Cambium Networks™

Take Control of Your MDU Network: Improve Profitability and Tenant Satisfaction

Property owners are realizing increased NOI and outstanding dollar-for-dollar returns while reducing tenant churn by deploying managed Wi-Fi networks equipped with Cambium Networks technology

With managed Wi-Fi, a property owner of a 100- subscriber property could expect $24,000 - $60,000 increased NOI annually.

Take back control of your building with a neutral host Wi-Fi network that transforms Wi-Fi service into a source of increased revenue – while reducing operating costs and increasing tenant satisfaction. Like other utilities, such as water, electricity or maintenance, the building is responsible for aggregate supply and distribution of services to the tenants. Different levels of service can be offered, and the service can be part of the lease.

Properties that deliver exceptional online experiences for their tenants have **higher occupancy, lower churn** and **higher tenant satisfaction**. Property owners who have taken control of the Wi-Fi are able to deliver secure and consistently reliable online experiences to tenants in class A, B or C multifamily assets across the entire property. Tenants can easily and seamlessly use their devices in their unit, the laundry rooms, social areas, outdoor pools and patios.

Furthermore, the same infrastructure and secure networks are being leveraged for smart-property technologies to optimize operations - controllable sprinkler systems, security surveillance, access systems, door locks, climate controls and others. Property managers and maintenance personnel utilize the same network for their devices used every day to manage the property and keep tenants satisfied. One managed Wi-Fi network optimizes operations, thrills tenants and increases NOI.

Modern tenants expect Wi-Fi to just work. Why is it so easy to call Starbucks to have coffee delivered and so hard to get Wi-Fi in my apartment?

©Copyright 2022 Cambium Networks, Inc. 3800 Golf Road, Suite 360, Rolling Meadows, IL 60008

MDU SEGMENTS

- Apartment Complexes
- Condominiums
- Student Housing
- Assisted Living

To understand how the technology best fits the MDU experience, start by understanding the nature of tenants.

> Why do people choose to live in an MDU? It makes their life easier because they don't have to think about many things. Statistics show that people who live in MDUs are willing to pay more for internet than people who live in houses. They want the ability to get high speed everywhere on the property. The question is how do you deliver that in a reasonable way?"
>
> *– Dr. Simon Lok, Founder, RG Nets*

Choose a Managed Wi-Fi Solution Architecture that Works:

Traditional Residential

APPROACH

Treat the MDU like a cluster of single-family houses. Once residential router per apartment.

THE REALITY

- Tenant must manage their own router
- Each router interferes with other routers
- Difficult to troubleshoot
- Wi-Fi doesn't roam on the site
- No added tenant services

Traditional Enterprise

APPROACH

Treat the MDU like one big enterprise. All subscribers are on one big network.

THE REALITY

- Security risk for tenant devices, network trojans, virus worms
- Doesn't allow casting within the home
- Difficult onboarding and provisioning
- No added tenant services

Managed WiFi

APPROACH

Each tenant has a private Wi-Fi bubble in the home, and anywhere on the site

THE REALITY

- Private, Secure, Personal Wi-Fi
- Self-service sign up, new services
- Coverage across the entire property
- Eliminates Wi-Fi interference
- Remote diagnostics, central reports
- Seamless roaming across the property using PSK

©Copyright 2022 Cambium Networks, Inc. 3800 Golf Road, Suite 360, Rolling Meadows, IL 60008

Cambium Networks™

> Managed Wi-Fi IS magical, because what we have done is taken the router, the firewall, the NOC and the billing engine – and put it all together."
>
> *- Dr. Simon Lok, Founder, RG Nets – an MDU Managed Service Provider (MSP) in the United States*

5% 80%

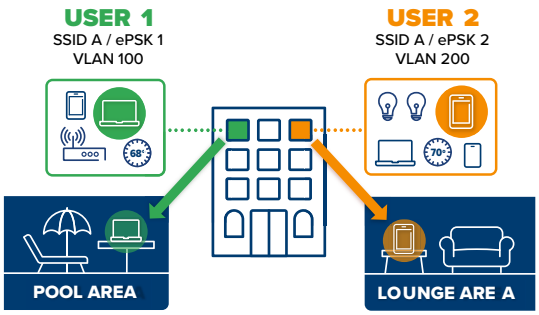
Interest in managed high-speed internet among apartment builders grew from 5% of new luxury developments in 2018 to 80% in early 2021.

