ZYXEL
COMMUNICATIONS

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NR7303

5G NR Outdoor Router

The Zyxel NR7303 5G NR Outdoor Router complies with the 3GPP Release 15 standard for competitive 5G FWA network deployments. The device delivers high-capacity, ultra-fast performance, making it a perfect choice for premium broadband services in suburban areas. Equipped with a compact form factor and a multi-type mounting kit, the NR7303 provides easy installation across a range of deployment locations.

Benefits

Lightning-fast internet connectivity with SA/NSA dual mode

The NR7303 supports a broad range of spectrum with 5G NR speeds up to 4.67 Gbps/1.25 Gbps* (DL/UL) and 4G LTE DL speeds up to 1.6 Gbps*, increasing network performance. Compliant with both Standalone (SA) and Non-Standalone (NSA) architecture, the NR7303 facilitates your deployments during 5G migration for faster service rollouts.

High-gain 4G/5G antenna for optimized signal coverage

Built-in 4x4 MIMO high-gain antennas of up to 9 dBi per element, the NR7303 can work under a near non-line-of-sight deployment scenario. With carrier aggregation, you can utilize the available spectrum resource to provide optimal signal coverage.

- **5G NR** 3GPP Rel. 15 5G NR, up to 4.67 Gbps/1.25 Gbps (DL/UL) with the support of NSA & SA mode

- DL 4x4 MIMO, built-in high-gain 4G/5G antennas of up to 9 dBi per element

- Standard 802.3af/at 2.5G PoE

- Bridge and router modes, IPv4/ IPv6 dual-stack

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

- IP67 hardened enclosure with industrial grade components

- Zyxel Air app (iOS and Android)

- Sustainable packaging design

5G

Environmental durability

IP67-compliant K.21 6 KV/300 A lightning protection ensures longer device life even in harsh weather or other challenging environments. The NR7303 can operate within a wide range of temperatures and humidity, whether services are deployed in urban, suburban, or rural areas close to serving base stations.

Remote management and upgrade

The NR7303 4G/5G radio interfaces support TR-069, HTTP, and remote GUI for complete configuration. Firmware Over-The-Air (FOTA) enables remote firmware upgrades and troubleshooting through operator-initiated events.

Easy network setup and management with Zyxel Air

The NR7303 comes with a subscriber app – Zyxel Air. The intuitive user interface of Zyxel Air provides your customers with the necessary assistance from device setup to routine management, minimizing service calls while enhancing user satisfaction.

Sustainable packaging design

Zyxel commits to a greener planet and improving the community's environmental well-being. The NR7303's packaging is made from 80% recycled paper with soy ink for Volatile Organic Compounds (VOC)-free printing.

Scan to Download

Q **Zyxel Air**

Download on the **App Store**

GET IT ON **Google Play**

Specifications

System specifications

IP networking
- Supports IPv4/IPv6 dual stack (NDP IPv6)
- DHCP server
- ICMP supported
- Virtual Private Network (VPN) pass-through

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

Routing
- Supports router mode 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 (HTTP, HTTPS)/Web GUI and firmware upgrade
- Supports TR-069 remote firmware upgrade management with TR-181 data model
- 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 remote throughput testing by TR-143
- Supports Zyxel Air app (iOS and Android) for easy installation and local management

Hardware specifications

5G NR interface
- Standard-compliant: 3GPP Release 15
- Supports both 5G NSA and SA modes
- Supports frequencies:
  - FDD: n1/n3/n5/n7/n8/n20/n28
  - TDD: n38/n40/n41/n77/n78

- DL 4×4 MIMO: n1/n3/n7/n38/n40/n41/n77/n78
- DL 2x2 MIMO: n5/n8/n20/n28
- UL 2x2 MIMO: n40/n41/n77/n78***
- Data rates:
  - 5G SA DL: 4.67 Gbps; UL: 1.25 Gbps,*
  - 5G NSA DL: 3.74 Gbps; UL: 1.46 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/n77/n78
  - Class 3 (23 dBm) for n1/n3/n5/n7/n8/n20/n38/n40

