NOKIA

RUCKUS
COMMSCOPE

Nokia Optical LAN + RUCKUS Wireless

One AI-driven enterprise network, unlimited possibilities

Advanced enterprise networking

Enterprises today need networks that can keep up with the speed of business. As digital transformation accelerates, connectivity must support high user density, real-time applications, and next-generation workloads like AI and immersive collaboration. Wi-Fi 7 delivers the wireless performance to enable this future – but the true breakthrough comes from pairing it with a wired LAN that is just as advanced.

That's why Nokia and RUCKUS Networks have partnered to offer a fully integrated LAN solution: Nokia's Optical LAN and RUCKUS Network's enterprise Wi-Fi™, unified under a single management platform. Together, they deliver:

A modern, converged LAN foundation

- **Unified infrastructure**
  Combine wired and wireless LAN into a single, high-performance system
- **Centralized control**
  Manage both networks through one AI-driven platform—RUCKUS One®
- **Optimized user experience**
  Deliver consistent, low-latency connectivity throughout any location
- **Future-ready investment**
  Eliminate repeated upgrades with fiber and Wi-Fi 7

High-impact in demanding environments

- **Hospitality**
  Enhance guest experience across hotels and resorts
- **Real estate & MDUs**
  Simplify infrastructure and add smart building capability
- **Healthcare**
  Enable secure, resilient data and device connectivity
- **Education**
  Support digital learning and large campus environments
- **Large public venues**
  Handle peak user traffic and critical services
- **Manufacturing & logistics**
  Reliable and scalable network for Industry 4.0

Why enterprises are switching now

Wi-Fi 7 is reshaping enterprise connectivity expectations – and exposing the limits of traditional LAN design. Many traditional networks can't keep pace with the bandwidth, latency, and scaling requirements of modern applications.

Optical LAN provides a smarter foundation

- A single fiber infrastructure supporting 1G, 10G, 25G, and future 50/100G speeds
- Centralized switching architecture reduces complexity and improves reliability
- Passive midspan that cuts energy use and eliminates most active switch layers
- Fiber optical cabling that resists electromagnetic interference (EMI)

When paired with RUCKUS's AI-driven wireless solutions and the RUCKUS One management platform, the result is a LAN that scales easily, simplifies IT operations, and meets both technical and financial goals.

Key takeaway

Now is the ideal moment to rethink the enterprise LAN—not just to support Wi-Fi 7, but to lay a long-term foundation that's greener, simpler, and ready for whatever comes next.

Business benefits at a glance

This solution supports fast deployment, scalable growth, and simplified long-term operations. It helps businesses reduce their environmental impact, control operational costs, and meet the growing expectations of users.

Future-ready performance 1/10/25 Gb/s today, 50/100 Gb/s tomorrow	**Lower energy use** Reduces network power usage by up to 40%	**Reduced total cost of ownership** Up to 50% lower TCO
Smaller IT footprint 70% less cabling and fewer active devices	**Longer lifespan** 50+ years with minimal upgrades	**Centralized management** One platform, one interface, one IT team
Faster speeds with Wi-Fi 7 Up to 46 Gbps with 320 MHz wider channels and 4K-QAM	**Lower latency** Multi-Link Operation sends data across bands at once	**More devices at once** Supports up to 16 spatial streams with improved interference handling and efficiency

Use cases

Hospitality

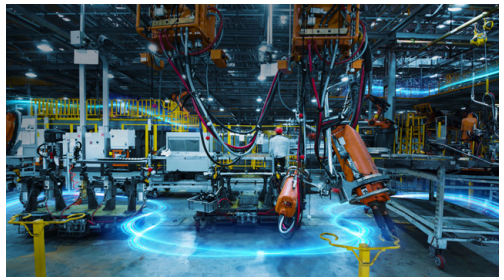
Hotels and resorts rely on fast, seamless Wi-Fi to deliver premium guest experiences. This solution simplifies LAN infrastructure, reduces cabling, and enables smart room services and efficient operations.