- Consumer technology research firm Parks Associates

The Multiple pre-shared key (PSK) process for MDUs gives each tenant their own PSK. They enter their PSK and can use their device anywhere on the property. When they buy a new device like an Alexa or a drone, they enter the PSK and use it – no need for complex provisioning.

The solution is the best of both worlds. It has the best attributes of the traditional network and the best attributes of enterprise networking. It is an optimized solution for multiple dwelling units – and it can be scaled easily for multiple buildings. Now, tenants in each property have seamless and secure access across the entire complex, trouble calls are reduced, satisfaction is higher, and multiple properties can all be managed from a central location.

Once installed, the Wi-Fi network can also easily support additional features including video security, HVAC sensors and controls, control of door locks and access and emergency call communications.



Why a Managed Wi-Fi Solution Is Better

While property owners may not be familiar with the details of managed Wi-Fi, the opportunity is a small risk which brings a high value in return. Property managers and managed service providers (MSP) have experience in this technology.

Increased Revenue

- Increase NOI and property values. Increase revenue from each tenant by bundling Wi-Fi services.
- Property-wide managed Wi-Fi that can be added into a tenant's lease or as an optional service for additional charges.
- Increase occupancy - Reduce churn by delivering online experiences that WOWs tenants and their guests – enterprise-grade, high-performance, low-latency Wi-Fi in residences and all common areas both indoors and outdoors.
- Offer tiered performance and pricing to best fit the tenants' needs and deliver a continuing revenue stream to the property owner.

High Tenant Satisfaction

- Tenants can onboard all of their devices within minutes of arrival.
- Increase performance of all tenants' Wi-Fi. Managed Wi-Fi eliminates the RF conflicts caused by BYO Wi-Fi.
- Fast Wi-Fi regardless of the number of devices and building density.
- Seamless roaming across the property using PSK.
- Choice of plans to fit usage and budget.
- Offer a superior service to tenants compared to unreliable mobile signals in urban buildings.

System Integrator LDI Connect installed cloud-managed switches in one building to control 1,000+ cameras, door locks and sensors.

> **This is something we have never had before – a true plug-and-play solution. It's very sophisticated, it's very smart, it gives us everything we needed without having an engineer in the house 24/7. Our down time is reduced, and we can scale the solution across other properties."**
>
> *– Property Owner, New York City*

©Copyright 2022 Cambium Networks, Inc. 3800 Golf Road, Suite 360, Rolling Meadows, IL 60008

Cambium Networks™

Reduce Operating Costs and Total Cost of Ownership (TCO)

- Simplify network infrastructure oversight through a single managed service.
- Enable digital transformation and IoT initiatives by leveraging a single Wi-Fi network that can be segmented to support both tenants and an overlay IoT network.
- Securely segment the service for each tenant and add any digital building operations.
- Reduce trouble calls.
- Digital management of utility bills.
- Easily turn off a tenant's Wi-Fi if they are not paying rent.

Each tenant has a single Network ID for the entire MDU campus with guaranteed privacy

With ePSK, you can create a Pre-Shared Key for each unit, isolating their VLAN from their neighbors while allowing all users on the MDU campus to be connected to the same local area network.

Cambium Networks' multiple Pre-Shared Keys feature (1024 ePSK per AP, 50K per account) can be used to onboard all tenants' devices to the network, providing them with seamless roaming experience across the MDU campus.

How the Technology Makes the Difference

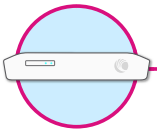
With Cambium Networks' cnMaestro™ Dashboard, you can view hundreds of clients' networks including their indoor Wi-Fi access points, access switches, outdoor Wi-Fi, building-to-building wireless bridges and wireless backhaul, all through one single dashboard.

Also, with the Tenant Dashboard, a property owner can show the client only their network, and the property logo can be added to this view for seamless branding.

No fiber to the building? No problem. Cambium Networks' comprehensive portfolio brings additional cost advantages when connecting separate buildings across the property. No need to trench across parking lots, bringing disruption to the community. As the market leader in outdoor point-to-point and point-to-multipoint networks, Cambium Networks delivers gigabit performance and saves tens, sometimes hundreds of thousands of dollars, compared to fiber delivery. Cost overruns are common for fiber, but Cambium Networks' fast and repeatable installation offers cost predictability.

