





NR5307

5G NR Indoor Router

The Zyxel NR5307 5G NR Indoor Router supports the latest Sub-6 GHz 5G NR technology while at the same time remaining full compatibility with 4G networks. The NR5307 is ideal for 5G NR FWA deployment. Service providers can deliver premium broadband services with high speed and capacity across customers' homes or workplaces through the latest WiFi 7 interfaces.

Benefits

Lightning-fast internet connectivity with SA/NSA dual mode

Supports a broad range of spectrum with 5G NR speeds up to 7.01 Gbps/2.5 Gbps* (DL/UL) and 4G LTE DL speeds of up to 1.6 Gbps*, the NR5307 helps service providers raise network performance. Compliant with both Standalone (SA) and Non-Standalone (NSA) architecture, the NR5307 facilitates your deployment during 5G migration for faster FWA service rollouts.

WiFi 7 (11be) technology for premium performance and coverage with WiFi 7 certification

Compliant with WiFi 7 (802.11be) standard that supports up to 7.2 Gbps* and features 4096-QAM, offering your subscribers an ultra-fast, low-latency, and reliable WiFi network like never before. Additionally, Multi-Link Operation (MLO) optimizes reliability and maximizes data speed through the aggregation of multiple bands, further enhancing the overall performance of the network. Along with the WiFi 7 certification, the NR5307 empowers service providers to deliver an optimal WiFi experience without dead zones.



3GPP Rel. 16 5G NR Sub-6 GHz DL 4xCA, up to 7.01 Gbps/ 2.5 Gbps (DL/UL) with NSA & SA mode



WiFi 7 (11be) 4x4+4x4 for superior performance and MPro Mesh® Solutions



DL 4x4 MIMO, built-in 4 highperformance 4G/5G antennas



2.5GbE LAN port for optimized bandwidth utilization



Remote firmware upgrade (FOTA)



Remote management via TR-069/TR-369/TR-098/ TR-143, TR-181, HTTP/web GUI, and FTP



Power monitoring and energy-saving features for lower carbon emissions



Zyxel One app (iOS and Android)

Strengthen your competitive edge with Fixed Wireless Access (FWA)

Deploying NR5307 as part of FWA allows you to extend your 4G/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.

Effortless installation network setup and management with Zyxel One app

The NR5307 comes with a brand new companion app – Zyxel One. The intuitive user interface of Zyxel One provides your customers with an effortless installation journey, eSIM service***, and routine management for subscribers' home or office networks, which minimizes service calls while enhancing user satisfaction.



Perfect balance between innovation and sustainability

Zyxel commits to a greener planet and improves the community's environmental well-being. The NR5307 is crafted from 100% recycled plastics** material, while the package is made from 75% recycled paper and uses vegetable oil ink for Volatile Organic Compounds (VOC)-free printing. Additionally, the package is halogen-free and does not include a PE-bag, further reducing harmful substances and plastic waste.

Power consumption monitoring

The NR5307 integrates a power monitoring chip for optimized energy efficiency, while its Type-C power delivery simplifies connections. It offers real-time and historical power consumption records, ensuring optimal resource utilization. Moreover, through the power-saving mode activation/deactivation feature on the Zyxel One App, subscribers can proficiently monitor and control changes in power consumption.

Lower OPEX and take control with remote management

Effortlessly configure, monitor, and troubleshoot devices without the need for costly onsite service visits. Equipped with built-in TR-069/TR-369 USP remote management features, the NR5307 significantly reduces service time and operational costs. Also, with FOTA (Firmware Over-the-Air), service providers can remotely upgrade firmware without user intervention. This removes any complexities of any bulk firmware upgrades and boosts operational efficiency.

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 route setting

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 power monitoring & energy saving
- Supports local/remote device management and firmware upgrade via TR-069, 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
- Supports Zyxel One (iOS and Android) for easy installation and local management

WLAN feature

- Auto channel selection
- WiFi Protected Setup (WPS)
- WiFi Multimedia (WMM)
- WiFi-enabled devices: up to 64
- Security: WPA2-PSK, WPA3-SAE, WPA2-PSK/WPA3-SAE
- MAC address filtering with 64 addresses supported
- Multiple SSIDs/hide SSIDs
- WLAN scheduling

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/n5/n7/ n8/n20/n28/n38/n40/n41/n77/n78
- · Data rates:
 - 5G SA: DL 7.01 Gbps;
 UL 2.5 Gbps*
 - 5G NSA: DL 5.67 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 1.5: 29 dBm +2/-3 dBm for n41/n77/n78
 - Class 2: 26 dBm +2/-3 dBm for n41/ n77/n78
 - Class 3: 23 dBm ±2 dBm all other 5G NR bands

