



## NR7123

### 5G NR Outdoor Router

The Zyxel NR7123 5G NR Outdoor Router supports the latest 5G NR technology while at the same time remaining full compatibility with 4G networks. This makes NR7123 the best choice for service providers who are looking for 5G NR FWA solutions to deliver high-capacity, premium broadband services with high-speed connectivity, enhanced network security, and deployment flexibility.

With easy installation and setup features, NR7123 helps service providers minimize service calls during the installation process.

### Benefits

#### Lightning-fast internet connectivity

The Zyxel NR7123 has 5G NR DL speeds higher than 4.67 Gbps\* and 4G LTE DL speeds of up to 1.6 Gbps\*.

The wide spectrum bandwidth accelerates internet speeds and reduces network latency for premium and time-sensitive connectivity services. With the high-speed 5G NR service you are able to fulfill the worldwide market requirements of mobile broadband access services.

#### Strengthen your competitive edge with Fixed Wireless Access (FWA)

Deploying NR7123 as part of FWA allows you to extend your 5G 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 Rel. 15 5G NR, up to 4.67 Gbps/2.5 Gbps (DL/UL) with the support of NSA & SA mode



Built-in 4x4 MIMO, high-gain 4G/5G antennas of up to 7 dBi



Standard 802.3af/at Gigabit PoE



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



IP65 hardened enclosure with industrial grade components



Zyxel Air app (iOS and Android)



Remote firmware upgrade



Easy and flexible installation

## Environmental durability

With IP65-compliant K.21 6KV/300A lightning protection, the Zyxel NR7123 guarantees high-quality connections, a longer device life against the weather and natural challenges. The NR7123 can operate within a wide range of temperature and humidity, which supports your service deployed in urban, sub-urban, and some rural area close to serving base stations.

## Easy installation with Zyxel Air

The NR7123 comes with a flexible wall, pole, or window mounting kit and a subscriber app – Zyxel Air. The intuitive user interface of Zyxel Air provides the necessary assistance from device setup to routine management. You can minimize service calls during the installation process while enhancing a satisfying user experience.



## SA/NSA dual-mode compliant

The Standalone (SA) and Non-Standalone (NSA) compliant architecture of NR7123 improves your operational efficiency during 5G migration, accelerating your 5G service rollouts.

## Remote management and upgrade

Through the 5G/LTE radio interface, NR7123 supports TR-069, remote GUI, and FTP to be fully configurable. Firmware Over-The-Air (FOTA) support enables remote firmware upgrades and troubleshooting through events triggered by the operators.

## Specifications

### System specifications

#### IP networking

- Supports IPv4/IPv6 dual stack (NDP IPv6)
- DHCP server
- Supports ICMP
- Virtual Private Network (VPN) pass-through
- Multiple APNs with VLAN mapping

#### NAT

- Supports NAT/NAPT
- Supports NAT enable/disable
- Supports port forwarding
- Supports port triggering
- Supports DMZ/ALG

#### Routing

- Supports router or 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 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 Zyxel Air app (iOS and Android) for easy installation and local management only
- Supports remote throughput testing (TR-143)

### Hardware specifications

#### 5G NR interface

- 3GPP Release 15 standard-compliant
- Supports both NSA and SA modes
- Supports frequencies:
  - FDD: n1/n3/n7/n8/n20/n28
  - TDD: n38/n40/n41/n77/n78
- Supports DL 4x4 MIMO: n1/n3/n7/n38/n40/n41/n77/n78
- Data rates:
  - 5G SA: DL 4.67 Gbps; UL 2.5 Gbps\*
  - 5G NSA: DL 3.7 Gbps; UL 1.5 Gbps\*
- Supports DL modulation QPSK, 16-QAM, 64-QAM and 256-QAM

- Supports UL modulation QPSK, 16-QAM, 64-QAM and 256-QAM
- Output power:
  - Class 2 (26 dBm) for n41/n78
  - Class 3 (23 dBm) for rest FDD/TDD NR bands

