WipAir 8000

The best-in-class carrier grade wireless bridge

WipAir 8000 is the most advanced point-to-point and point-to-multipoint wireless solution at the most competitive price in the market

WipAir 8000
Exceptional Highlights

WipAir 8000 introduces superior dynamic net throughput of 310Mbps combined with ultra-low latency and best PPS delivery.

Designed for unmatched interference rejection, WipAir's unique Automatic Interference Sensibility (AIS) technology guarantees stable performance with constant latency and throughput.

WipAir Point-to-Point & Point-to-Multipoint solutions set a benchmark of unrivaled performance and reliability, making it the ultimate choice for future-proof wireless systems.

High Performance Radio

- Superior net throughput – **310 Mbps**
- **Dynamic asymmetric capacity**
- Best latency – **1ms** typical
- Up to **400,000 PPS** (Packets Per Second)
- Long range – more than 130 Km
- Configurable channel bandwidth – 3.5-50 MHz
- 128-bit AES encryption & MAC level authentication
- TDD and FDD modes - software configurable

Unmatched Interference Rejection

- **AIS** (Automatic Interference Sensibility) technology makes WipAir the most stable wireless solution in the market
- **Time Synchronization** eliminates self interference and allows frequency reuse
- **MIMO Radio** – higher capacity, longer range and diversity
- The only solution with **Hitless ACM** - Adaptive Coding & Modulation
- Fastest ARQ - Automatic Retransmit reQuest
- ACS – Automatic Channel Selection

Extremely Low CAPEX & OPEX

- **Most competitive price**
- **Flexible capacity,** software upgradeable
- **Rugged & Reliable** IP67 design
- **Compact & Simple** to install and maintain
- **<7Watt** power consumption
- Power & data redundancy
- Multiple frequency bands in one radio

Advanced Networking

- **Point-to-Point & Point-to-Multipoint** on a single platform
- State-of-the-art NMS
- WEB, EMS, SNMP and Telnet management
- QoS based on 802.1p, TOS & DSCP
- VLAN tagging/stripping & QinQ
- Uplink and downlink bandwidth control
- Over the air remote management

Specifications

Radio

Radio Frequency	700 MHz, 900 MHz, 2.0-2.3 GHz, 2.3-2.7 GHz, 3.3-3.8 GHz 4.8-6.0 GHz, 5.6-6.4 GHz, 6.0-7.0 GHz, 7.0-7.8 GHz, 10.0-10.7 GHz
Net Throughput	Build as you grow: • MIMO: scalable 5 - 310 Mbps (up to 375 Mbps air bit rate) • SISO: scalable 5 - 150 Mbps (up to 187.5 Mbps air bit rate)
PPS	Up to 400,000 Packets Per Second
Channel Size	Configurable - 3.5/5/7/10/14/20/28/40/50 MHz
Waveform	Advanced OFDM 2x2 dual polarization MIMO - BPSK, QPSK, 16QAM, 64QAM: • Hitless 7 stages Adaptive Coding & Modulation (ACM) • Fixed modulation mode • LDPC coding • Configurable modulation thresholds (minimum / maximum)
Output Power	Up to 30 dBm, configurable in 1dB step
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 • Fastest ARQ – Automatic Retransmit reQuest • TDD and FDD modes - software configurable
Encryption & Security	128-bit AES & MAC level authentication

Networking and Management

Topology	Point-to-Point (PTP), Point-to-Multipoint (PTMP) - software configurable
Access Technology	Time Division Duplex (TDD) & Frequency Division Duplex (FDD) Time Division Multiple Access (TDMA) - dynamic or symmetric
Data Latency	1ms typical per SU
Jumbo Frames	Supported
Network Modes	Layer 2 Bridge, VLAN, QinQ, VLAN / broadcast / IP filters, Layer 3 Routing, NAT, DHCP server, DHCP Relay
VLAN	Transparent, VLAN filter, tagging/stripping, QinQ
QoS	8 priority queues based on 802.1p, TOS and DSCP
Traffic Shaping	Bandwidth control for uplink and downlink independently
SLA (Service Level Agreement)	MIR/CIR/BE/CBR, configurable per SU
Management	ViewAir NMS, WEB, SNMP, Telnet, NBI CORBA, EMS (Link Manager) Built in throughput test, RF Analyzer and path profiling tools
Performance Management	Real time & history – logs and counters of traffic and radio data

Physical and Environmental

Physical Interface	2x 10/100/1000 Base-T (ODU)
Connector Type	2x RJ-45
Dimensions and Weight	19 x 19 x 4 cm, <1 Kg (connectorized)
Power	Power over Ethernet (PoE) - 48 VDC
PoE Adapter AC-DC: • **Input Power** • **Dimensions**	 100-240 VAC, 47-63 Hz 12 x 6 x 3.5 cm
PoE Adapter DC-DC: • **Input Power** • **Dimensions**	 10-60 VDC 16 x 6 x 3 cm
Power Consumption	<7Watt
IP Rating	IP67
Operating Temperature	-40ºc to 60ºc
Operating Humidity	100% non condensing (Rainproof)

About WaveIP

WaveIP is the technology leader of Point-to-Point and Point-to-Multipoint Broadband Wireless solutions in the sub-11 spectrum, founded in January 2000.
WaveIP solutions are perfect for IP & cellular backhauls, video surveillance and security networks, enterprises and municipality networks and business grade broadband access services.

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