





# NR2101 5G NR Mobile WiFi

5G is here! Explore the speed of 5G network technology and rethink what's possible in the future. We've created the Zyxel 5G NR Mobile WiFi (NR2101) to bring you into the 5G world. Faster. Stronger. Better. Take control of it. Cool things happen when you just act on it!



# Faster than Ever

5G up to 4 Gbps/660 Mbps data rates (Download/Upload)



**Dual-Band WiFi 6** 2.4 GHz + 5 GHz dual-band concurrent

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**Sharable WiFi** Share with up to 16 WiFi devices simultaneously



Long-Lasting Battery

5300mAh removable battery for all day usage



Intuitive Display 2.4" color touchscreen



**Safety Without Compromise** Configure network security functions



Multiple Connection Types WiFi, built-in USB or Ethernet port

# **Benefits**

# No lag, more fun!

5G speed is faster than ever with the Qualcomm X55 modem. Stream the latest games, download large files, enjoy 8K video contents, watch real-time ultra-high-definition videos, get reliable video chat, and much more - all without lag or buffering. Enjoy better, wider coverage with enhanced stable internet speed. Get up to 4 Gbps of speed and experience exciting moments with no distance limitation. Let it change the way you work and play while you're on the go! Wait no more, experience a digital life in real time!



Datasheet NR2101

#### 5G + WiFi 6 = unstoppable power

When 5G meets WiFi 6, these two cutting edge technologies gather in the NR2101 box, making the networking power stronger than ever! AX1800 WiFi 6 delivers the fastest speed to virtually anything you want! Whether it's for high-end video streaming, flying drones, or playing an AR video game on your gadget, get up to 4X the speed compared to WiFi 5. Don't worry, the NR2101 remain backwards compatible with WiFi 5 and WiFi 4 gadgets. For today and tomorrow, make 5G part of your life now!



#### Power up your life

Uncompromised long-lasting power lets you connect with 5G all day long! A removable Li-lon battery of 5300mAh makes everyday life easier. Get going faster with Quick Charge 2.0, which can charge devices up to 75% faster than a conventional charger. Charge faster than ever! Power should be the last thing you need to worry about on a wide range of on-the-go duties and adventure.

### More choices, more freedom

Get off the wired life! Bring ultra-fast 5G internet connectivity wherever you go with 2.4 GHz + 5 GHz concurrent dual-band WiFi 6 with up to 16 devices connected at once by simply scanning a QR code. Switch to a tethered connection using either the built-in USB Type-C or Ethernet port. Within a blink of an eye, get all your gadgets connected instantly with speedy and secured 5G speed no matter if you're at home, in the office, or out and about.



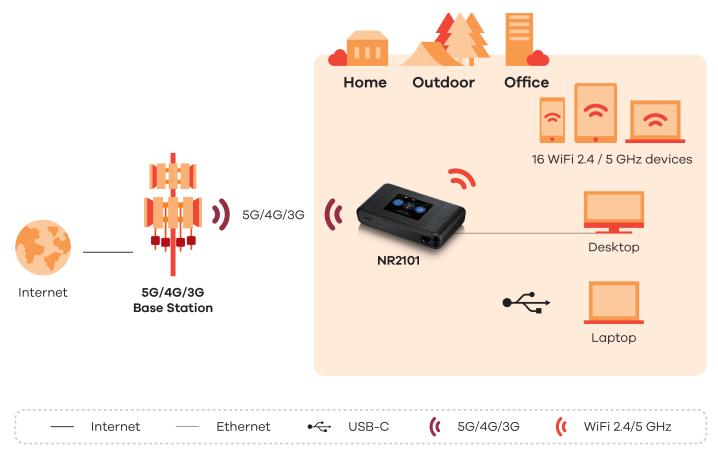
#### Safety without compromise

You can easily track and manage data usage, signal strength, network settings, battery life, WiFi password/ connection, and more in real-time on an intuitive 2.4" color touchscreen. Configuring your mobile WiFi is a breeze! NR2101 provides essential security features, including WiFi security/protected setup, VPN pass-through, NAT firewall, port forwarding, password protection, and many more. Connect with a peace of mind!