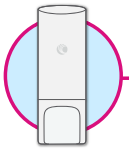
cnMaestro X
Single-Cloud Dashboard

True cloud management for Wi-Fi, Ethernet and broadband with MSP controls



Network Service Edge
Security Services

Security, routing and SD-WAN policies in one integrated solution

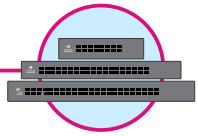


Outdoor Wi-Fi
Superior flexibility and range

Optimized integrated antennas to cover large areas with less equipment

Switching
Wireless-optimized Ethernet

8/24/48 port GigE and mGigE with policy-based automation

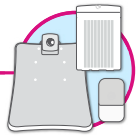


Indoor Wi-Fi
Multi-Purpose Usage

Right-sized for all needs, from wall plate APs in tenant units to high density APs for public areas

Wireless Backbone
Multi-gigabit 60 GHz 802.11ay

3.8 Gbps up to 450m supporting redundant MESH and near real-time failover



©Copyright 2022 Cambium Networks, Inc. 3800 Golf Road, Suite 360, Rolling Meadows, IL 60008

Cambium Networks™

How to Select a Managed Wi-Fi Partner

Cambium Networks partners with the foremost Managed Service Providers (MSP) in the industry to design, install, maintain and manage networks. Our partners include MSPs with national capabilities and regional or local coverage with experience to handle properties of all sizes.

MSPs and IT Service Providers (ITSPs) of all sizes migrate to manufacturers who consistently deliver reliable connectivity. Cambium Networks' goal is to make it easy for our partners to offer superior service at competitive prices.

We strive to enable our property owner and operator customers to achieve above average return on capital through differentiated digital experiences for their tenants and staff. Cambium Networks' Wi-Fi 6 access points and cnMaestro X software deliver the performance, intelligent automation and application optimization that meaningfully contribute to that end."

- Dave Elder, Senior Director of Business Development, Safety NetAccess Inc.

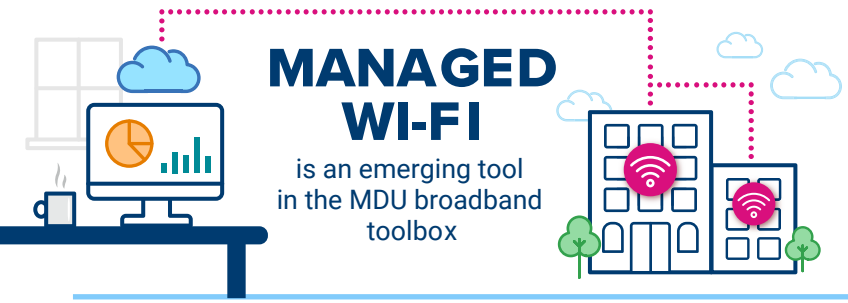
While many platforms say they cater to MSPs, Cambium Networks listened and acted. They have built an intuitive user interface that takes an enterprise product and puts an 'easy button' over it. This simplified interface covers the most common wireless setups that MSPs use. Streamlining process translates into real money savings on the new hardware as well as reducing total cost of ownership (TCO)."

- Brian Brammeier, Chief Strategy & Chief Information Security Officer, Ntiva, IncNetAccess Inc.

GiGstreem guarantees the most reliable, fastest internet service on the market. Cambium Networks' Wi-Fi 6 APs deliver superior RF performance, are easy to install and use, and enable us to consistently deliver exceptional end user experiences."

- Andrew Kusminsky, CEO, GiGstreem

Take back control of your building with a neutral host Wi-Fi network and PSK. Simplify network infrastructure oversight through a single managed service that is segmented for each tenant and building operations. Have confidence that the solution will work and deliver results from a proven solution provider.



Implement a managed Wi-Fi solution that delivers:

- **High-performance** Wi-Fi service for tenants
- **Seamless roaming** across the property
- **Simple onboarding** of devices
- **Secure** personal networks
- **Economical** pricing

©Copyright 2022 Cambium Networks, Inc. 3800 Golf Road, Suite 360, Rolling Meadows, IL 60008

Cambium Networks™