



NR5307

5G NR Indoor router

The Zyxel NR5307 5G NR Indoor Router supports the latest 5G NR technology while at the same time remaining the full compatibility with 4G networks. The NR5307 is perfect for 5G NR indoor FWA deployment. Service providers can deliver premium broadband services with high speed and capacity across customers' homes or workplaces through the WiFi 7 interface.

Benefits

Lightning-fast internet connectivity

The Zyxel NR5307 has 5G NR DL speeds of up to 7.0 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.

WiFi 7 (11be) technology for superior performance and coverage

Compliant with the latest WiFi 7 (802.11be) standard, the Zyxel NR5307 offers speeds of up to 7.2 Gbps with 2,4GHz and 5GHz 4x4 UL/DL MU-MIMO/MLO. The uplink MU-MIMO, Orthogonal Frequency Division Multiple Access (OFDMA) and beamforming technologies empower the NR5307 to deliver premium speed for multi-streaming data access and optimal WiFi experience without dead zones.



5G NR

3GPP Rel. 16 5G NR, up to 7.0 Gbps/2.5 Gbps (DL/UL) with the support of NSA & SA mode



WiFi 7 (11be) for superior performance and coverage



Built-in 4x4 MIMO, 4 highperformance 4G/5G antennas



Remote management via TR-369, TR-181, TR-471, HTTP/ web GUI, and FTP



Zyxel mobile apps (iOS and Android)



Remote firmware upgrade (FOTA)

Strengthen your competitive edge with Fixed Wireless Access (FWA)

Deploying NR5307 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 fiber-grade connection.

SA/NSA dual-mode compliant

The Standalone (SA) and Non-Standalone (NSA) compliant architecture of NR5307 improves your operational efficiency during 5G migration, accelerating your 5G service rollouts.

Remote management and upgrade

Through the 5G/LTE radio interface, the NR5307 supports TR-369, 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.

Easy installation with Zyxel Air

The NR5307 comes with 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.

Specifications

System specifications

IP networking

- Supports IPv4/IPv6 dual stack (NDP IPv6)
- DHCP Client/server
- Virtual Private Network (VPN) pass-through
- Supports NAT/NAPT
- Supports DMZ
- Multiple APNs
- Supports port forwarding

Routing

- Supports bridge and router modes
- Supports remote management under bridge mode
- Static/dynamic routing settings

IP firewall

- DoS attack detection
- Supports SPI
- Application-level firewall (LAN to WAN such as FTP, HTTP, Telnet, Ping)
- Filters LAN MAC address
- Filters LAN IP address

Management

- Supports local/remote device management and firmware upgrade via TR-369 and web GUI
- PIN/PUK management
- APN management
- Operating frequency band selection
- CLI/SSH (local and remote SSH access)
- Supports UPnP IGD
- Supports web server API to support APPs

WLAN feature

- · Auto channel selection
- WiFi Protected Setup (WPS)
- WiFi Multimedia (WMM)
- WiFi-enabled devices: up to 64
- Security: none, WPA2-Personal, WPA/WPA2,WPA3

- MAC address filtering with 64 address supported
- Multiple SSIDs/hide SSIDs
- WLAN scheduling
- EasyMesh**

Hardware specifications

5G NR interface

- 3GPP Release 16 standard-compliant
- Supports both NSA and SA modes
 - FDD: n1/n3/n7/n8/n20/n28
 - TDD: n38/n40/n41/n75/n77/n78
- Supports DL 4×4 MIMO: n1/n3/n7/n8/n20/n28/n38/n40/n41/n75 /n77/n78
- Data rates:
 - 5G SA: DL 7.0 Gbps; UL 2.5 Gbps*
 - 5G NSA: DL 5.7 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 1.5 (29 dBm) for 5G NR n41/n78
 - Class 2 (26 dBm) for 5G NR n41/n78
 - Class 3 (23 dBm) for rest FDD/TDD NR bands

4G LTE interface

- 3GPP UE Category 19 standardcompliant
- Supports frequencies:
 - LTE-FDD: B1/B3/B7/B8/B20/B28/B32
 - LTE-TDD: B38/B40/B41/B42/B43
- Supports DL 4×4 MIMO: B1/B3/B7/B8/B40/B38/B41/B42/B43
- Peak data rates:
 - Max. 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

