

CellBox Air 5G mmWave Radio

Multi-gigabit, cost-efficient 5G mmWave radio for enhanced mobile broadband, outdoor private networks, fixed wireless access, and macro cell deployments.



Specification

Performance	4+ Gbps
Latency	< 5 ms
Deployment	Outdoor, macro cell
Frequency Bands	n257: 26.5 - 29.5 GHz n258: 24.25 - 27.5 GHz
Modulation Scheme	64 QAM / 256 QAM
Bandwidth	800 MHz
Duplex	TDD
Power Supply	-48 VDC / 110-240 VAC
Synchronization	IEEE 1588v2 (PTP v2), SyncE
O-RAN Category	Split option 7.2x
Sub Carrier Spacing	120 kHz
Fronthaul Interface	QSFP28 / SFP28
Dimension	430 x 270 x 75 mm
Weight	9.4 kg
IP Grade	IP65
Operating Temperature	-30~55°C

Product Overview

CellBox Air 5G mmWave is a high-power radio for distributing the 5G network signal in the mmWave spectrum in **outdoor and macro cell scenarios**. It allows for building next-generation mmWave 5G networks of enormous capacity and excellent economics.

The device accelerates unique algorithms in the 3GPP-compliant L1 Phy layer to provide users with extraordinary mmWave performance. It fully supports a distributed architecture, seamlessly interfacing with higher network layers provided by Microamp infrastructure, accelerated on the cloud or external servers, granting new dimensions of deployment flexibility.

CellBox Air 5G mmWave features a high-power RF front-end that provides an excellent link budget and allows for the equal distribution of the multi-gig signal within the covered area. It contains an integrated Massive MIMO antenna array and offers advanced beamforming and ultra-sensitivity, which translate into carrier-grade signal stability and coverage, making it a perfect solution for outdoor and macro cell use.

The radio is fully adapted to support all the Microamp 5G mmWave network features: **Integrated Access and Backhaul, Mobility Mode, and an Uplink-heavy System**.

CellBox Air meets the highest certification standards, enabling the most demanding deployments. Every unit is designed and manufactured in the EU and is covered by post-deployment service, customer support, and warranty.

About Microamp

Microamp designs and delivers multi-gigabit, ultra-low latency 5G mmWave networks based on purpose-built radios. Leveraging deep tech expertise and a network of partners, Microamp empowers industries, System Integrators, MNOs, governments and research institutions with new dimensions of wireless connectivity.