Real Estate & MDUs

Apartments and office buildings require scalable, secure networks enabling tenant access, building automation, and IoT. A centralized fiber LAN paired with high-performance Wi-Fi reduces complexity, cuts costs, and supports flexible, reliable service delivery.

Airports

Airports handle large volumes of users, devices, and systems. This joint solution provides robust, high-speed connectivity across terminals, improving operational efficiency and passenger experience.

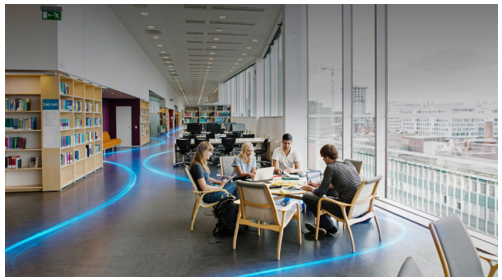


Manufacturing & Logistics

Factories and warehouses need reliable networks for automation and tracking. Optical LAN covers large areas with fewer components, while Wi-Fi maintains strong connectivity in challenging environments.

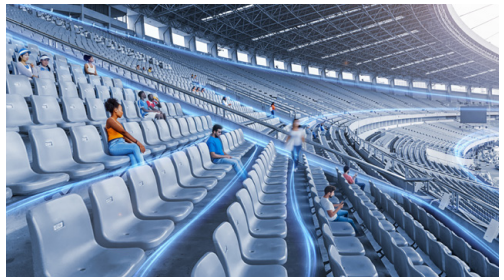
Healthcare

Hospitals and clinics need secure, high-availability networks to support patient data, medical devices, and real-time monitoring systems. Fiber-based LAN combined with Wi-Fi ensures the reliability and capacity needed for critical healthcare environments with high device density.



Education

Schools and universities are increasingly digital. The joint solution delivers high-density Wi-Fi backed by fiber, supporting virtual learning, research, and collaboration across large campuses.



Venues & Stadiums

Large public venues like stadiums must manage sudden spikes in traffic. The combined fiber and Wi-Fi solution ensures smooth operations for ticketing, concessions, security, and fan engagement.

Solution components

The joint Nokia + RUCKUS Networks solutions deliver a complete, future-ready LAN infrastructure, combining advanced fiber and enterprise Wi-Fi components, all managed through RUCKUS One™. This cloud-based, AI-driven platform gives IT teams a unified view of both the wired and wireless network for effortless provisioning, troubleshooting, and scaling.

Aurelis MF-2 Optical Switch

Compact, modular 2U form factor designed for scalability. Supports 1G, 10G, and 25G speeds. Key features include:

- High-capacity 400G backplane per slot
- Up to 16 ports per card, with support for thousands of endpoints
- Dual AC/DC power options and full hardware redundancy
- Six-nines availability (99.9999%) and sub-second switchover protection
- Energy efficient: up to 8x more efficient than traditional LAN

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G-040P-T

GPON, 4x GE, PoE+

G-040P-R

GPON, 4x GE, PoE++, in-wall design

XS-010S-Z

XGS-PON, 1x 10GE, pluggable module

U-880XP-P

GPON/XGS-PON, 8x POTS & 8x GE, PoE++

U-080XP-P

GPON/XGS-PON, 8x GE, PoE++

U-490XP-P

GPON/XGS-PON, 8x GE/1x 10GE, PoE+

U-00240XP-A

25G PON, 16x 2.5GE + 8x 10GE, PoE++

NOTE: images not to scale

RUCKUS Wireless Access Points

R370 Wi-Fi 7 Indoor AP

High-performance indoor access point designed for facilities of any size. Offers advanced features including:

- Improved AP throughput via dynamic selection of least congested Wi-Fi channels
- AI-driven Radio Resource Management
- Adaptive Wi-Fi cell sizing to boost performance and capacity in high-density areas