#### 4G LTE interface

- 3GPP UE Category 19 standard-compliant
- Supports frequencies:
  - LTE-FDD: B1/B3/B5/B7/B8/B20/B28/B32
  - LTE-TDD: B34/B38/B39/B40/B41/B42/B43
- Supports DL 4×4 MIMO: B1/B3/B7/B41/B42/B43
- Peak data rates: DL 1.6 Gbps/UL 316 Mbps\*
- Supports DL modulation QPSK, 16-QAM, 64-QAM and 256-QAM
- Supports UL modulation QPSK, 16-QAM, 64-QAM and 256-QAM
- Output power:
  - Class 2 (26 dBm) for LTE B41
  - Class 3 (23 dBm) for rest FDD/TDD LTE bands

#### 5G/4G antennas

- Four embedded directional antennas with peak gain
  - 600 MHz ~ 1 GHz: 3.8 dBi
  - 1.7 GHz ~ 2.7 GHz: 7 dBi
  - 3.3 GHz ~ 4.2 GHz: 7.4 dBi

#### WiFi AP Features (ODU)\*\*

- 802.11 n/g/b, 2.4 GHz, N300\*\*
- Hidden SSID
- MAC address filtering
- Two embedded antennas
- For local management purpose only

## Hardware interface

- One 2.5GbE RJ-45 PoE LAN port
- One troubleshooting USB port
- Two LED indicators for: signal strength and device status
- One reset to default button
- One 3FF format Micro SIM card slot

## Power consumption

- Power consumption at PoE: 15 W (peak)
- Power specifications: Standard IEEE 802.3af/at PoE

## Physical specifications

- Item dimensions (WxDxH): 220 x 58 x 154 mm (8.66" x 2.28" x 6.06")
- Item weight: 630 g (1.39 lb.)
- Packing dimensions (WxDxH): 324 x 95 x 251 mm (12.76" x 3.74" x 9.88")
- Packing weight: 1300 g (2.87 lb.)

## Environment specifications

### Ingress Protection rating

- IP65

### Lightning protection

- K.21 enhanced mode, 6 KV

### Operating environment

- Temperature: -30°C to 50°C (-22°F to 122°F)
- Humidity: 0% to 95% (non-condensing)

## Storage environment

- Temperature: -30°C to 70°C (-22°F to 158°F)
- Humidity: 0% to 95% (non-condensing)

## Wind load testing

- GR 487 issue 4 (2013) standard compliant
- Beaufort scale level 16 wind force wind speeds 53.6 m/sec (~ 193 km/h)

