/off button
- One 3FF micro SIM card socket
- One reset to default button

Power specifications
- Standard 802.3af/at Power over Ethernet (PoE)
- Power consumption at PoE < 16 W

Power consumption
- 16 watt (peak)

Physical specifications
- Item dimensions (WxDxH): 254 x 255 x 58 mm (9.99" x 10.03" x 2.28")
- Item weight: 1100 g (2.43 lb.)
- Package dimensions (WxDxH): 280 x 402 x 108 mm (11.02" x 15.83" x 4.25")
- Package weight: 2520 g (5.55 lb.)

Environmental specifications

Ingress Protection rating
- IP68 harden for outdoor environments

Lightning protection
- K.21 enhanced mode, 6 kV

Operating environment
- Temperature: -40°C to 60°C (-40°F to 140°F)
- Humidity: 5% to 95% (non-condensing)

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

Certification
- CE
- WEEE (Waste Electrical and Electronic Equipment) Directive certification
- RoHS (Restriction of Hazardous Substances) Directive certification
- HSF (Hazardous Substance Free)
- European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste
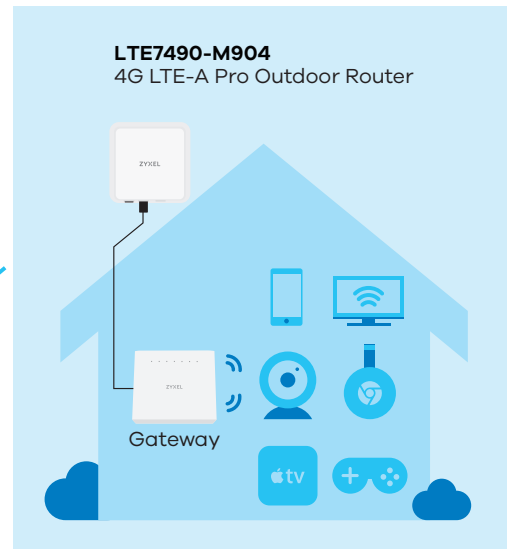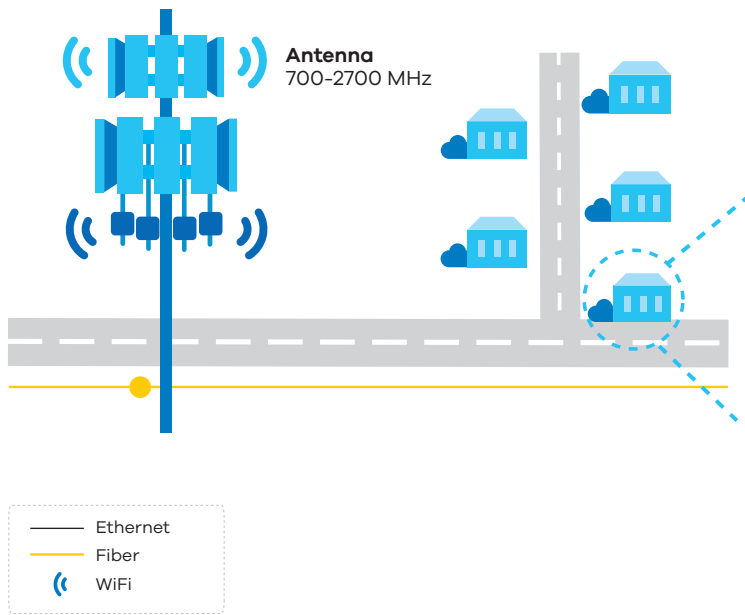
Package contents
- Standard 802.3af/at Power of Ethernet (PoE) injector
- 1.8 m Ethernet cable yellow 8P8C
- Power cord
- PG19 thread (cable gland)
- Quick Start Guide
- Warranty card
- DoC and safety warning
- Wall/pole mounting kit
- Wire grounding kit

* The maximum data rate is a theoretical value. The actual data rates depends on the operator.
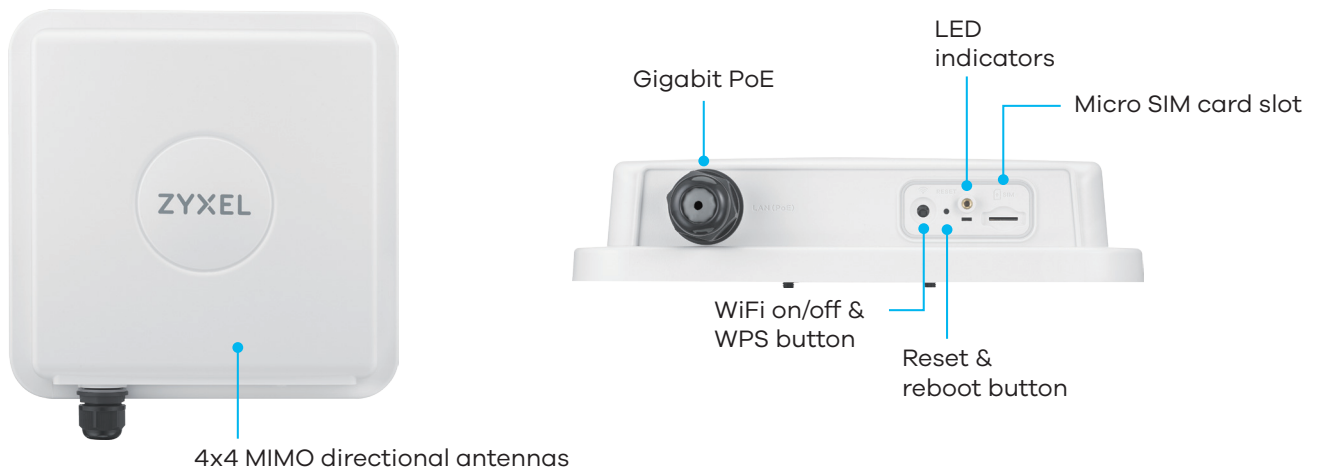** Details carrier aggregation combination please contact with local sales.
*** WiFi interface is used for local management purpose only.

Application diagram

Antenna
700-2700 MHz

LTE7490-M904
4G LTE-A Pro Outdoor Router

Gateway

--- Ethernet
--- Fiber
((WiFi

Hardware description

4x4 MIMO directional antennas

Gigabit PoE

LED indicators

Micro SIM card slot

WiFi on/off & WPS button

Reset & reboot button

Datasheet LTE7490-M904

28/07/20