# **Application Diagram**



# **Interface Description**



# **Specifications**

# **System Specifications**

#### **IP Networking**

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

#### IP firewall

- Firewall can be enabled or disabled via GUI
- Application-level firewall
- Filters WLAN MAC addresses

#### Management

- Supports local device management and firmware upgrade via FOTA
- Supports APN management
- Supports PIN/PUK management

#### Wireless LAN standards

- 802.11 b/g/n/ax 2.4 GHz, data rates up to of 574 Mbps
- 802.11 a/n/ac/ax 5 GHz, data rates up to of 1.2 Gbps

#### Wireless LAN AP features

- Wireless Protected Setup (WPS)
- WPA-PSK, WPA2-PSK, WPA3/WPA2 mixed mode with TKIP & AES security type
- Hidden SSID
- Supports MU-MIMO
- Connected users max. 16

## **Hardware Specifications**

#### 5G NR interface

- 3GPP Release 15 standard-compliant
- Supports 5G NR NSA/SA mode
- Support frequency : n1/n3/n20/n28/ n77\*\*/n78
- DL 4X4 MIMO: n1/n3/n77\*\*/n78
- Supports 5G NR speed up to 4 Gbps / 660 Mbps (DL/UL) data rates\*
- Supports DL modulation QPSK, 16-QAM, 64-QAM and 256-QAM
- Supports UL modulation QPSK, 16-QAM and 64-QAM

- Output power:
  Class 2 (26dBm) for bands :
  - n77/n78
  - Class 3 (23dBm) for bands : n1/n3/n20/n28

#### 4G LTE interface

- 3GPP UE Category 20 standardcompliant
- Supports frequencies:
  - FDD bands: B1/B3/B7/B8/B20/B28
  - TDD bands: B38
- DL MIMO:
  - FDD: B1/B3/B7
  - TDD: B38
- Supports 4G LTE DL speeds of up to 2 Gbps
- Supports DL modulation QPSK, 16-QAM, 64-QAM and 256-QAM
- Supports UL modulation QPSK, 16-QAM and 64-QAM
- Output power:
  - Class 3 (23 dBm) for FDD/ TDD bands

#### Hardware interface

- One power on/off button
- One 10/100/1000 Mbps Ethernet RJ-45 LAN port
- One LED indicator:
   Power status
- One USB 3.1 gen 2 type C port (support Quick charging 2.0)
- One reset to default button
- One nano SIM card slot
- 2.4" Color touchscreen:
  - Operator name
  - 5G/4G/3G network status
  - Data usage status
  - Signal strength
  - Battery status
  - WiFi status

## Battery\*\*\*

- Removable lithium-ion polymer battery
- 3.8 V, 5300 mAh
- Up to 10 hours operating time (depends on network environment)

# **Physical specifications**

- Item dimensions (WxDxH): 119 x 72 x 23.5 mm (4.69" x 2.84" x 0.93")
- Item weight: 235 g (0.52 lb.)
- Packing dimensions (WxDxH): 165 x 141 x59 mm (6.50" x 4.53" x 2.32")
- Packing weight: 530g (1.17 lb.)

# **Environmental specifications**

#### **Operating environment**

- Temperature:
- 0°C to 40°C (32°F to 104°F) • Humidity:
- 10% to 90% RH (non-condensing)

#### Storage environment

- Temperature: -30°C to 70°C (-22°F to 158°F)
- Humidity: 10% to 90% (non-condensing)

## Certification

- CE
- GCF (Global Certification Forum)

## Package contents

- Battery (5300 mAh)
- AC charger
- USB type C cable
- Quick Start Guide
- Warranty card
- DoC
- \* The maximum data rate is a theoretical value. The actual data rate depends on the network environment. The LTE and NR bands may vary in accordance with different telecom operators. Please check the compatibility of frequencies, bands and network coverage of with the operators before use the router. \*\* SA mode only.
- \*\*\* The warranty is provided for a period of six months in respect of the removable/embedded battery. It is designed to retain up to 80% of its original capacity at 500 complete charge cycles.

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