

Introducing RAD's Airmux-5000

A Unique Approach for High Capacity Point-to-Multipoint Wireless Connectivity

The Airmux-5000 delivers up to 200 Mbps and is the ideal choice for First Mile enterprise connectivity and high-end wireless applications that demand assured performance to secure guaranteed bandwidth



RAD's Airmux-5000 is ideal for multiple applications including:

- First Mile enterprise connectivity
- High resolution video surveillance
- Private network infrastructure
- Mission-critical broadband applications

- Remote broadband connectivity
- Backhaul for IP cellular base stations
- Backhaul for wireless and wired access systems (such as Wi-Fi hot spots)

Highest Base Station Capacity for the Best User Experience

The Airmux-5000 sector base station delivers up to 200 Mbps, providing the highest end user capacity in the market to support voice, data and high-resolution video applications. It saves valuable tower space, reduces maintenance and lowers total cost of ownership (TCO). Offering a variety of powerful subscriber units (SUs), Airmux-5000 enables service capacity of up to 50 Mbps for enterprise customers.

Greater Spectrum Efficiency for Faster ROI

By delivering the highest spectrum efficiency available in the market, Airmux-5000 facilitates transmission of greater throughput over smaller channel bandwidth. High spectrum efficiency increases network revenue and performance, reduces spectrum license fee costs and increases flexibility in frequency planning and channel selection.

Secured Service Level Agreement for Demanding Applications

Airmux-5000 secures available bandwidth per end user, guaranteeing SLAs for business clients and demanding applications, such as video surveillance. RAD's novel approach prevents an SU suffering from inferior transmission performance from negatively impacting the available capacity of other SUs that share the same sector.

Superb Performance in Harsh Conditions

Airmux-5000 incorporates advanced techniques that assure superior operation in harsh conditions. RAD's interference mitigation technology has been successfully deployed in hundreds of thousands of links that contend with challenging surroundings. Combined with OFDM, MIMO 2x2 and space diversity, Airmux-5000 establishes robust performance in nLOS/NLOS deployments while it benefits from highest spectrum efficiency.

Multi-Band Capabilities, All in a Single Unit

Airmux-5000 supports an extensive range of frequency bands in the same unit: either 4.8–6GHz or 3.3–3.8GHz. This allows for flexible radio planning during initial network deployment and future evolvement and dramatically reduces operational efforts when changing the operating band throughout the network life cycle while, at the same time, saves on CapEx.

Low Visual Impact SUs

Airmux-5000 offers a variety of SUs, some of them guaranteeing exceptionally low visual impact due to their small form factor, making them both environmentally friendly and easy to deploy. With built-in connectors, the SUs maintain the flexibility to utilize an external antenna whenever needed. This low visual impact approach reduces inventory burdens and CapEx.

Complimentary Solution for First Mile and Backhaul

Airmux-5000, working in tandem with RAD's Airmux-400 point-to-point radio, creates a complimentary solution for First Mile and backhaul applications. They can both be managed using the same Network Management System (NMS). Both First Mile and backhaul segments can be TDD synchronized to prevent mutual interference and deliver high capacity over long distances.

