

The ultimate high capacity Point-to-Point wireless bridge

WaveIP's WipAirII is a benchmark for High Performance carrier class Wireless Backhauls in the unlicensed 2.4, 5.47 – 5.85 GHz bands that comprises of Reliability, High Capacity, Lowest Latency, RF Robustness, Rugged outdoor design, Flexibility and Simplicity to install and maintain.

WipAirII exceptional highlights

High Performance Radio

- OFDM technology – spectrum efficient 54 Mbps data rate and multipath immunity
- Highest throughput - 40 Mbps useable Ethernet throughput
- Best latency – 1ms typical
- Long range – up to 80 Km
- High system gain – up to 148 dB
- Dynamic up/downstream throughput, automatically controlled
- Adaptive Modulation (OFDM – BPSK/QPSK/16QAM/64QAM)
- Security – secure MAC level authentication and AES encryption
- WEB & EMS management

RF & Interference Robustness

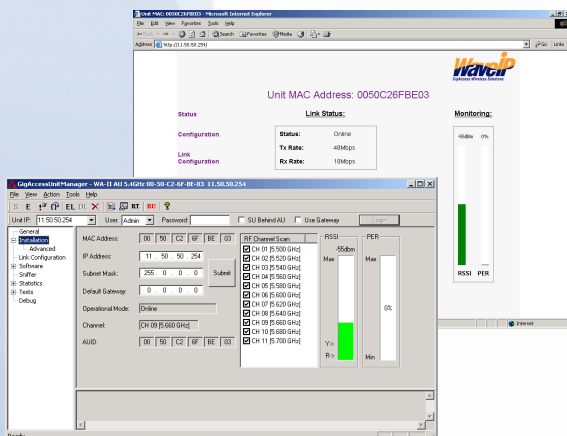
- Automatic Interference Sensibility
- Unique Time Synchronization eliminates self interference and allows frequency reuse
- Dynamic Frequency Selection (DFS)
- Automatic Transmit Power Control (ATPC)
- Forward Error Correction (FEC)
- Automatic Retransmit reQuest (ARQ)
- RF sniffer tool

Lowest Total Cost of Ownership (TCO)

- The most competitive price
- Rugged & Reliable weather resistant design
- Compact & Simple to install (RSSI buzzer for easy alignment)
- Built-in consecutive/concatenation capability
- Flexible license exempt radio

Applications

- Rural/Suburban or remote Locations
- High bandwidth campus solutions
- Backbone for Metro WiFi Networks
- Government installations
- Temporary & Emergency systems
- Cellular and 3G IP data backhaul
- Video surveillance
- E-Learning
- Banking/Telemedicine



WipAirII - The Best Value Backhaul Solution in the Market

Specifications

Radio

Radio Frequency	2.4 GHz: 2400 – 2483 MHz 5.4 GHz: 5470 – 5725 MHz 5.8 GHz: 5725 – 5850 MHz
Data Rate	Configurable up to 54 Mbps
Channel Size	20 MHz
Modulation	BPSK, QPSK, 16 QAM, 64 QAM – fixed or adaptive modulation
Waveform	OFDM
Output Power	Configurable up to 25 dBm
Receiver Sensitivity	-86 dBm
Handling Interference	Automatic Interference Sensibility Forward Error Correction (FEC) Automatic Retransmit reQuest (ARQ)
Regulatory	FCC, ETSI

Networking and Management

Net Throughput	Up to 40 Mbps
Access Technology	Time Division Duplex (TDD) – Dynamic & automatic up/downstream
Data Latency	1ms typical
Traffic Handling	Layer 2 transparent bridging
Security	AES 128 & MAC level authentication
Management	WEB, EMS, Built in throughput tests and RF sniffer tool
Software update	Over the air remote download

Physical and Environmental

Physical Interface	2 X 10/100 Base-T (ODU)
Connector Type	RJ – 45
Mechanical	External antenna port: 7" X 7" X 2" Integrated antenna: 12" X 12" X 2"
Mounting	Wall or pole
Operating Temperature	-20°C to 55°C
Operating Humidity	5% to 95% non condensing (Rainproof)
Power	Power over Ethernet (PoE) - 48 VDC
PoE Adapter:	
• Input Power	100-240 VAC, 47-63 Hz
• Mechanical	4" X 2" X 1"
Power Consumption	6 Watt