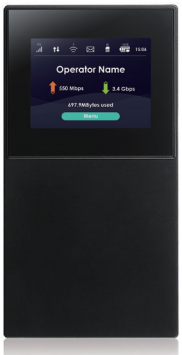
ZYXEL NETWORKS



NR2301

5G NR Portable Router

The Zyxel Networks NR2301 is a cutting-edge 5G that complies with the 3GPP Release 16 standard, ensuring seamless compatibility with 4G networks. Offering high-speed broadband service through WiFi 6, it provides enhanced network security and supports up to 32 connected devices. With its compact design, your subscribers can stay connected on the go, enjoying unparalleled connectivity and convenience.

Benefits

Lightning-fast 5G connectivity everywhere you go

The NR2301 has 5G NR DL speeds of up to 3.4 Gbps and 4G LTE DL speeds of up to 1.6 Gbps*, increasing internet speed and reducing network latency. Wide spectrum bandwidth accelerates internet speeds and reduces network latency for premium and time-sensitive connectivity services.

WiFi 6 technology for superior performance and coverage

The NR2301 supports the WiFi 6 (11ax) standard, offering speeds of up to 1.8 Gbps with 2x2 UL/DL MU-MIMO. The uplink MU-MIMO, Orthogonal Frequency Division Multiple Access (OFDMA) and beamforming technologies empower the NR2301 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 3.4 Gbps/900 Mbps (DL/UL) with the support of NSA & SA mode
- AX 802.11 — WiFi 6 (11ax) AX1800, 2x2 + 2x2 for superior performance and coverage
- FOTA — Remote firmware upgrade
- Zyxel Air app (iOS and Android)
- One USB 3.1 type C port
- 2.4" LCD Display
- 4500 mAh Li-ion battery

Easy network setup and management with Zyxel Air

The NR2301 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.

Remote firmware upgrade

Firmware Over-The-Air (FOTA) support enables remote firmware upgrades and troubleshooting through events triggered by the operators.

Intuitive LCD display design

Comes with an intuitive 2.4-inch TFT LCD color display, the NR2301 makes device management effortless with a few taps. Check data usage, battery life, signal strength, download/upload speeds and more at a glance. Additionally, stay connected on your desktop or laptop through the integrated USB port for seamless online access.

Specifications

System specifications

IP Networking
- Supports IPv4/IPv6 dual stack (NDP IPv6)
- DHCP Client/server
- Supports ICMP
- Virtual Private Network (VPN) passthrough
- Supports NAT/NAPT
- Supports DMZ
- Supports DDNS

Routing
- Supports Dynamic DNS for first APN

IP Firewall
- Firewall can be enabled or disabled via GUI
- Supports SPI firewall
- Application-level firewall
- Filters LAN MAC address
- Filters LAN IP address
- Supports port forwarding/ triggering

Management
- Supports local device management and firmware upgrade via Web GUI
- PIN/PUK management
- APN management
- Operating frequency band selection
- Supports UPnP IGD
- Supports web server API to support APPs
- FOTA remote firmware upgrade
- Network selection
- Data usage
- Supports Zyxel Air app (iOS and Android) for easy installation and local management

WLAN feature
- Filters LAN IP address
- Wireless Protected Setup (WPS)
- WiFi Multimedia (WMM)
- Open, WPA2-PSK, WPA-PSK/WPA2-PSK, WPA3-SAE, WPA2-PSK/WPA3-SAE with AES security type
- Multiple SSIDs/hide SSIDs
- Supports MU-MIMO
- WiFi-enabled devices: 32

Hardware specifications

5G NR interface
- 3GPP Release 16 standard-compliant
- Supports both NSA and SA modes
  - FDD: n1/n3/n5/n7/n8/n20/n28/n71/n75/n76/n77/n78
  - TDD: n38/n40/n41
- Supports DL 4×4 MIMO: n1/n3/n7/n38/n40/n41/n77/n78
- Data rates:
  - 5G NSA: DL 3.4 Gbps; UL 550 Mbps*
  - 5G SA: DL 2.4 Gbps; UL 900 Mbps*
- Support DL modulation QPSK, 16-QAM, 64-QAM and 256-QAM
- Support UL modulation QPSK, 16-QAM, 64-QAM and 256-QAM
- Output power: Class 3 (23 dBm ± 2 dB)

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/B71
- Supports DL 4×4 MIMO: B1/B3/B7/B38/B40/B41/B42/B43
- Peak data rates:
  - Max. DL 1.6 Gbps/UL 200 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 dB)

