ZYXEL NETWORKS

NR7101

5G NR Outdoor Router

Need to increase bandwidth and network speed at the office? Want to help manufacturing production operations become more flexible and efficient with better precision while lowering costs? No matter at the branch, remote, rural and any other hard-to-reach sites that is challenged with limited or suboptimal choices of primary connection. Get a head start on smart office or industry 5.0, it's time to upgrade to 5G and empower your future. NR7101 is poised to be your backbone of your network to pave the way for your future business success.

Benefits

Effortlessly Monitor All Devices Anytime Anywhere at Any Scale

The 5G NR Outdoor Router has two variants, **NR7101** for on-premise solution and **Nebula NR7101**, which allows it to deliver consistent high-quality network connectivity for business-critical operations by Nebula cloud solution anytime anywhere with ease. Centrally provisioning and seamlessly managing all endpoint devices, including access points, switches and firewalls, within your organization across distributed locations from the Nebula platform, while keeping your network aware of constantly changing devices. If your deployment requires on-premise solution without the need for cloud monitoring for device status, NR7101 is the device for you.

5G NR with up to 5 Gbps download rate*

Nebula cloud management for **Nebula NR7101** only

Extreme weather resistance

4 High gain LTE/5G directional antennas of up to 10 dBi

Support Standalone (SA) and Non-Standalone (NSA) mode

Standard 802.3af/at PoE

Free app for finding the best installation signal spot

Reliable Backbone, Non-Stop Connection

NR7101 has industrial-grade components with outdoor-friendly design making it possible to work in harsh environment conditions where desirable signal strength is difficult to achieve or having weather challenges including strong winds and rainstorms. NR7101 guarantees high-quality connections and a longer device lifespan, which supports your business deployment in wide territorial scopes.

• IP68-certified : Dustproof and waterproof protection
• Withstand hurricane level winds (Level 16, 200 Km/h)
• K.21 enhanced-mode lightning protection
• Adapts to temperature from -40° C to 60°C
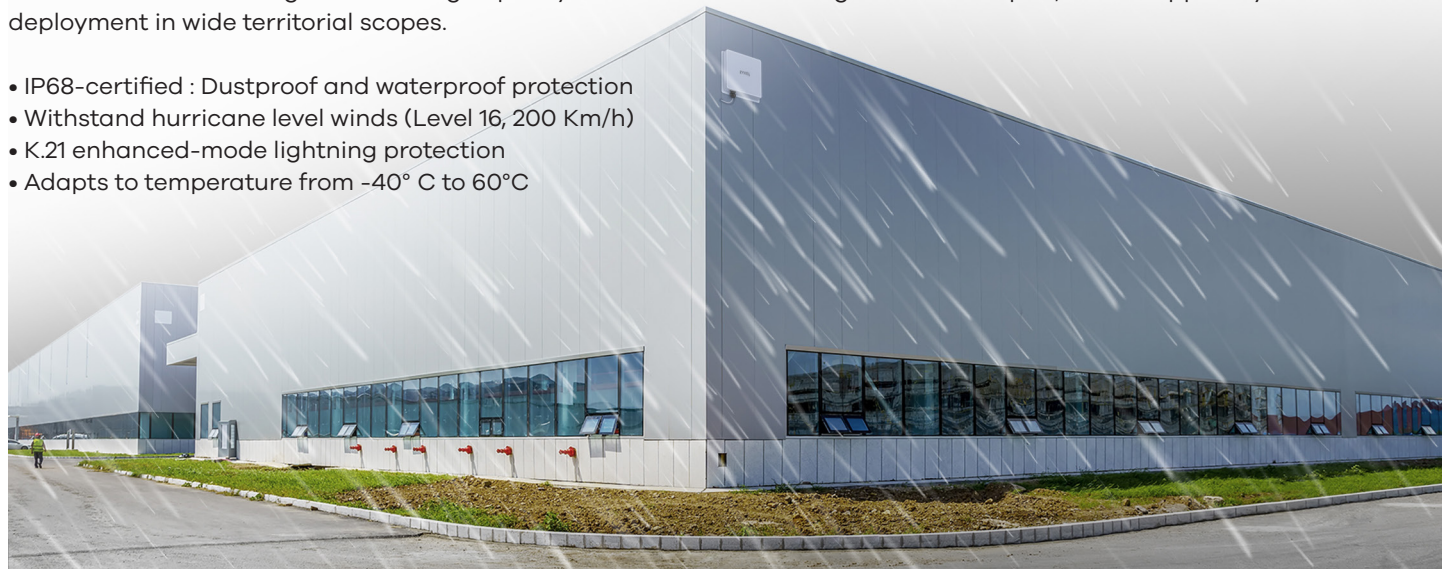
Transforming Your Business Today

