WipAir 6000

The ultimate carrier grade wireless bridge

WipAir 6000 is the most advanced OFDM 2x2 MIMO carrier class wireless system and most versatile radio in 700 MHz, 900 MHz, 2.0-2.3, 2.3-2.7, 3.3-3.8, 4.9 & 5.x GHz bands.
WipAir 6000 Point-to-Point & Point-to-Multipoint solution sets a benchmark of unrivaled performance, reliability, capacity, latency and RF robustness making it the ultimate choice for future-proof wireless systems.

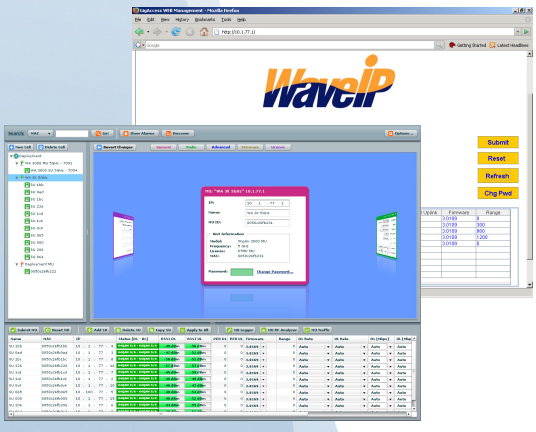
WipAir 6000 exceptional highlights

High Performance Radio

- Superior net throughput – **200 Mbps (100 Mbps FD)**
- **Dynamic asymmetric capacity**
- Best latency – **1ms** typical
- More than **100,000 PPS** (Packets Per Second)
- Long range – more than 130 Km
- Configurable channel bandwidth – 5 / 10 / 20 / 40 MHz
- 128-bit AES encryption & MAC level authentication

RF Interference Robustness

- **AIS** (Automatic Interference Sensibility) – unique technology that makes WipAir the most stable wireless solution in the market
- **Time Synchronization** eliminates self interference and allows frequency reuse
- **2x2 dual polarization MIMO** for high capacity and diversity
- The only solution with **Hitless ACM** (Adaptive Coding & Modulation)
- Fastest ARQ - Automatic Retransmit reQuest
- ACS – Automatic Channel Selection
- DFS - Dynamic Frequency Selection
- ATPC - Automatic Transmit Power Control
- FEC - Forward Error Correction



Advanced Networking

- **Point-to-Point** & **Point-to-Multipoint** modes
- WEB, EMS, SNMP and Telnet management
- QoS based on 802.1q & 802.1p
- VLAN tagging/stripping
- Up/downstream bandwidth control
- Packet filtering – based on broadcast, VLAN & IP
- Over the air remote management

Extremely Low CAPEX & OPEX

- **Most competitive price**
- **Rugged & Reliable** weather resistant design
- **Compact & Simple** to install:
  - RSSI buzzer for easy alignment
  - Built in RF Analyzer
  - < 6Watt power consumption
- Built in consecutive/concatenation capability
- Built in power & data redundancy
- Multiple frequency bands in one radio
- Flexible licensed / unlicensed radio

WipAir 6000 – The Best Value Backhaul Solution in the Market

WipAir 6000

Specifications

Radio

Radio Frequency	700MHz, 900 MHz, 2.0-2.3 GHz, 2.3-2.7 GHz, 3.3-3.8 GHz, 4.9 GHz, 5.x GHz							
Net Throughput	Up to 200 Mbps (100 Mbps Full Duplex)							
PPS	>100,000 Packets Per Second							
Range	More than 130 Km							
Channel Size	Configurable – 5 / 10 / 20 / 40 MHz							
Waveform	Advanced OFDM 2x2 dual polarization MIMO							
Output Power	Configurable up to 26 dBm, 40 dB dynamic range							
Handling Interference	AIS – Automatic Interference Sensibility Hitless ACM – Adaptive Coding & Modulation ACS – Automatic Channel Selection FEC – Forward Error Correction, k = 1/2, 2/3, 3/4, 5/6 Fast ARQ – Automatic Retransmit reQuest							
Encryption & Security	128-bit AES & MAC level authentication							
Modulation	BPSK	QPSK		16QAM		64QAM		
FEC	1/2	1/2	3/4	1/2	3/4	2/3	3/4	5/6
Data Rate @ 5 MHz (Mbps)	3.25	6.5	9.75	13	19.5	26	29.25	32.5
Data Rate @ 10 MHz (Mbps)	6.5	13	19.5	26	39	52	58.5	65
Data Rate @ 20 MHz (Mbps)	13	26	39	52	78	104	117	130
Data Rate @ 40 MHz (Mbps)	30	60	90	120	180	240	270	300
Sensitivity @ 20 MHz (dBm)	-87	-85	-83	-80	-78	-72	-70	-67

Networking and Management

Topology	Point-to-Point (PTP), Point-to-Multipoint (PTMP)
Access Technology	Time Division Duplex (TDD) – Dynamic or Symmetric
Data Latency	1ms typical
Network modes	Layer 2 Bridge, VLAN, VLAN / broadcast / IP filters
VLAN	Transparent, VLAN filter, tagging/stripping
QoS	8 priority queues based on 802.1q & 802.1p
Traffic shaping	SLA (Service Level Agreement) provisioning for uplink and downlink independently
Management	WEB, EMS, SNMP, Telnet, Built in throughput test and RF Analyzer tools

Physical and Environmental

Physical Interface	2 X 10/100 Base-T (ODU)
Connector Type	RJ–45
Mechanical	19 x 19 x 4 cm (external antenna port)
PoE Adapter: • Input Power • Mechanical	 100-240 VAC, 47-63 Hz 10 x 5 x 2.5 cm
Mounting	Wall or pole
Power Consumption	<6Watt
Operating Temperature	-30°c to 55°c
Operating Humidity	100% non condensing (Rainproof)
Power	Power over Ethernet (PoE) - 48 VDC

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