

## The ultimate carrier grade wireless bridge

WipAir 6000 is the most advanced OFDM 2x2 MIMO carrier class wireless backhaul and most versatile radio in 700-900 MHz, 2.4, 3.3-3.8, 4.9 & 5.x GHz bands. WipAir 6000 comprises of reliability, high capacity, lowest latency, RF robustness, rugged outdoor design, flexibility and simplicity to install and maintain.

### WipAir 6000 exceptional highlights

#### High Performance Radio

- Superior net throughput – **200 Mbps (100 Mbps FD)**
- Best latency – **1ms** typical
- More than **50,000 PPS** (Packets Per Second)
- Long range – up to 130 Km
- Configurable channel bandwidth – 5 / 10 / 20 / 40 MHz
- **Dynamic or symmetric up/downstream throughput**
- 128-bit AES encryption & MAC level authentication

#### RF & Interference Robustness

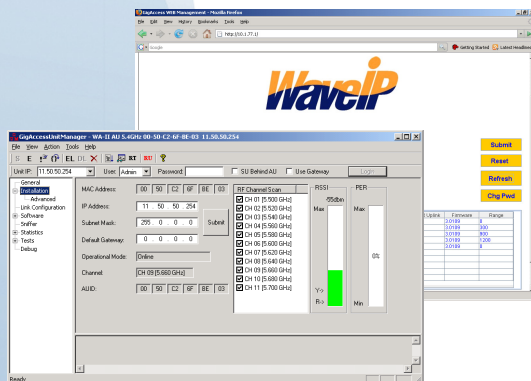
- **AIS - Automatic Interference Sensibility**
- Unique **Time Synchronization** eliminates self interference and allows frequency reuse
- **2x2 dual polarization MIMO** for high capacity and diversity
- **ACS** – Automatic Channel Selection
- **ACM** - Adaptive Coding & Modulation
- **DFS** - Dynamic Frequency Selection
- **ATPC** - Automatic Transmit Power Control
- **FEC** - Forward Error Correction
- **Fast ARQ** - Automatic Retransmit reQuest

#### Advanced Networking

- **Point-to-Multipoint** mode
- 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
- 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



## Specifications

### Radio

Radio Frequency	700-900 MHz, 2.3-2.4 GHz, 3.3-3.8 GHz, 4.9 GHz, 5.x GHz							
Net Throughput	Up to 200 Mbps (100 Mbps Full Duplex)							
PPS	50,000 Packets Per Second							
Range	Up to 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 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
Traffic Handling	Layer 2 transparent bridging
VLAN	Transparent or tagging/stripping
QoS	Based on 802.1q & 802.1p
Management	WEB, EMS, SNMP, Telnet, Built in throughput tests 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	100-240 VAC, 47-63 Hz
• Mechanical	10 x 5 x 2.5 cm
Mounting	Wall or pole
Power Consumption	< 6Watt
Operating Temperature	-30°C to 55°C
Operating Humidity	95% non condensing (Rainproof)
Power	Power over Ethernet (PoE) - 48 VDC