



Cambium Networks™

CASE STUDY

DigitalC Accelerates Cleveland's Broadband Future with Cambium Networks and InCoax Networks

Customer Overview

DigitalC is a nonprofit technology social enterprise working to close the digital divide in Cleveland, Ohio. Focused on affordability, equity, and access, DigitalC delivers high-speed home internet across the city, starting with underserved communities—bringing life-changing connectivity to households previously left behind by commercial ISPs. With a long-term mission to make Cleveland one of the most connected cities in the U.S., DigitalC is on track to transform its reputation from “worst to first” in broadband accessibility.

Business Challenge

DigitalC is in a four-year contract to connect a targeted number of households in Cleveland. While progress has been increasing in momentum, the stakes continue to rise—each year brings higher benchmarks. The DigitalC team has completed the full buildout of its citywide network—





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activating all 58 locations within 18 months since launching the initiative in January 2024. The four-year goal is to connect 23,500 households.

The organization's strategy includes a mix of single-family homes and MDUs (multi-dwelling units). MDUs, however, present unique deployment challenges due to legacy infrastructure, including coaxial wiring. In many older buildings, fiber rewiring is cost-prohibitive or infeasible. Re-purposing the coaxial wiring, DigitalC needed a reliable, flexible solution that would allow them to quickly scale and overcome technical hurdles such as interference/ingress and shared medium conflicts with incumbent providers.

"We tried another solution in some properties, but it couldn't offer the frequency separation or coexistence we needed when others were operating on the same coax lines," said Adrian Tetu, Head of Engineering at DigitalC.

Technology Solution

To scale connectivity rapidly and cost-effectively, DigitalC implemented a hybrid solution using Cambium Networks for wireless infrastructure and InCoax for last-mile coax-based broadband delivery in MDUs. This approach allows them to deploy in virtually any building condition without sacrificing performance, budget, or tenant satisfaction.

Cambium Networks Components

- XV2-22H Wi-Fi 6 AP – compact, wall-mounted dual-radio AP designed for hospitality and MDU environments.
- XE3-4 Wi-Fi 6/6E AP – tri-band, high-performance access point for dense, high-demand applications.
- cnMaestro™ Cloud Management – centralized, zero-touch deployment and lifecycle management platform.

InCoax Components

- C254 MoCA Access Control Unit, supporting up to 124 modems, 10 Gbps backhaul capacity, active Ethernet or XGS-PON.
- A101 MoCA Access 1 Gbps modem, high-performance modem for dense, high-demand applications.
- InCoax Manage™ element management system – centralized, zero-touch deployment and lifecycle management platform.

Flagship Deployment: Domain Cleveland

One of DigitalC's most advanced and strategic installations is Domain Cleveland, a 148-room student housing building affiliated with Cleveland State University.



This property showcases the full potential of their platform strategy: enterprise-grade property wide secure managed Wi-Fi throughout common areas and student rooms, and 200/100 Mbps service with infrastructure capable of scaling to 1 Gbps service. Thanks to property-wide secure managed Wi-Fi, the residents now connect anywhere within the property, connected to their own secure WiFi network. A test lab replicates the field setup, allowing engineers to test updates and train staff before pushing configurations live. Installers benefit from a plug-and-play deployment process, needing only to mount equipment and run cables.

“We went all out with this MDU,” said Tetu. “It reflects everything we’ve learned over the last few years. The Domain is now a model for how we’ll approach future MDU deployments across Cleveland.” In addition, serving students who attend a public university at the heart of Cleveland is deeply aligned with DigitalC’s mission—ensuring access to high-speed home internet as a foundation for education, equity, and opportunity.

This deployment combines Cambium’s best-in-class APs and InCoax’s coax-based MoCA Access solution to serve a high-density student population, while also connecting non-student residents—a reflection of DigitalC’s inclusive connectivity vision. The Domain is being positioned as a potential video case study, with property managers actively engaged in making the deployment a success.

Field Results

DigitalC’s network now spans 58 active sites, with 6 more scheduled to go live shortly. At the start of summer in 2025, the team connected its 5,000th household—a milestone that coincides with its 10-year anniversary. While early focus was on network build-out, momentum is now shifting toward impact storytelling, with residents sharing how connectivity has transformed their lives.

Citywide, the organization offers 100 Mbps symmetrical service for just \$18 per month, making it one of the most affordable high-speed options in the country. With cnMaestro™ and Manage™, DigitalC manages multiple buildings remotely—ideal for their lean but fast-moving technical team.

“We’re past the point of counting how many households we connect each month. The real metric now is the difference we make in people’s lives,” said Tetu.

Business Value

DigitalC’s approach provides a scalable blueprint for urban broadband transformation:

- **Accelerated Deployment:** Leveraging coax infrastructure reduces costs and eliminates the need for disruptive rewiring.
- **Operational Efficiency:** cnMaestro’s and Manage’s centralized control enables a small team to manage a large, citywide network with minimal overhead.



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- **Technical Flexibility:** InCoax allows coexistence with legacy ISPs—critical for resident choice and building access.
- **Equity-Driven Access:** Low-cost service eliminates affordability as a barrier to connectivity.
- **Community Engagement:** DigitalC has shifted its messaging from performance metrics to human impact—amplifying stories of lives improved through access.

The Cambium ONE Network Advantage

At the heart of DigitalC's scalability is Cambium's ONE Network—a unified management and networking platform that integrates Wi-Fi, switching, security, and fixed wireless under a single pane of glass. This framework offers intelligent automation, centralized policy control, and application optimization—enabling lean organizations like DigitalC to do more with less and deliver a consistently excellent online experience.

Looking Ahead

DigitalC is doubling down on MDU expansion in pursuit of its 2025 household connection goals. The Domain Cleveland will serve as a showcase for future partnerships and deployments, helping accelerate progress. A major announcement with technology partners and a press conference featuring the governor of Ohio is planned for summer, alongside an open house and public celebration of DigitalC's 10-year journey.

"This summer is more than just a network milestone—it's a celebration of what affordable, people-first connectivity can do for a city," said Tetu.

About InCoax Networks AB

InCoax Networks AB re-purposes existing property coaxial networks in fiber and fixed wireless access (FWA) extension deployments for Communication Service Providers (CSP) globally.

The technology is a high performance, future proof, reliable and cost-effective complement that reduces installation time and improves take-up rate, to boost digital inclusion and internet access for all.



About Cambium Networks

Cambium Networks enables service providers, enterprises, industrial organizations, and governments to deliver exceptional digital experiences, and device connectivity, with compelling economics. Our ONE Network platform simplifies management of Cambium Networks' wired and wireless broadband and network edge technologies. Our customers can focus more resources on managing their business rather than the network. We make connectivity that just works.