## Certification

- CE
- UKCA

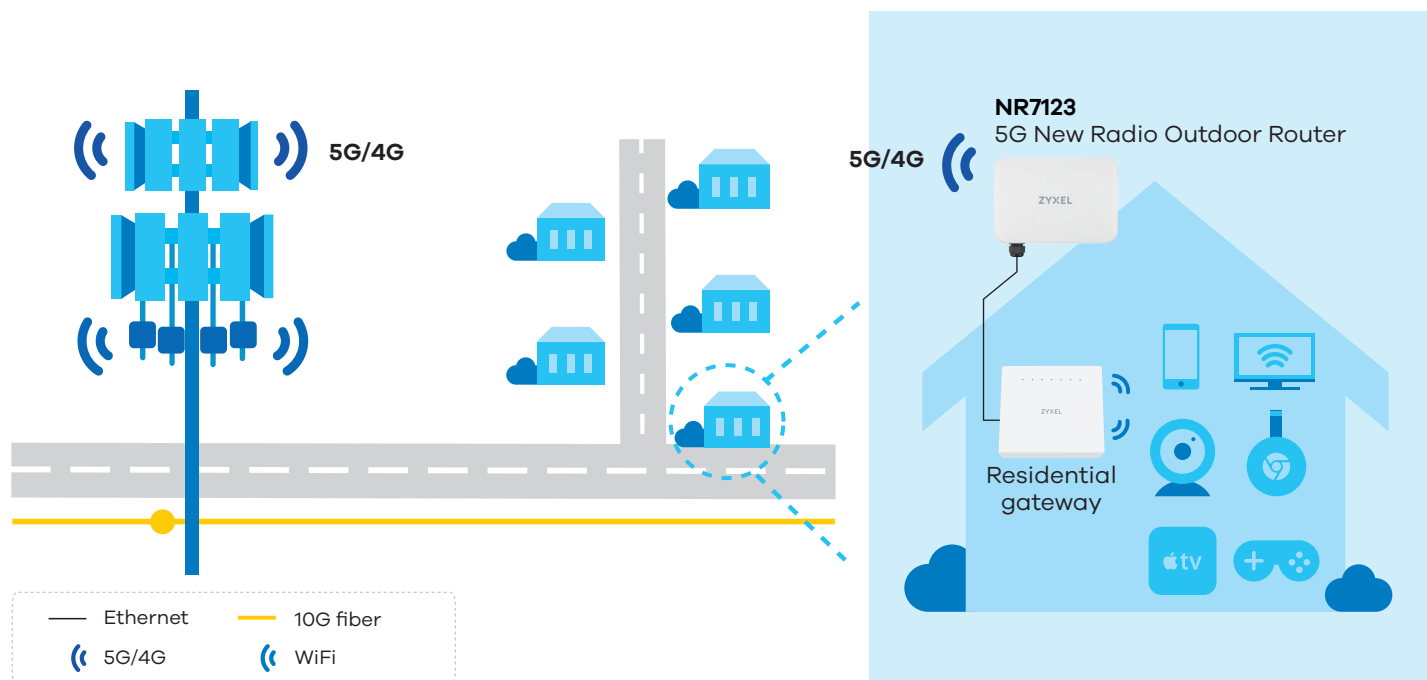
## Package contents

- Power over Ethernet PoE injector
- 1.8M Ethernet cable 8P8C
- PG19 thread (cable grand)
- Quick Start Guide
- Wall/pole/window mounting kit

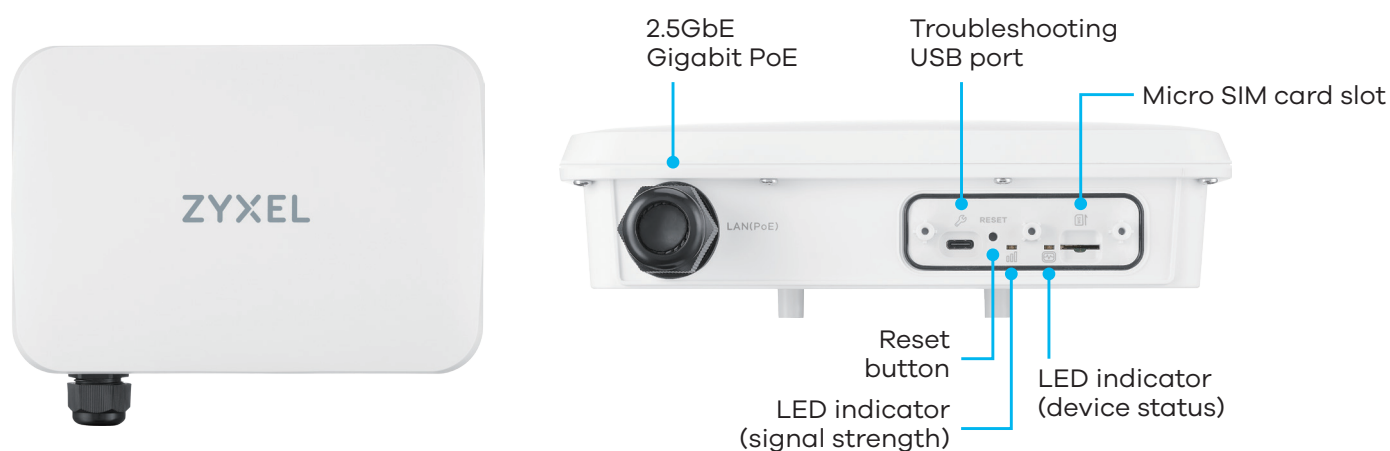
\* The maximum data rate is a theoretical value. The actual data rate depends on the operator.

\*\* WiFi interface is used for local management purposes only.

## Application diagram



## Hardware description



For more product information, visit us on the web at <https://service-provider.zyxel.com>

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