WiFi Air Interface

- Wireless standard: IEEE 802.11 b/g/n/a/ac/ax/be
- Wireless speeds:
 - Link rates up to 7,200 Mbps* for 802.11be DBDC
- Internal WiFi antenna:
 - Dual-band & concurrent 4x4 + 4x4
- WiFi antenna gain:
 - ~3.6 dBi for 2.4 GHz
 - ~4.5 dBi for 5 GHz

5G/4G antennas

- 2 TS9 connectors for external antennas
- 4 embedded omni-directional antennas
- •Antenna Spec(Peak Gain)
- ■700MHz ~ 800MHz: 3.3 dBi
- ■800MHz ~ 1GHz: 5.3 dBi
- ■1.4GHz ~ 2.7GHz: 5.9 dBi
- ■3.3GHz ~ 4.2GHz: 5.2 dBi

Hardware interface

- Two 10/100/1000/2500 Mbps Ethernet RJ-45 LAN ports. LAN2 can be configured for Ethernet WAN port
- LEDs:
 - Power/System status
 - Internet status
 - 5G NR signal strength
 - LTE signal strength
 - WiFi/WPS status
- One 4FF/Micro push-push type SIM card slot with tray
- •One WPS/WiFi on/off button
- One USB 3.0 Type-A host port for file sharing
- One internal/external antenna switch
- One reset button
- One power on/off button
- One USB type-C for PD power input

Power consumption

• 38.4 W (peak)

Physical specifications

• Item dimensions (LxWxH):

130mm(L)x120mm(W)x208mm(H)

• Item weight:1000g (subject to update)

Environment specifications

Operating environment

- Temperature:
- -10°C to 40°C (14°F to 104°F)
- Humidity:

0% to 90% RH (non-condensing)

Storage environment

- Temperature:
 - -30°C to 70°C (-22°F to 158°F)
- Humidity:

0% to 95% (non-condensing)

Certification

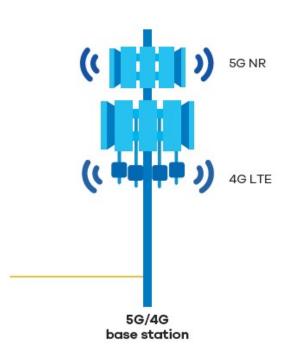
- CE
- UKCA
- WiFi Alliance Certification
- EasyMesh R4 Certification

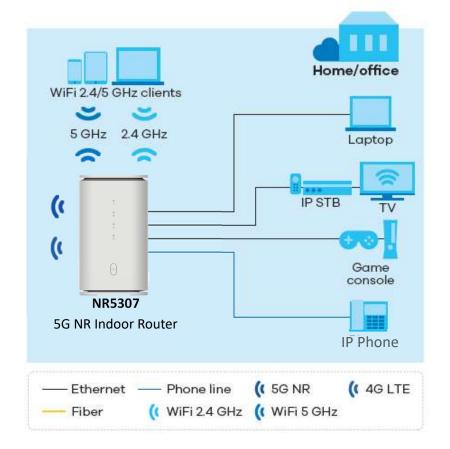
Package contents

- EU/UK plug power adaptor
- Ethernet cable 1.8 m 8P8C
- 45W USB Type-C PD PSU with 1.8M cable
- Quick Start Guide

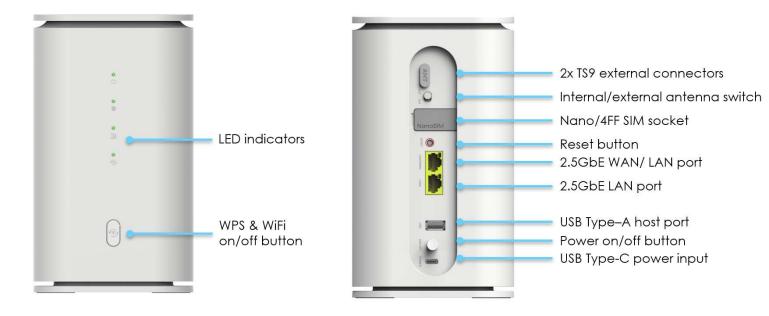
- * The maximum data rates is a theoretical value. The actual data rates depend on the network environment.
- ** Compatible Mesh repeater

Application diagram





Hardware description



For more product information, visit us on the web at www.zyxel.com

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