T670 Wi-Fi 7 Outdoor AP

Ruggedized outdoor AP for harsh environments, ideal for airports, large public venues, MDUs and industrial spaces:

- Weatherproof and temperature-resistant
- Advanced beamforming and client density handling
- Reduced interference traffic from unconnected Wi-Fi devices

R670 Wi-Fi 7 Indoor AP

Dramatically improves network performance through a combination of wireless innovations and learning algorithms that includes:

- Increased average network throughput in heavily congested environments
- Reduced traffic interference from unconnected Wi-Fi devices
- Extended coverage and optimized throughput with dynamic multi-directional antennas

T670SN Wi-Fi 7 Outdoor AP

High performance, ruggedized outdoor AP for harsh environments. Equipped with unique programmable sector antenna delivering both narrow and wide sector coverage on demand. Ideal for airports, large public venues, MDUs and industrial spaces:

- Weatherproof and temperature-resistant
- Advanced beamforming and client density handling
- Reduced traffic interference from unconnected Wi-Fi devices

R770 Wi-Fi 7 Indoor AP

High-performance indoor access point designed for high-density enterprise environments. Offers advanced features including:

- Multi-gigabit performance with Wi-Fi 7 support
- AI-driven traffic optimization
- Seamless roaming and robust security

RUCKUS One®: Unified Network Management

An AI-powered cloud-native platform for end-to-end network management, RUCKUS One™ provides:

- Unified visibility and control over both Optical LAN and Wi-Fi components
- Zero-touch provisioning and automated updates
- AI-driven insights and real-time analytics
- Role-based access and multi-site scalability

Together, these components form a fully integrated solution, centrally managed and easily deployed to meet enterprise connectivity demands today and in the future.

Proven at scale

Scaleable. High performance. AI driven network visibility and optimization.

Nokia leads in Optical LAN. RUCKUS Networks leads in enterprise wireless solutions. Our technologies are already deployed by more than 1,000 enterprises globally.

Customers span:

- Luxury hotel brands
- Major hospitals and care networks
- Global airports and transportation hubs
- University and research campuses
- High-density residential and office buildings

Together, we help enterprises reduce complexity, improve resilience, and support innovation with a network that's built to last.

About Nokia and RUCKUS

About Nokia

Nokia is a global leader in Optical LAN, providing a high-performance connectivity solution for enterprises across all industries. As the #1 provider of fiber solutions worldwide we bring unmatched expertise and innovation in fiber, automation, and network virtualization. Our cutting-edge enterprise LAN portfolio is purpose-built to deliver futureproof, simple and reliable connectivity.

About RUCKUS

RUCKUS Networks, designs and delivers purpose-built networking solutions engineered to thrive in the most demanding environments. From high-performance wireless LAN and wired infrastructure to IoT, assurance, and security platforms—RUCKUS empowers seamless connectivity for guests, students, residents, citizens, and employees alike.

With best-in-class hardware and AI-driven software, RUCKUS simplifies network complexity and drives measurable business outcomes across industries. Renowned for performance, simplicity, and intelligent optimization, RUCKUS wireless solution powers connectivity in hospitality, education, healthcare, multi-dwelling units, large public venues, and beyond.

Let's build your future-ready network

Contact your local Nokia or RUCKUS Networks representative to learn how a unified Fiber + Wi-Fi LAN can support your business today, and scale for tomorrow.

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About Nokia

At Nokia, we create technology that helps the world act together.

As a B2B technology innovation leader, we are pioneering networks that sense, think and act by leveraging our work across mobile, fixed and cloud networks. In addition, we create value with intellectual property and long-term research, led by the award-winning Nokia Bell Labs, which is celebrating 100 years of innovation.

With truly open architectures that seamlessly integrate into any ecosystem, our high-performance networks create new opportunities for monetization and scale. Service providers, enterprises and partners worldwide trust Nokia to deliver secure, reliable and sustainable networks today – and work with us to create the digital services and applications of the future.