4G LTE interface
- 3GPP UE Category 19 standard-compliant
- Supports frequencies:
  - LTE-FDD: B1/B3/B5/B7/B8/B20/B28/B32
  - LTE-TDD: B38/B40/B41/B42/B43
- DL 4×4 MIMO: B1/B3/B7/B38/B40/B41/B42/B43
- Peak data rates: DL: 1.6 Gbps; UL: 211 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 3 (23 dBm) for FDD/TDD LTE bands

5G/4G antennas
- Four embedded directional antennas
- Ultra-high band: up to 9 dBi peak gain
- High band: up to 5 dBi peak gain
- Low band: up to 2 dBi peak gain

Management WiFi AP Features (ODU)**
- 802.11 n/g/b, 2.4 GHz, N150**
- Hidden SSID
- MAC address filtering
- One embedded antenna

Hardware interface
- One 2.5GbE RJ-45 PoE LAN port
- One troubleshooting USB port
- Two LED indicators:
  - Device status
  - Signal strength
- One reset to default button
- One micro SIM card slot

Power consumption
- Power consumption at PoE: < 15 Watt

Power specifications
- Standard IEEE 802.3af/at 2.5G PoE

Physical specifications
- Item dimensions (WxDxH): 210 x 120 x 40 mm (8.27" x 4.72" x 1.58")
- Item weight: 665 g (1.47 lb.)
- Packing dimensions (WxDxH): 245 x 169 x 90 mm (9.65" x 6.65" x 3.54")
- Packing weight: 1395 g (3.08 lb.)

Environmental specifications

Operating environment
- Temperature: -30°C to 55°C (-22°F to 131°F)
- Humidity: 5 to 95% RH (non-condensing)

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

Ingress protection rating
- IP67

Lightning protection
- K.21 enhanced mode, 6 KV

Wind load testing
- GR 487 issue 4 (2013) standard compliant
- Level 12 wind force
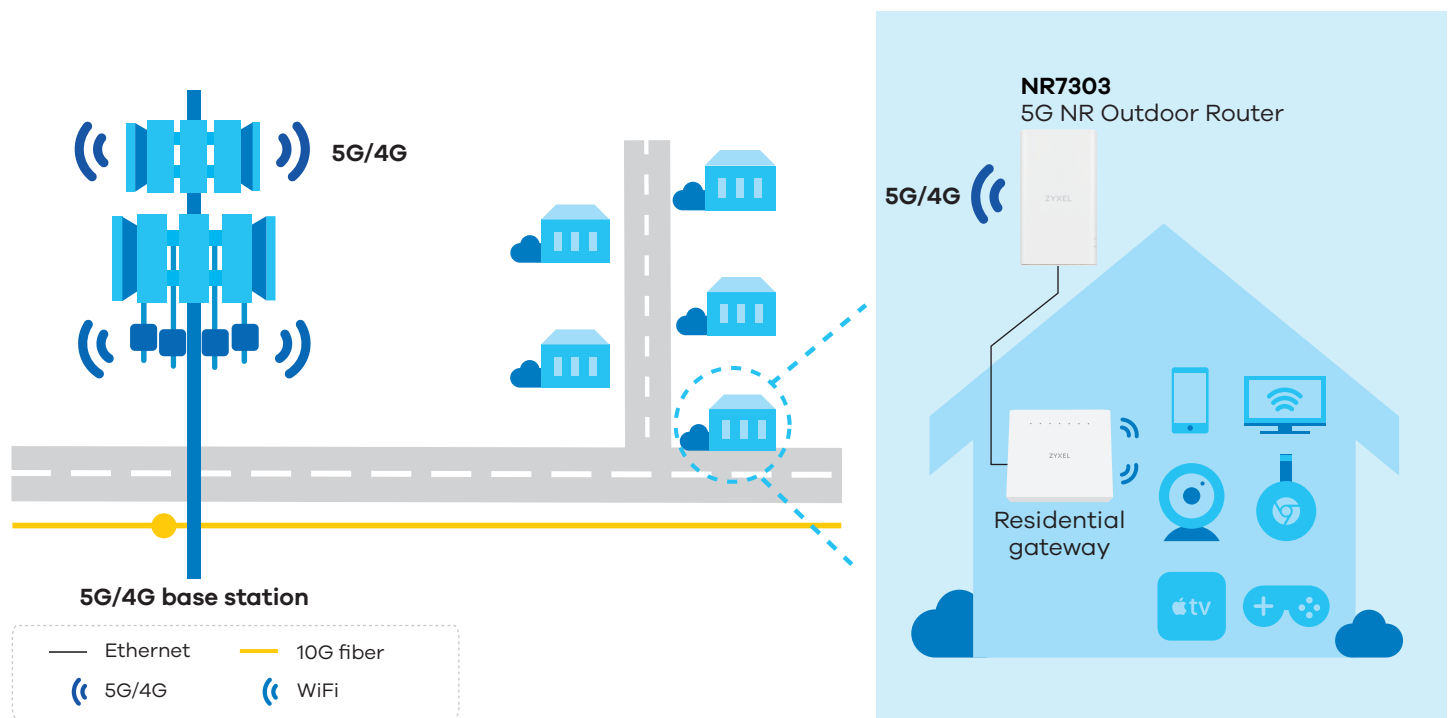- Wind speeds 53.6 m/sec (~ 193 km/h)