Four 10 dBi long range directional antennas are built into the NR7101, providing more focus transmission beam for receiving better cellular signal strength and quality from operator base stations. Better donor signal quality, faster cellular data speed. Choose the NR7101, start business transformation today.
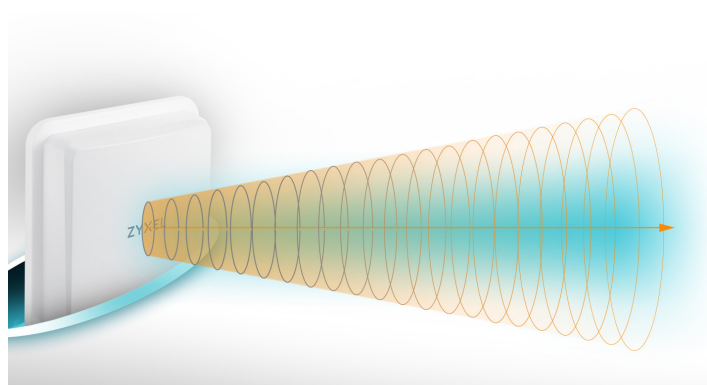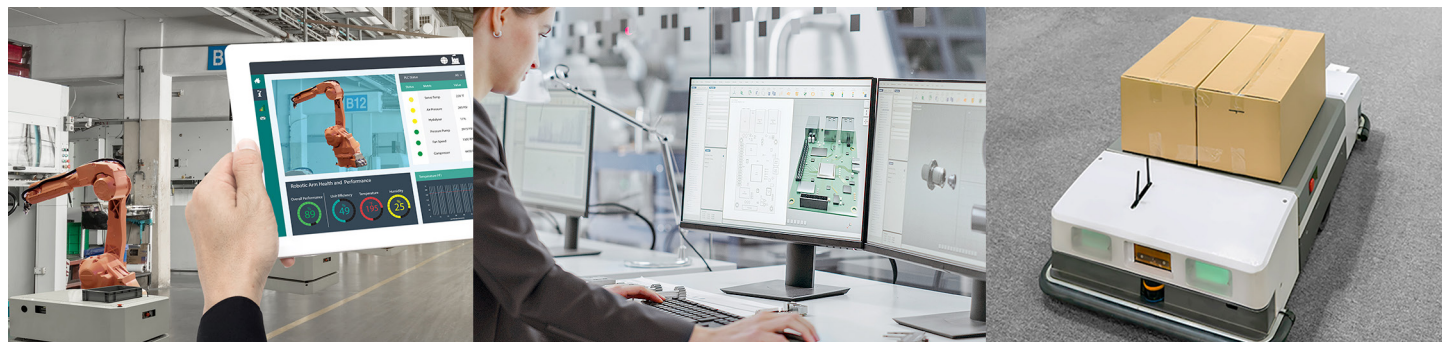
Easy and Instant Installation

To find the best signal spot for installation, you just need to use a smartphone or tablet to connect to NR7101's WiFi network and follow its configuration instruction on the free "Zyxel Air" app. Comes with flexible wall and pole mounting options, integrated Power over Ethernet (PoE) support makes power requirements a non-issue.
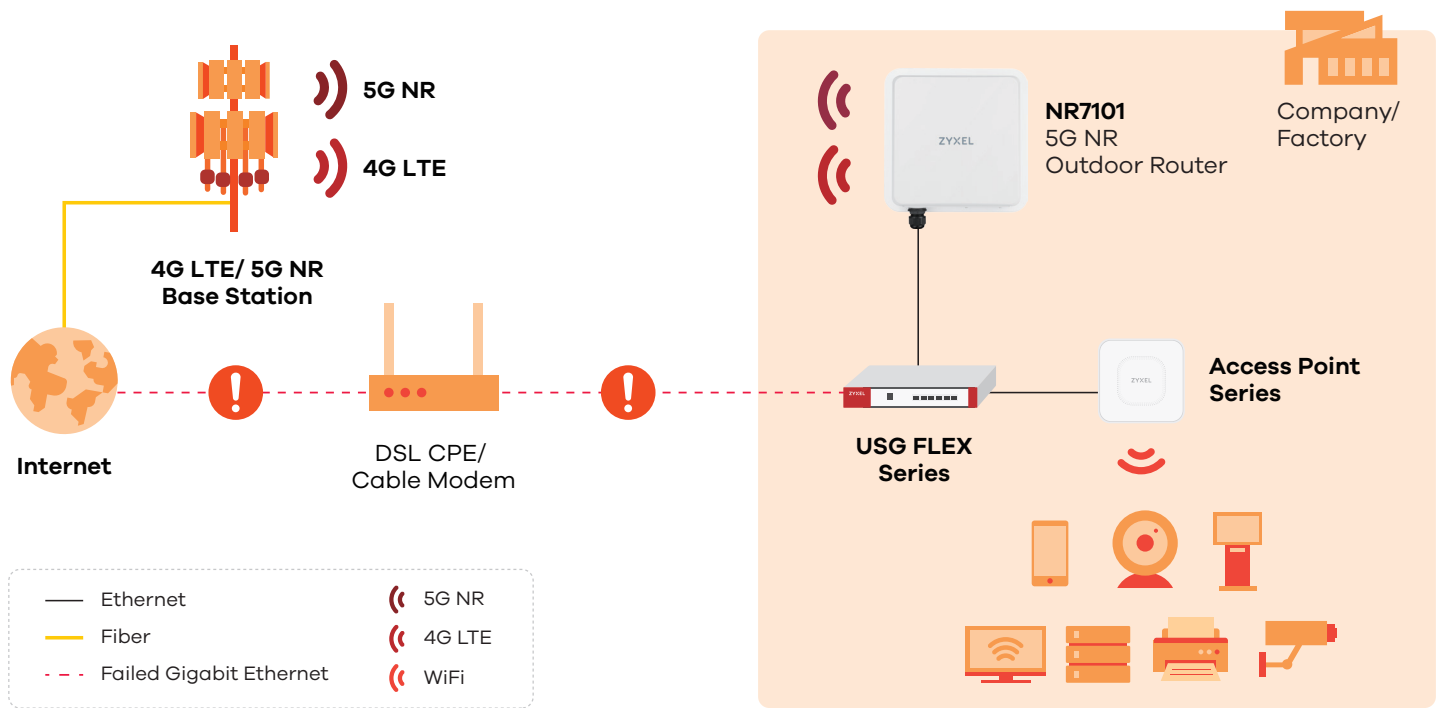