Wireless LAN Standards
- 802.11 a/b/g/n/ac/ax 2.4 GHz, data rate up to 574 Mbps*
- 802.11 a/n/ac/ax 5 GHz, data rate up to 1200 Mbps*

Hardware interface

- One power on/off button
- 2.4″ LED display
- One type-c USB 3.1 quick charging
- One reset button
- One Nano-SIM card slot
- One menu-confirm button
- One menu-select button
- Two TS9 external antenna connectors

Power consumption

- 15 W (5 V/3 A @QC)/18 W (9 V/2 A @ PD 2.0) quick charging

Physical specifications

- Item dimensions (WxDxH): 137.5 x 72 x 16.5 mm (5.41″ x 2.83″ x 0.65″)
- Item weight: 196 g (0.43 lb.)
- Packing dimensions (WxDxH): 173 x 100 x 47 mm (6.81″ x 3.94″ x 1.85″)
- Packing weight: 330 g (0.73 lb.)

Environmental specifications

Operating environment

- Temperature: 0°C to 40°C (32°F to 104°F)
- Humidity: 5% to 95% (Non-condensing)

Storage environment

- Temperature: -20°C to 60°C (-4°F to 140°F)
- Humidity: 5% to 95% (Non-condensing)

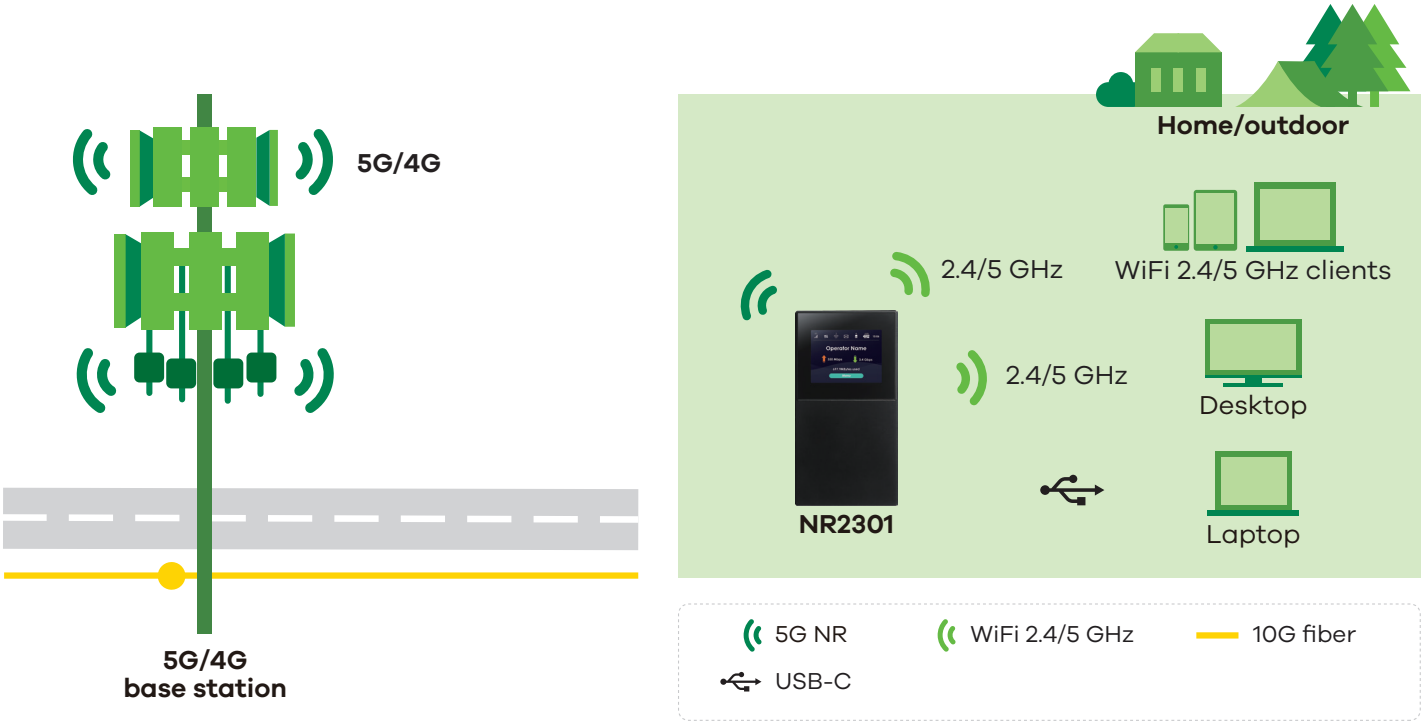
Certification

- CE/Safety
- WEEE
- 2011/65/EC (RoHS) Restriction of Hazardous Substances Directive
- HSF (Hazardous Substance Free)
- European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste

