Microamp

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.

Product Overview

The **CellBox Air** 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 5G mmWave 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.

The **CellBox Air 5G mmWave Radio** features a high-power RF front-end that provides an excellent link budget and allows for the equal distribution of the multi-gigabit signal within the covered area. It contains an integrated Massive MIMO antenna array and offers advanced beamforming and ultra-sensitivity. These properties translate into carrier-grade signal stability and coverage, making it a perfect solution for outdoor and macro cell use. This radio is fully adapted to support all the Microamp 5G mmWave network features: **Integrated Access and Backhaul**, with Backhaul Adaptation Protocol applied in the DU layer, **Mobility Mode**, **Uplink-Heavy System** and **5G LAN.**

The **CellBox Air 5G mmWave Radio** meets the highest certification standards, enabling the most demanding deployments. Every unit is designed and manufactured in the European Union and is covered by post-deployment service, customer support and warranty.

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) n261 (27.5 – 28.35 GHz)
Modulation Scheme	64 QAM / 256 QAM
Bandwidth	800 MHz
Duplex	TDD
Subcarrier Spacing	120 kHz
O-RAN Category	Split option 7.2x
Antenna	2T2R
Fronthaul Interface	SFP28
Synchronization	IEEE 1588v2 (PTP v2), SyncE
Power Supply	-48 VDC
Installation	Pole/wall mount (optional)
Dimensions	395 x 250 x 85 mm
Weight	5.3 kg
Operating Temperature	-30°C to 55°C
IP Grade	IP65

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.

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