

# AirMux-200 Family

## High Capacity License Exempt Radio Relay



### Features

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- **High data rate of up to 48Mbps**
- **Long range of up to 80 Km**
- **Integrated solution for E1/T1s and Ethernet interfaces**
- **Carrier-class solution**
- **Compliant with FCC and ETSI regulations**
- **Wireless connectivity instead of private line leasing from service providers**
- **Compact integrated solution that is simple to install and operate**

### Description

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AirMux-200 family of products is a carrier-class, high capacity and low cost Point to Point broadband wireless transmission system. It packs Legacy TDM and Ethernet services over 5.x GHz unlicensed bands and is suitable for deployment in FCC or ETSI regulated countries.

AirMux-200, which provides high capacity connectivity of up to 48 Mbps, allows for the rapid deployment of E1/T1s and Ethernet links at a fraction of alternatives cost.

AirMux-200 is based on RADWIN's SmartPacket technology, which enables high performance and reliability.

AirMux-200 is the right solution for customers requiring immediate deployment of affordable carrier-class high capacity connectivity in the license exempt frequencies.

### Benefits

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#### *Short Time to Service*

- License exempt frequencies remove regulatory delays

#### *Carrier Class Solution*

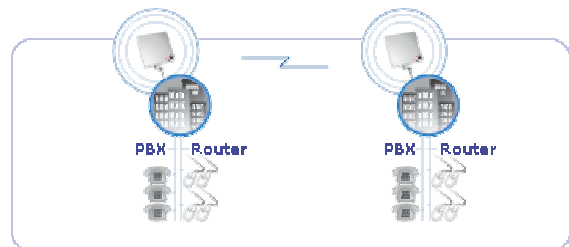
- High reliability and availability based on robust air-interface
- TDM transmission complies with all Telecom requirements.

### Typical Applications

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#### *Remote Sites' Connectivity*

AirMux-200 is offered to enterprises with multiple sites that require a cost effective and transparent connection of their LAN and PBX systems across their various campuses



#### *Broadband Access*

AirMux-200 provides broadband access services, such as broadband Ethernet and Leased Lines, to Small and Medium Enterprises (SME).

#### *Backhauling*

AirMux-200 backhauls traffic from cellular base stations, Hotspots or point of presence (POP) of wireless ISP's to backbone network.

## Specifications

### Configuration

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- **Architecture**  
Indoor Unit (IDU) and  
Outdoor Unit (ODU)
- **IDU to ODU Interface**  
Outdoor CAT-5 cable  
Maximum length of  
100m

### Radio

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- **Frequency**  
5.725 – 5.850 GHz  
5.470 – 5.725 GHz
- **Data Rate**  
Configurable up to 48Mbps
- **Channel BW**  
20MHz
- **Duplex Technique**  
TDD
- **System Gain**  
160dB
- **Modulation**  
OFDM - BPSK, QPSK,  
16QAM, 64QAM
- **Transmit Power**  
FCC: 18dBm (max)  
ETSI: 7dbm (Max, limited by the  
regulation)
- **Received Dynamic range**  
>60dB

### Integrated Antenna

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- **Gain**  
23dbi
- **Type**  
Flat panel
- **Polarization**  
Linear (V or H)
- **Beam Width**  
9°

### Optional External Antenna

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- **Gain:**  
28dbi
- **Type**  
Flat panel
- **Polarization**  
Linear (V or H)
- **Beam Width**  
4.5°

### General

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- **Power Feeding**  
110/220 VAC  
50/60Hz; 48VDC
- **Power Consumption**  
25W max

### LAN Interface

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- **Type**  
10/100BaseT,  
Auto-negotiation
- **Framing/Coding**  
IEEE 802.3/U
- **Bridging**  
Self-learning up to 2000 MAC  
addresses
- **Traffic Handling**  
MAC layer bridging, self-learning
- **Data Latency**  
2msec typical
- **Line Impedance**  
100Ω
- **VLAN Support**  
Transparent
- **Connector**  
RJ-45

### E1/T1 Interface

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- **Framing**  
Unframed (Transparent)
- **Timing**  
Plesynchronous (Independent Tx and  
Rx timing)
- **Latency**  
8 msec
- **Line Impedance**  
120/100Ohm, balanced
- **Number of Ports**  
1,2,4
- **Connector**  
RJ-45
- **Jitter & Wander**  
G.823, G.824

### Management

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- **Protocol**  
SNMP based
- **Network Management**  
Based on SNMPC
- **Management Interface**  
Ethernet 10/100BT  
RS-232
- **Upgrade Capabilities**  
Local and over the air remote software  
download
- **Diagnostic**  
Local and Remote  
loopback testing
- **Mounting**  
Pole and Wall

### Mechanics

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- **ODU Dimensions (with Integrated  
Antenna)**



Height: 12 in  
Width: 12 in  
Depth: 2.3 in  
Weight: 3.3 lb

- **IDU-E Dimensions**

Height: 1.7 in  
Width: 9.3 in  
Depth: 6.5 in  
Weight: 1.1 lb

## **Environmental**

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- **Outdoor Unit Enclosure**

All-weather cases

- **ODU Temperatures**

-35 – 60°C  
-31–140°F

- **IDU Temperatures**

-5 – 45°C  
23 - 113°F

- **Humidity**  
Up to 90%  
Non-condensing

## **Standards**

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- **Radio**  
FCC 47CFR Part 15, §15.247 and subpart C & E;  
ESTI EN 301 893
- **Safety**  
TUV 60950, according to UL 60950  
CAN-CSA C22.2 No. 60950
- **EMC**  
FCC 47CFR Part 15, §15.247 and subpart B  
ETSI EN 300 386, EN 301 489-1
- **Environmental**  
IEC 60721-3-4 Class 4M5  
IP 67

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