

# Airmux-200

## Broadband Wireless Radio



The Airmux-200 carrier-class radio system delivers native Ethernet and TDM services over a single wireless link in various sub-6 GHz frequencies. These include 2.3 GHz, 2.4 GHz, 4.9 GHz, and 5.x GHz, as well as licensed 2.5 GHz BRS bands. Featuring up to four E1/T1 interfaces and up to three Ethernet ports, the Airmux-200 operates in point-to-point and multiple point-to-point topologies to support a full duplex net throughput of 18 Mbps (48 Mbps air data rate) for distances of up to 80 km (50 miles). The Airmux-200 is part of the AXCESS+ portfolio of multiservice access and First Mile solutions.

The accurate E1/T1 clock recovery, low round-trip delay and high link availability, position the Airmux-200 as a carrier-class wireless transmission system and an ideal solution for mobile, WiMAX and ISP backhaul, as well as for broadband access, remote site connectivity and video surveillance.

### Video surveillance backhaul

The Airmux-200VS is optimally suited for video surveillance and security applications, such as perimeter security, license plate monitoring and face recognition. Supporting asymmetric Ethernet throughput of 2/5 Mbps over a distance of up to 20 km, it provides cost-effective support to meet requirements for

advanced IP camera communications, including high capacity megapixel transmissions, real-time alerts, minimal quality degradation and high service availability.

### Spectral efficiency, link performance and resiliency

The Airmux-200 features advanced space diversity configuration, OFDM (orthogonal frequency-division multiplexing) and ACS (adaptive channel selection) technologies. Providing channel bandwidth options of 5, 10 and 20 MHz, it guarantees optimal link performance to withstand strong RF interference and harsh ambient conditions.

Hub-site synchronization (HSS) ensures simultaneous (multiple point-to-point or deployment) data transmission for all colocated radios by eliminating interference caused by multiple ODU (outdoor unit) transmissions at the same site.

Monitored hot standby (MHS) 1+1 link redundancy protects the wireless transmission with sub-50 ms link switchover in cases of link or air interface faults.

### Management and security

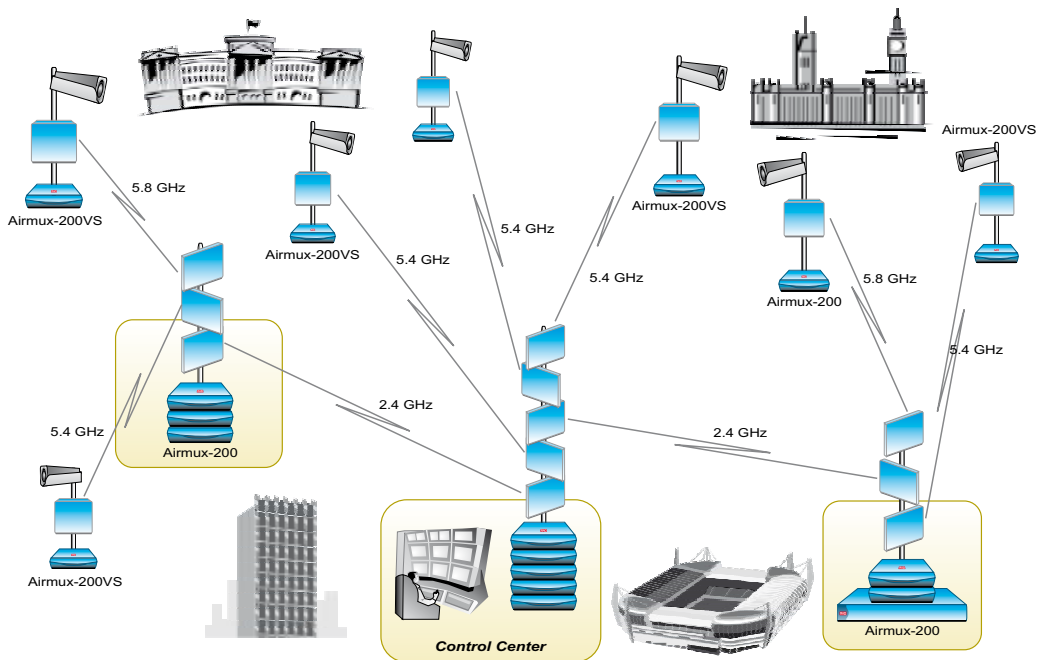
The Airmux-200 employs advanced encryption standard (AES) with a 128-bit data encryption

- Radio system combining up to four E1/T1 and up to three UTP and SFP Ethernet interfaces
- Point-to-point and multiple point-to-point topologies; hub-site synchronization (HSS) to prevent interference
- 18 Mbps full duplex net throughput
- Transmission range up to 80 km (50 miles)
- Sub-6 GHz multi-band operation in a single device: 2.3–2.7 GHz, 4.9–6.020 GHz
- 5, 10, 20 MHz channels; OFDM support

For latest updates visit [www.rad.com](http://www.rad.com)

key to protect the data transmitted over the air interface.

The device is managed remotely inband, with separation between management and user traffic achieved via the use of VLANs. Diagnostic tools are provided by RADview-EMS, RAD's carrier-class element management system, via an SNMP-based GUI. The Airmux-200 also supports a variety of configuration access channels, including Telnet, SNMP, Web server, and TFTP.



