

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

Cell Box 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.

Cell Box 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.