Certification
- CE
- UKCA
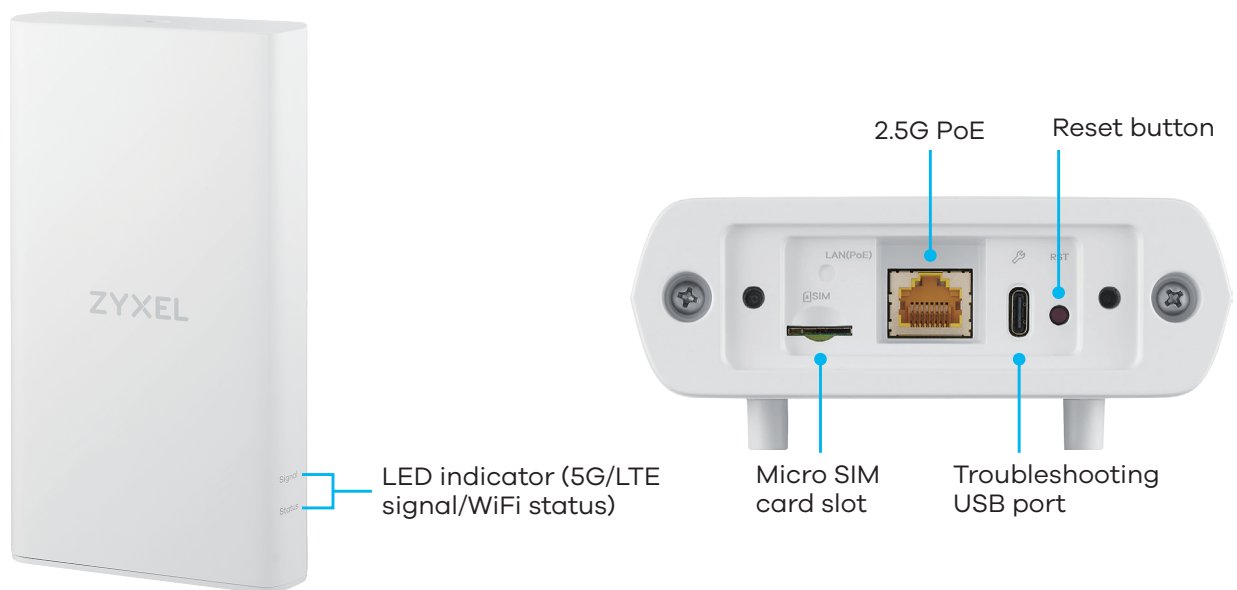- WEEE
- RoHS

Package contents
- Standard 802.3af/at 2.5G Power of Ethernet (PoE) injector
- 10m flat Ethernet cable white 8P8C
- Cable gland
- Quick Start Guide
- Warranty card
- DoC and safety warning
- Wall/pole/glass 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.
*** Supported in 5G TDD SA mode.

Application diagram

5G/4G

5G/4G base station

—	Ethernet	—	10G fiber
((	5G/4G	((	WiFi

NR7303
5G NR Outdoor Router

5G/4G

Residential
gateway

Hardware description

2.5G PoE

Reset button

LED indicator (5G/LTE
signal/WiFi status)

Micro SIM
card slot

Troubleshooting
USB port

Datasheet NR7303

UK CA   CE   20 PAP   RoHS

18/12/23