Backhauling urban surveillance video over wireless





# Airmux-400

## Broadband Wireless Radio



- Radio system combining up to 16 E1/T1 and up to three UTP and SFP Ethernet interfaces
- Point-to-point and multiple point-to-point topologies
- 100 Mbps full duplex throughput (200 Mbps aggregated)
- Transmission range up to 120 km (75 miles)
- Sub-6 GHz multi-band operation in a single device: 2.4 GHz, 4.8–5.9 GHz
- 10, 20, 40 MHz channels; OFDM, MIMO support

For latest updates visit [www.rad.com](http://www.rad.com)

The Airmux-400 carrier-class radio system delivers native Ethernet and TDM services over a single wireless link in various sub-6 GHz frequencies. These include 2.4 GHz, 4.8 GHz, 4.9 GHz, and 5.x GHz. Featuring up to 16 E1/T1 interfaces and up to three Ethernet ports, the Airmux-400 operates in point-to-point and multiple point-to-point topologies to support a full duplex net throughput of 100 Mbps (200 Mbps aggregated)

for distances of up to 120 km (75 miles). The Airmux-400 is part of the AXCESS+ portfolio of multiservice access and First Mile solutions.

The accurate E1/T1 clock recovery, low round-trip delay and high link availability, position the Airmux-400 as a carrier-class wireless transmission system and a perfect solution for mobile, WiMAX and ISP backhaul, as well as for broadband access, video surveillance and remote site connectivity.

### Broadband connectivity for private networks

The Airmux-400 is ideal for high capacity inter-branch connectivity for university campuses, health care organizations, government institutions, and large enterprises requiring high traffic volumes, without the added costs of building a network or leasing fixed line services.

### Spectral efficiency, link performance and resiliency

The Airmux-400 features advanced space diversity configuration, OFDM (orthogonal frequency-division multiplexing), MIMO (multiple input and multiple output), and ACS (adaptive channel selection) technologies. Providing channel bandwidth options of 10, 20 and 40

MHz, it guarantees optimal link performance to withstand strong RF interference and harsh ambient conditions.

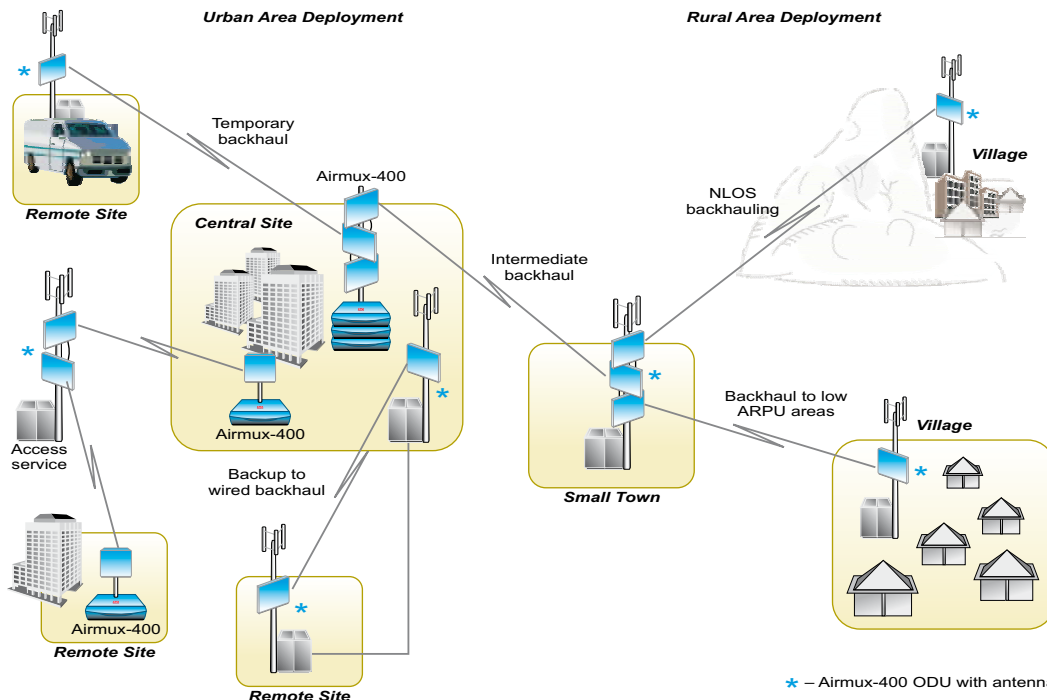
Hub-site synchronization (HSS) ensures simultaneous (multiple point-to-point deployment) data transmission for all colocated radios by eliminating interference caused by multiple ODU (outdoor unit) transmissions at the same site.

Monitored Hot Standby (MHS) 1+1 link redundancy provides TDM service protection with sub-50 ms link switchover in cases of equipment failure or air interface faults.

### Management and security

The Airmux-400 employs advanced encryption standard (AES) with a 128-bit data encryption key to protect the data transmitted over the air interface.

The device is managed remotely inband, with separation between management and user traffic achieved via the use of VLANs. Diagnostic tools are provided by RADview-EMS, RAD's carrier-class element management system, via an SNMP-based GUI. The Airmux-400 also supports a variety of configuration access channels, including Telnet, SNMP, Web server, and TFTP.



Wide range of wireless connectivity applications