



SOLUTION BRIEF

High-performance public Wi-Fi Siklu and CommScope RUCKUS® create connected communities quickly and affordably

The urgent need to bring public Wi-Fi to more places and spaces

Public Wi-Fi is needed everywhere, but “everywhere” is not always easy to reach. In urban and rural areas alike, digging trenches for fiber is often physically difficult and financially prohibitive. Without a high-bandwidth backhaul network, communities have no viable support infrastructure to deploy high-performance outdoor access points (APs).

Communities without public Wi-Fi are often the ones that need it the most. A municipal Wi-Fi network can strengthen public safety and support delivery of new services. For residents, public Wi-Fi may be their only internet access. For many communities, public Wi-Fi is essential for supporting local businesses and tourism. Some outdoor spaces are particularly difficult to cover with outdoor Wi-Fi, such as business or historic districts, parks and open-air shopping plazas.

These communities don't just want to catch up; they have plans to leap forward. And deploying public Wi-Fi is the foundation for a bigger connected community vision.

Affordable, easy-to-deploy public Wi-Fi empowers communities everywhere

Siklu and CommScope RUCKUS® are partnering to make modern, high-performance public Wi-Fi available to communities everywhere. It's all about speed and convenience. Now communities can deploy a multigigabit backhaul network using Siklu's millimeter wave (mmWave) wireless technology—no trenching, complicated RF planning, or giant towers required.

Siklu's backhaul networks support the latest RUCKUS AP technology. The RUCKUS T350 Wi-Fi 6 series has more capabilities and configuration options than any other outdoor APs in the market today. They have the high capacity that public Wi-Fi requires and Siklu multigigabit networks support.

For many communities, there will be a backlog of demands to meet. But the needs of today will be eclipsed by what's possible in the future. Siklu and RUCKUS advanced technology also gives municipal administrators the confidence that their network provides future proofing for years to come.



Highlights of the Siklu/RUCKUS public Wi-Fi solution

- A multigigabit backhaul network that's easy and economical to deploy
- A positive, productive user experience even in the most challenging outdoor environments
- A modern, multi-services network that can support bandwidth-intensive applications, such as IP security cameras
- A scalable future-proof investment

A backhaul network that knows no obstacles

Siklu is a leader in multigigabit wireless solutions for urban, suburban, and rural areas. Siklu's mmWave technology provides dedicated backhaul capacity that's both affordable and easy to deploy. With up to 10 Gbps full duplex wireless backhaul available, communities can ensure predictable performance even in the face of unpredictable demands.

Siklu mmWave solutions operate in a protected frequency band (60-70/80 GHz) with copious available channel bandwidth. This spectrum is well suited for short transmission ranges: 700–2,300 feet for street level and 1–2 miles for rooftops. mmWave is unlicensed or lightly licensed, depending on local regulations.

Siklu combines the advantages of this protected frequency with narrow pencil-beam technology. The combination virtually eliminates interference problems without having to mount the Siklu radios on high towers. Local administrators don't have to worry about interference, even as the physical landscape of the community changes over time.

The small form factor of Siklu radios makes site selection and installation easier. Siklu also provides deployment flexibility with products for point-to-point (P2P), point-to-multipoint (P2MP) and mesh topologies based on Facebook Terragraph™ technology.

Outdoor APs that stand up in every environment

Outdoor Wi-Fi presents particular challenges to RF signals. APs deal with constantly changing conditions, from bad weather to crowd sizes to rolling obstacles (otherwise known as vehicles). Nevertheless, in the most unpredictable of environments, predictability is paramount.

The RUCKUS T350 Series uses patented RUCKUS optimization technologies (utilizing up to 64 directional antenna patterns) to extend coverage, improve throughput, and mitigate interference.

The T350 Series is designed for fast, simple installation with an ultra-lightweight, low-profile, IP67 rated weatherproofing enclosure. The series gives administrators multiple options for management, including RUCKUS Cloud, SmartZone™ network controllers and Unleashed™ controller-less management.

Looking toward the future? The T350 Series can be integrated with the RUCKUS Analytics™ cloud service, RUCKUS Cloudpath® secure network access software, the RUCKUS IoT suite, and SPoT Wi-Fi location engine.

Use cases

- Urban, rural and suburban communities
- Hospital campuses
- School campuses
- Extensions to existing public Wi-Fi networks
- Instant outdoor “smart spaces”
- Temporary outdoor Wi-Fi infrastructure for big events





Siklu MultiHaul™ TG distribution node

RUCKUS T350 Series outdoor access points

RUCKUS T350 OUTDOOR HARDENING

- IP67 rated
- Operating temperature: -20/40°C to 65°C
- Operating humidity: Up to 95 percent, non-condensing
- Wind survivability: Up to 266 km/h (165 mph)
- Salt-fog testing: Over 1,000 hours
- Altitude: Up to 3,048 meters (10,000 feet)

About Siklu

Siklu is a global leader in millimeter wave (mmWave) technology for multigigabit wireless backhaul. Siklu solutions are ideal for connected community projects requiring extra capacity, such as video security, Wi-Fi backhaul, and municipal network connectivity all over one network. Easily installed on street fixtures or rooftops, Siklu radios have been proven to be the ideal solution for networks requiring fast and simple deployment of secure, wireless fiber.

Learn more about the Siklu/RUCKUS public Wi-Fi solution:

<https://www.commscope.com/ruckus/alliance-partners/siklu/>

<https://www.siklu.com/solutions/smart-cities/public-wifi/>

About Ruckus Networks

Ruckus Networks builds and delivers purpose-driven networks that perform in the demanding environments of the industries we serve. Together with our network of trusted go-to-market partners, we empower our customers to deliver exceptional experiences to the guests, students, residents, citizens and employees who count on them.

www.ruckusnetworks.com

Visit our website or contact your local RUCKUS representative for more information.

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