4G LTE interface

- 3GPP Release 16 standard-compliant
- Supports frequencies:
 - FDD: B1/B3/B5/B7/B8/B20/B28/B32
 - TDD: B38/B40/B41/B42/B43
- Supports DL 4×4 MIMO: B1/B3/B5/B7/ B8/B20/B28/B38/B40/B41/B42/B43
- Peak data rates:
 - Max. 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 ±2 dBm all other LTE bands
 - Class 2: 26 dBm +2/-3 dBm for B41

WiFi air Interface

- Wireless standard: IEEE 802.11b/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 dBi for 2.4 GHz
 - ≤ 4 dBi for 5 GHz

5G/4G antennas

- Four embedded omni-directional antennas
- Antenna spec (Peak gain)
 - 700 MHz ~ 960 MHz: ≤3 dBi
 - 1.4 GHz ~ 2.7 GHz: 6 dBi
 - 3.3 GHz ~ 4.2 GHz: 7 dBi

Hardware interface

- Two 100/1000/2500 Mbps Ethernet RJ-45 LAN ports, LAN2 can be configured for Ethernet WAN port
- LED indicators:
 - Power indication
 - Signal strength
 - Internet connection status
 - WiFi/WPS status
- One 4FF Nano SIM card slot with push-push type SIM tray
- One power on/off button
- One WPS/WiFi on/off button
- One reset button
- Two external antenna connectors (TS9 type)
- One Int/Ext antenna switch
- One USB 2.0 Type-A host port for file sharing
- One Type-C PD port

Power consumption

• 48 W (peak)

Physical specifications

- Item dimensions (WxDxH):
 117 x 130 x 217 mm
 (4.60" x 5.12" x 8.54")
- Item weight: 1082 g (2.39 lb.)
- Packing dimensions (WxDxH):
 126 x 154 x 287 mm
 (4.96" x 6.06" x 11.30")
- Packing weight: 1648 g (2.63 lb.)

Environmental 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

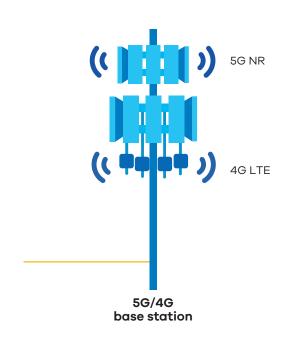
- CE
- UKCA

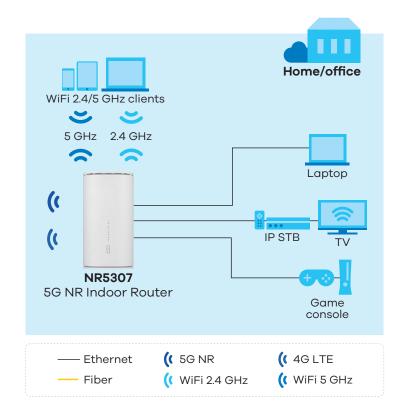
Package contents

- Type-C PD 45 W power adaptor
- Ethernet cable 1.5 m 8P8C
- Warranty card
- * The maximum data rate is a theoretical value.

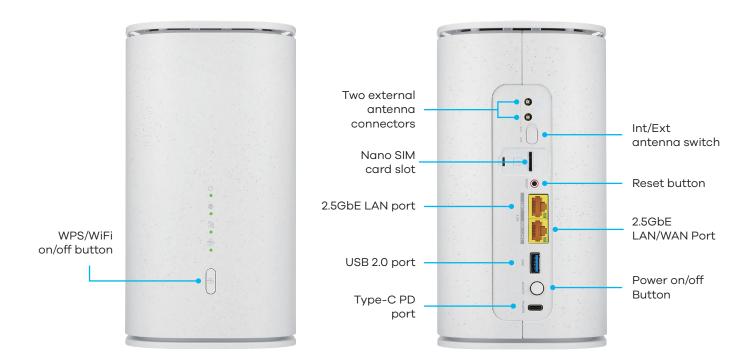
 The actual data rates depend on the network environment.
- ** 5% additives and solvents are necessary to be added to the recycled polymers to achieve the desired technical characteristics of the material.
- *** eSIM service is available upon customer request. Please contact us for more information on the availability.

Application diagram





Hardware description



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

