

RADWIN JET, JET AIR Model

Sector Base Station - Data Sheet (RW5000/HBS-Air/5AC5/F54/UNI/JET/INT)



RW-5AC5-9654

Product Description

RW-5AC5-9654 is an AIR series beamforming sector Base Station radio unit (HBS). It provides 500 Mbps net aggregate throughput while delivering access connectivity for up to 64 Subscriber Units (HSU).

RW-5AC5-9654 supports 4.9 to 5.9 GHz and complies with Universal, MII, FCC, FCC/IC & UBR regulations.

The radio comes with a smart beamforming integrated antenna with embedded GPS.

Product Highlights

- Base station with smart beamforming antenna
- Up to 500 Mbps net aggregated throughput
- Long range - Up to 40 km / 25 miles
- Supports up to 64 HSUs
- Best Effort Service
- Dynamic channel bandwidth selection: 20/40/80MHz
- Short and constant latency
- Single radio supporting multiple bands
- Advanced MIMO, OFDM and Diversity technologies
- Robust and reliable operation in harsh conditions, extreme temperatures and non-line-of-sight scenarios
- Ease of operation and maintenance

Product Specifications:

| | | | | | |
|----------------------------------|--|------------------------|------------------------|------------------------|---|
| Configuration | | | | | |
| Architecture | Outdoor Unit with a smart beamforming integrated antenna with embedded GPS | | | | |
| PoE to ODU Interface | Outdoor CAT-5e; Maximum cable length: 100m for 10/100BaseT and 75m for 1000BaseT | | | | |
| Radio | | | | | |
| Max Capacity | 500 Mbps net aggregate throughput | | | | |
| Subscriber Units support | Up to 64 subscriber units | | | | |
| Channel Bandwidth | Configurable: 10, 20, 40, 80 MHz (for the default band) | | | | |
| Modulation | MIMO-OFDM (BPSK/QPSK/16QAM/64QAM/256QAM) | | | | |
| Adaptive Modulation & Coding | Supported | | | | |
| Smart Bandwidth Management (DBA) | Supported | | | | |
| DFS | Supported (FCC) | | | | |
| Diversity | Supported | | | | |
| Max Tx Power | 25 dBm | | | | |
| Duplex Technology | TDD | | | | |
| Error Correction | FEC k = 1/2, 2/3, 3/4, 5/6 | | | | |
| Encryption | AES 128 | | | | |
| Support Indoor units | RADWIN PoE devices (RW-9921-101X) | | | | |
| Uplink / Downlink Allocation | Configurable: Symmetric or Asymmetric | | | | |
| End to End Latency | Typical: 3.5msec @ 2 SUs; 20msec @ 64 HSUs | | | | |
| Layer 2 | Bridging learning of 5K MAC addresses | | | | |
| QoS | Packet classification to 4 priority queues according to 802.1P or Diffserv | | | | |
| VLAN Support | 802.1Q, QinQ, 4094 VLANs | | | | |
| TDD Intra Site Synchronization | Supported | | | | |
| ODU Management | IPv4/IPv6 dual-stack; SNMPv1, SNMPv3; HTTP/HTTPS using web browser | | | | |
| Supported Bands | | | | | |
| Band | CBW 10MHz [GHz] | CBW 20MHz [GHz] | CBW 40MHz [GHz] | CBW 80MHz [GHz] | Radio Compliance |
| 5.1 GHz Universal | 5.145-5.340 | 5.140-5.345 | 5.130-5.355 | 5.130-5.375 | Universal |
| 5.8 GHz MII | - | 5.725-5.850 | 5.725-5.850 | 5.725-5.850 | CMIIT RTA |
| 5.9 GHz Universal | 5.725-5.850 | 5.725-5.850 | 5.725-5.850 | 5.725-5.850 | Universal |
| 5.4 GHz FCC | - | 5.480-5.715 | 5.480-5.715 | 5.485-5.715 | FCC 47CFR Part 15.407 |
| 5.2 GHz FCC | - | 5.255-5.340 | 5.255-5.340 | 5.250-5.340 | FCC 47CFR Part 15.407 |
| 5.8 GHz FCC/IC | 5.730-5.845 | 5.730-5.845 | 5.730-5.845 | 5.730-5.845 | FCC 47CFR Part 15.407; ISSED RSS-247 |
| 5.4 GHz Universal (default) | 5.470-5.725 | 5.465-5.730 | 5.455-5.740 | 5.455-5.760 | Universal |
| 4.9 GHz FCC/IC | 4.940-4.990 | 4.940-4.990 | - | - | FCC 47CFR Part 90 Subpart Y; IC RSS-111 |
| 4.9 GHz Universal | 4.900-4.995 | 4.900-4.995 | 4.900-4.995 | 4.900-4.995 | Universal |
| 5.9 GHz Universal | 5.725-5.955 | 5.720-5.960 | 5.710-5.970 | 5.710-5.990 | Universal |
| 5.1 GHz UBR | 5.125-5.880 | 5.125-5.880 | 5.125-5.880 | 5.125-5.880 | Universal |
| Mechanical | | | | | |
| ODU Dimensions | 35.6(w) x 22.5(h) x 9.4(d) cm | | | | |
| ODU Weight | 3.3 kg / 7.28 lbs | | | | |
| Power | | | | | |
| Power Feeding | Power provided over ODU-IDU cable | | | | |
| Power Consumption | <30W | | | | |
| Environmental | | | | | |
| Operating Temperatures | -35°C to 60°C / -31°F to 140°F | | | | |
| Humidity | 100% condensing, IP67 (totally protected against dust and against immersion in water up to 1m) | | | | |
| Safety | | | | | |
| US/CAN (cTUVus) | UL 60950-1, UL 60950-22, CAN/CSA C22.2 60950-1, CAN/CSA C22.2 60950-22 | | | | |
| CE/IEC | EN/IEC 60950-1, EN/IEC 60950-22 | | | | |
| EMC | | | | | |
| FCC | 47 CFR, Part15, Subpart B, Class B | | | | |
| ETSI | EN 300 386, EN 301 489-1, EN 301 489-4 | | | | |
| CAN/CSA-CEI/IEC | CISPR 22-2010 Class B | | | | |

| Integrated Antenna | |
|------------------------|---------------------------------------|
| Gain | 20 dBi |
| VSWR | 2.0 : 1 |
| 3 dB Azimuth Beamwidth | 90 Deg. (typ) |
| Polarization | Dual Linear (Vertical and Horizontal) |
| Sidelobes Level | -12 dB(typ) |
| Cross Polarization | -30dB (typ) |
| F/B Ratio | -25 dB |
| Port To Port Isolation | 35 dB (typ) |
| Lightning Protection | DC Grounded |

Ordering Info

Part Number: RW-5AC5-9654

Description: RADWIN JET AIR ODU, with a smart beamforming integrated antenna with embedded GPS, supporting multi frequency bands at 5.x GHz, factory default 5.4 GHz Universal.

Datasheet information can be changed by manufacturer without prior notice