RADWIN HPMP JET-AIR 250 Series

Sector Base Station - Data Sheet (RW5000/HBS-Air/5AB5/F54/ETSI/JET/INT)

RW-5AB5-2654

Product Description

RW-5AB5-2654 is an AIR series beamforming sector Base Station radio unit (HBS). It provides 250 Mbps net aggregate throughput while delivering access connectivity for up to 64 Subscriber Units (HSU).
RW-5AB5-2654 supports 5.1 to 5.8 GHz and complies with ETSI regulations.
The radio comes with a smart beamforming integrated antenna with embedded GPS.

Product Highlights

- Base station with smart beamforming antenna
- Up to 250 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

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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	250 Mbps net aggregate throughput
Subscriber Units (HSUs) support	Up to 64 HSUs
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)	Best Effort Service
DFS	Supported (ETSI)
Diversity	Supported
Max Tx Power	25 dBm; max EIRP 30 dBm (for the default band)
Duplex Technology	TDD
Error Correction	FEC k = 1/2, 2/3, 3/4, 5/6
Encryption	AES 128; FIPS 197
Support Indoor units	RADWIN PoE devices (RW-9921-101X)
Uplink / Downlink Allocation	Configurable: Symmetric or Asymmetric
End to End Latency	Typical: 3msec
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 (via Internal GPS receiver and antenna)
TDD Inter Site Synchronization	Supported (via Internal GPS receiver and antenna)
ODU Management	IPv4/IPv6 dual-stack; SNMP v1 and v3; HTTP using web browser

Supported Bands					
Band	CBW 10MHz [GHz]	CBW 20MHz [GHz]	CBW 40MHz [GHz]	CBW 80MHz [GHz]	Radio Compliance
5.3 GHz ETSI	5.150-5.350	5.150-5.350	-	-	EN 301 893
5.8 GHz ETSI	5.735-5.865	5.735-5.865	-	-	EN 302 502
5.4 GHz ETSI (default)	5.475-5.705	5.470-5.710	5.490-5.690	5.490-5.650	EN 301 893

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

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

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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-5AB5-2654

Description: RADWIN JET-AIR 250 ODU, with a smart beamforming integrated antenna with embedded GPS, supporting multi frequency bands at 5.x GHz, factory default 5.4 GHz ETSI.