Cambium Networks™

Wireless Connectivity Solutions for Multi-Dwelling Units (MDU)

THE DEMAND FOR BANDWIDTH IS INCREASING

EXPONENTIALLY IN THE MDU MARKET. Renter occupied households are now approaching 44 million (37%) in the US. In addition, there is rapid growth of townhome and high rise living space in urban markets, indicating a trend that will likely continue.

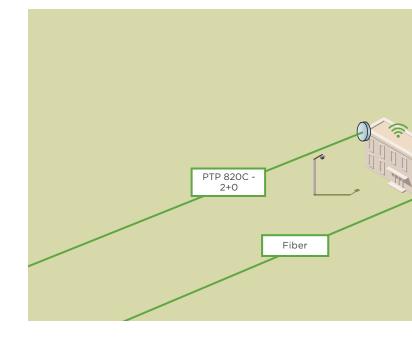
Many of these MDU's are still limited to the aging copper lines coming into the facility. Given their location, fiber often times doesn't make financial sense. Service providers traditionally focused on this space are under pressure to deliver a better end user experience while maintaining a competitive price point to their customers.

Millennials and the demand for housing:

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- They are living in MDU's longer as a result of higher student loan debt, and a desire to be mobile (54% of apartment rental market are studios and 1-bedroom due to millennial demand) Forbes
- They are changing the home entertainment model. OTT and On-Demand services are preferred over traditional cable programming.

MDU Applications:

- Locations
 - Apartment
 - Condominium
 - Dormitory
 - Senior Living
- · Multi Gigabit capacity backbone to club house or leasing office
- · Video surveillance security in parking lot
- · Wi-Fi in common areas: pool, patio, fitness center, media rooms
- Wi-Fi throughout apartments
- Router where needed for fixed devices in room (TV, Smart Hub, Sonos)



Benefits:

Improved service offering – Higher capacity wireless connections between buildings, combined with e430W wall plates to deliver improved user experience over 10 Mbps DSL in many today

Low CAPEX – Compared with trenching fiber, and an expensive DAS system within the building, wireless offers a low upfront capital expense

Low OPEX – PTP 820 licensed microwave combined with PMP distribution solutions from Cambium Networks delivers a low cost solution to operate

Flexibility – Fixed wireless technology offers the flexibility to add capacity and coverage where needed. Additional bandwidth to a building or a common area is low cost and easy to add.

Rapid Deployment – As opposed to traditional wireline infrastructure, wireless is quick and simple to deploy with minimal impact on the residents or property





Proven Solutions

Wi-Fi Access

- Wi-Fi wall plates and indoor routers used for Wi-Fi connectivity within the unit
- cnPilot[™] e500 offers best in class outdoor Wi-Fi solution for common areas, fitness center, media room High capacity licensed backhaul can eliminate the recurring fiber lease cost to the clubhouse

Wide-Area Point-to-Multipoint

- Offer hundreds of megabits distributed to remote buildings
- Multipoint distribution offers the flexibility of leveraging the network to add video surveillance cameras to parking lots and common areas

High capacity long range Point-to-Point backhaul

- High Capacity Multipoint (HCMP)
- Licensed microwave and unlicensed backhaul

Single pane of glass network management

- Bird's eye view of field network
- Rapid on-boarding and provisioning of new nodes
- · End-to-end performance and fault management
- Centralized password management and firmware updates



The Cambium Difference

- Reliability Deploy wireless broadband with confidence that it will work right the first time and continue to work 24/7 over the long haul.
- Scalability Connect thousands of individual locations with a synchronized network that enables RF frequencies to be re-used throughout the network to provide the highest level of connectivity in the least total amount of spectrum.
- **Planning Software** End-to-end network design using LINKPlanner for prediction of capacity and availability.
- **Sustainability** Solutions designed to operate for years from a supplier with a proven track record of stability and sustainable product evolution.
- **Spectral Efficiency** Provide the highest amount of information transfer in the least amount of scarce spectrum with industry award winning throughput.



ABOUT CAMBIUM NETWORKS

Cambium Networks is a leading global provider of wireless connectivity solutions that strengthen connections between people, places and things. Specializing in providing an end-to-end wireless fabric of reliable, scalable, secure, cloud-managed platforms that perform under demanding conditions, Cambium Networks empowers service providers and enterprise, industrial and government network operators to build intelligent edge connectivity. Cambium Networks' commitment to continuous innovation in wireless access is demonstrated in the millions of radios deployed in thousands of networks that benefit communities around the world. Team members also contribute to social responsibility activities to serve the communities in which they live. Headquartered outside Chicago and with R&D centers in the U.S., U.K. and India, Cambium Networks sells through a range of trusted global distributors.

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