Package contents

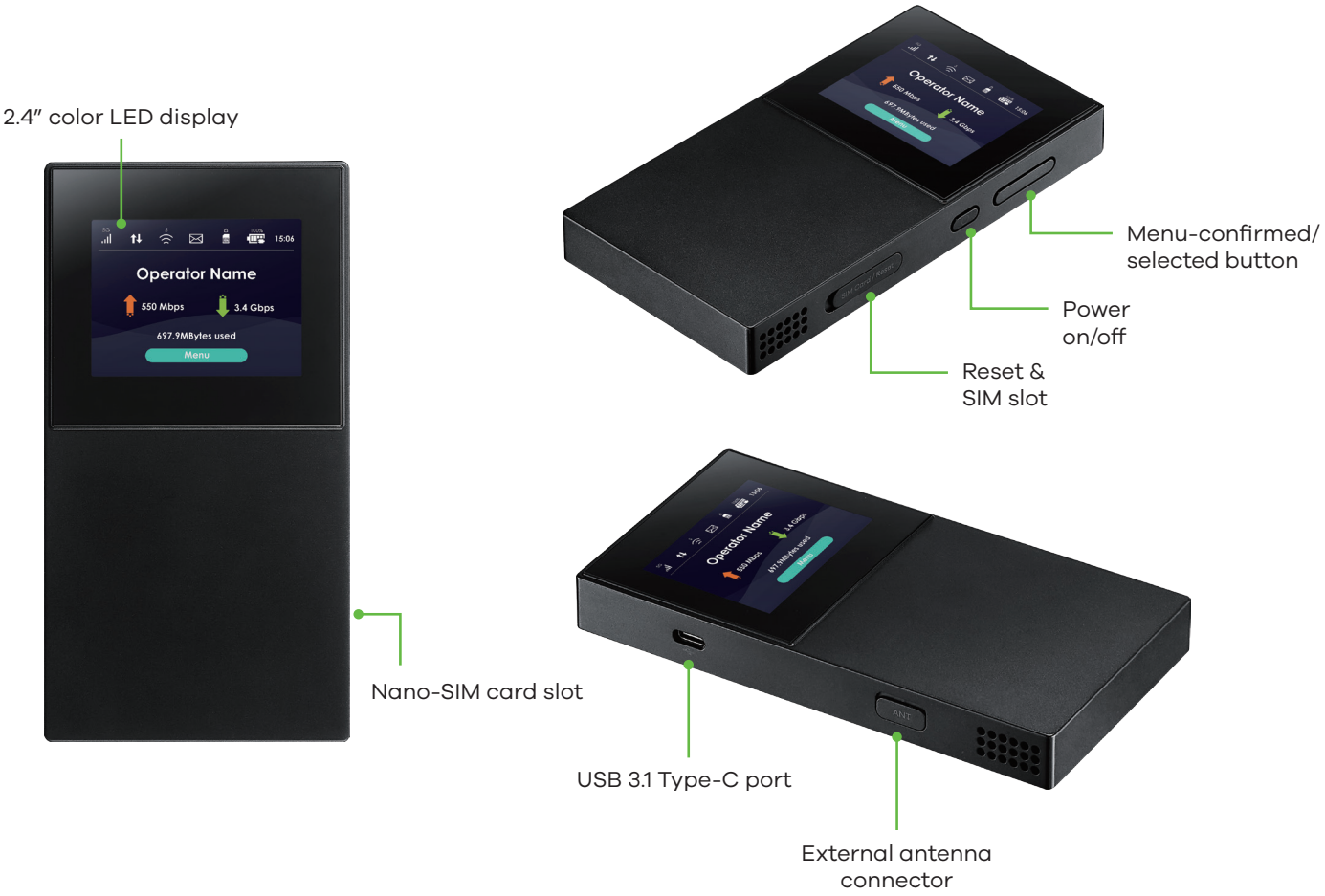
- Type-A to Type-C USB cable
- Quick Start Guide
- Safety warning

Application diagram



* The maximum data rate is a theoretical value. The actual data rate depends on the network environment. The LTE and NR bands may vary under different telecom operators. Please check the compatibility of frequencies, bands and network coverage with the operators before using the router.

Hardware description



For more product information, visit us on the web at www.zyxel.com
Copyright © 2023 Zyxel and/or its affiliates. All rights reserved.
All specifications are subject to change without notice. While carehas been taken to ensure that the information contained in this publication is accurate, neither Zyxel, nor its subsidiaries/affiliates, accept responsibility or liability for any errors or inaccuracies.

20/12/23