

Microamp

5G mmWave Networks for Universities and Research Facilities

Testbeds • End-to-End Deployments • Custom Use Cases



Powering Academia with Real, Standalone 5G mmWave Networks

True 5G mmWave Standard for Universities and Laboratories

Microamp 5G mmWave is the next-generation private, wireless network system, enabling the implementation of the most innovative low-latency and bandwidth-hungry use cases for research and academic purposes.

It is a perfect solution for universities and high-tech laboratories that allows for the empowerment of students, professors and researchers to push the boundaries of technological development.

Easy to setup, develop and manage - as networks of the future should be.



Why Microamp 5G mmWave for Laboratories?



Standalone Networks

Compared to other solutions, no sub-6GHz licence is needed. Only mmWave licence that we will help you obtain.



Superior Performance

Over 4 Gbps, near zero latency and uplink-heavy system that will power even the most bandwidth-hungry use cases.



Flexible & Easy Setup

An out-of-the box solution making use of the plug-and-play approach that can be installed in your lab within hours and adjusted to your specific needs.



Versatile End-to-End Solution

Integrable networks with a wide array of end devices (CPEs and UEs) that can be easily added to your current setup.



Openness

Our RU is also pre-integrated with Open Air Interface CU/DU.



Standards Compliance

Fully compatible with 3GPP and Open RAN split 7.2.

Unlocking the Technological Possibilities of the Future

5G mmWave networks enable the deployment of a wide range of innovative and disruptive technologies. Discover the possibilities:



Remote Controlling



Industrial Automation



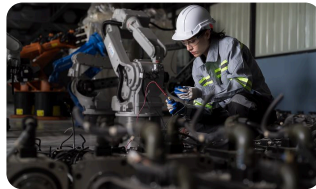
Drones



Geolocation



ISAC/JSAC



Time-Sensitive Networks (TSN)



Non-Terrestrial Networks (NTN)



mmWave Mesh Networking

Benefits for Students



Hands-on Learning Experiences

Enable students to gain practical expertise by actively engaging with emerging 5G/6G technologies, bridging the gap between theory and practice.



Interdisciplinary Exploration

Create an environment that fosters interdisciplinary projects, sparking creativity and innovation among students.



Competitive Edge in the Job Market

Cultivate proficiency in cutting-edge technologies, increasing students' employability and making them highly sought-after by the industry.



State-of-the-Art Classes & Labs

Ensure your facility provides the most technologically advanced educational offers for students and stay ahead of competitors.

Benefits for Universities



Enhance Academic Reputation

By seamlessly incorporating state-of-the-art technologies into your curriculum, you can elevate the standing of your institution or department.



Opportunities for Collaboration

Establish partnerships with influential industry leaders to promote research funding, collaborative initiatives, and substantial real-world contributions.



Empower Graduates

Provide your students with skills highly sought after by employers, ensuring a smooth transition into their professional careers.