Network Slicing, Tailor Your Network

NR7101 is interoperable with both Standalone (SA) and Non-Standalone (NSA) deployments. Under SA mode, NR7101 can support network slicing function with tailored network capabilities that are essential to fulfil different business needs, like dealing complex environments with massed wired and wireless networks for separate factory and office connections, all while handling of multiple-node WiFi infrastructure, which can be unstable. Customize network with NR7101 to keep ahead of industry and to ensure success!

Application Diagram

5G NR

4G LTE

4G LTE/ 5G NR Base Station

Internet

DSL CPE/ Cable Modem

NR7101
5G NR
Outdoor Router

Company/ Factory

Access Point Series

USG FLEX Series

——	Ethernet	((5G NR
——	Fiber	((4G LTE
- - -	Failed Gigabit Ethernet	((WiFi

Interface Description

Gigabit Ethernet & PoE

Reset & Reboot button
WiFi On/Off button
LED indicators

Dual Micro-SIM card slots

4 High gain LTE/5G directional antennas
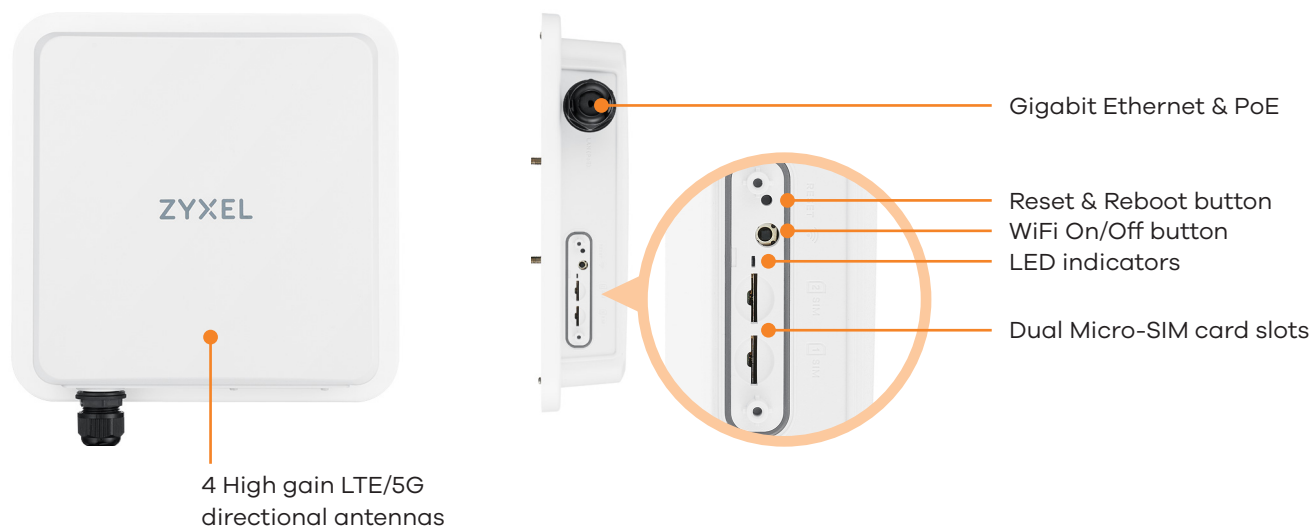
Specifications

Hardware specifications

5G NR interface
- 3GPP Release 15 standard-compliant
- Supports both NSA and SA modes
- Supports frequencies: n1/n3/n5/n7/ n8/n20/n28/n41/n77/n78/n38/n40
- DL 4×4 MIMO: n1/n3/n7/ n38/n40/n41/ n77/n78