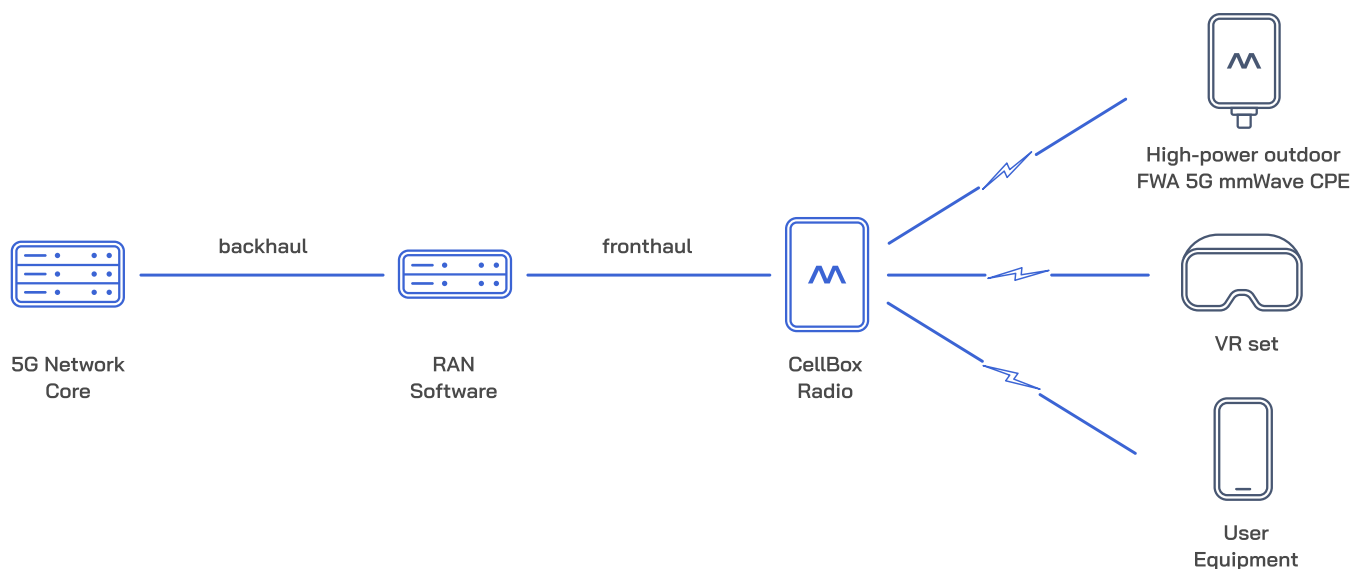
Testbed for 5G & 6G Use Cases

Arm your department in networks allowing you to test the most innovative use cases and get your students ready for the rise of 6G technology.

We work with



Architecture Overview



Bring 5G mmWave Network to Your Laboratory

Test Our 5G Network, Hassle-Free

Every Microamp 5G mmWave Starter Kit contains all the elements required for deploying a carrier-grade 5G mmWave network in the form of a fully functional PoC. It can be easily adjusted to your unique requirements and integrated with the existing infrastructure.

[Order Starter Kit](#)



What's inside?



5G mmWave gNodeB

A multi-gigabit 5G mmWave gNodeB for outdoor and macro cell deployments.

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3 x 5G mmWave CPE

Three units of CPEs for integrating end devices with the network.

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RAN software

3GPP-compliant 5G mmWave RAN, providing high computing capacity.

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5G mmWave Core Network

Scalable network core with a user-friendly interface, easy to install and manage.

5G Network Control Panel

The Microamp 5G Network Control Panel is the intuitive command center for your private network deployment. Designed as a seamless web interface for the 5G mmWave Starter Kit, it provides complete visibility and control over your end-to-end network infrastructure, from the Core Network to the Radio Unit.

Real-Time Infrastructure Monitoring

Color-coded indicators for quick verification of system synchronization and carrier status of critical components.

Connected Users Tracking

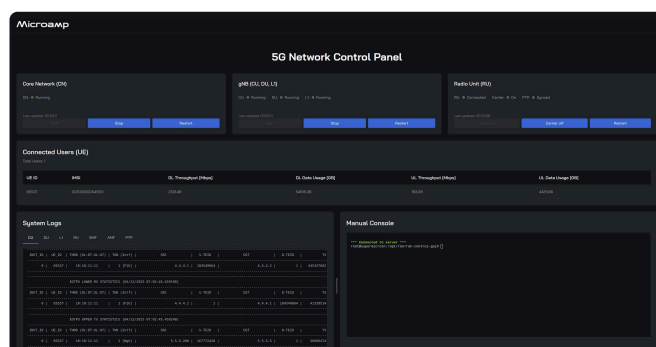
Active UE monitoring via IMSI mapping with real-time metrics on DL/UL throughput and total data usage.

Coordinated and Convenient Management

Activation control of individual network elements for a coordinated startup sequence from one dashboard.

Advanced Network Diagnostics

Direct access to comprehensive system logs and a built-in command-line terminal for rapid troubleshooting.





About Microamp

Microamp is a leading tech innovator designing and delivering multi-gigabit and ultra-low latency 5G mmWave wireless networks based on purpose-built radios. The company merges deep tech know-how and a broad portfolio of technology partners, empowering industries, system integrators, MNOs, DSPs, governments and research institutions with new dimensions of wireless connectivity.

Born in academia and perfected in top tech laboratories worldwide, Microamp is paving the way for a connectivity revolution across industries, combining technological excellence with top business expertise.

Microamp's cutting-edge networks enable the implementation of the most technologically advanced applications that require processing huge amounts of data in real time such as autonomous vehicles connectivity, AI reasoning, 10K and infrared camera sensors and security systems, remote controlling or ultra-quality live video and audio streaming.

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