4G LTE interface
- 3GPP UE Category 20 standard-compliant
- Supports frequencies:
  - LTE-FDD: B1/B3/B5/B7/B8/B20/B28
  - LTE-TDD: B38/B40/B41/B42

Hardware interface
- One GbE RJ-45 PoE LAN port
- LEDs:
  - Power status
  - Internet status
  - WiFi status
- 3FF format Micro SIM card slot
- One WiFi on/off button
- One reset to default button

Power consumption
- Power consumption at PoE: < 16 W (est.)

Physical specifications
- Item dimensions (WxDxH): 255 x 256 x 58 mm (9.99" x 10.03" x 2.28")
- Item weight: 1143 g (21 lb.)
- Packing dimensions (WxDxH): 280 x 420 x 108 mm (11.02" x 16.53" x 4.25")
- Packing weight: 2818 g (61 lb.)

Environmental Specifications

Operating Environment
- Temperature: -40°C to 60°C (- 40°F to 140°F)
- Humidity: 5% to 95% (non-condensing)

Storage Environment
- Temperature: -40°C to 65°C (-40°F to 149°F)
- Humidity: 5% to 95% (non-condensing)

Ingress Protection rating
- IP68

Lightning protection
- K.21 enhanced mode, 6 KV

Wind load testing
- GR 487 issue 4 (2013) standard-compliant
- Level 16 wind force
- Wind speeds 53.6 m/sec (~ 193 km/h)

Certification
- CE
- WEEE (Waste Electrical and Electronic Equipment) Directive certification
- RoHS (Restriction of Hazardous Substances) Directive certification
- HSF (Hazardous Substance Free)
- European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste

Package Contents
- Standard 802.3af/at Power over Ethernet (PoE) injector
- 1.8 M Ethernet cable 8P8C
- Quick Start Guide
- Warranty card
- DoC and safety warning
- Wall/pole 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.

Zyxel Air App

Q Zyxel Air

Available on the iPhone App Store

GET IT ON Google Play
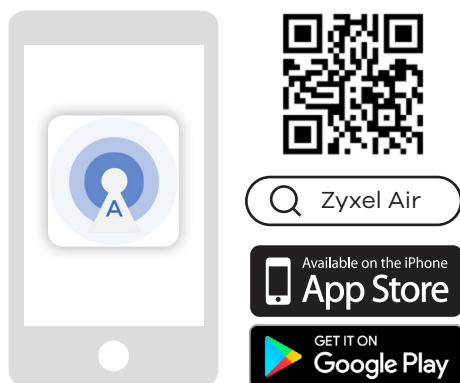
Nebula NR7101 License Pack

Nebula offers flexible options that match your requirements, whether you are looking for a complimentary option giving you some peace of mind at no extra costmore control over your network updates and visibility, or even the most advanced management of cloud networking, Nebula is here to help you. The plan you choose will determine the service level of Nebula Cloud.

Feature Name	Base Pack	Plus Pack	Pro Pack
Unlimited Registration & Central Management (Configuration, Monitoring, Dashboard, Location Map & Floor Plan Visual) of Nebula Devices	●	●	●
Over-the-air Firmware Management	●	●	●
Admin Accounts per Organization (Full Access for Administration Rights)	5	8	No Limit
Advanced Firmware Scheduling (Org/Site/Device)		●	●
Automatic Network Topology (Visual and Actionable)		●	●
Email users and alert Notifications		●	●
Organizational User Audit / Change Logs			●
Configuration Backup/Restore			●
Priority Nebula Support Request (Direct NCC incl. Web Chat)			●

* Only available for Nebula NR7101 model
** Search Nebula Control Center for more Nebula license plan

Nebula Mobile App

Nebula Mobile

Available on the iPhone
App Store

GET IT ON
Google Play

* Only available for Nebula NR7101 model

Success Story

SUCCESS STORY

Ordering Information

Model	Part Number	Description
NR7101	NR7101-EU01V1F	5G NR Outdoor Router
Nebula NR7101	NR7101-EUZNN1F	Nebula cloud-managed 5G NR Outdoor Router

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

12/04/24

Datasheet NR7101