RADWIN HPMP NEO Model

Sector Base Station - Data Sheet (RW5000/HBS/5AG5/F58/FCC/NEO/INT)

RW-5AG5-0850

Product Description

RW-5AG5-0850 is a sector Base Station radio unit (HBS) that provides up to 750 Mbps net aggregate throughput, while delivering access connectivity for up to 64 SUs
RW-5AG5-0850 includes separate smart beamforming antenna with embedded GPS unit.
RW-5AG5-0850 supports 5.1 to 5.8 GHz.

Product Highlights

- Dual carriers base station radio with smart beamforming antennas
- Up to 750 Mbps net aggregated throughput
- Long range - Up to 40 km / 25 miles
- Best Effort service
- Support up to 64 SUs
- Exceptional short and constant latency
- 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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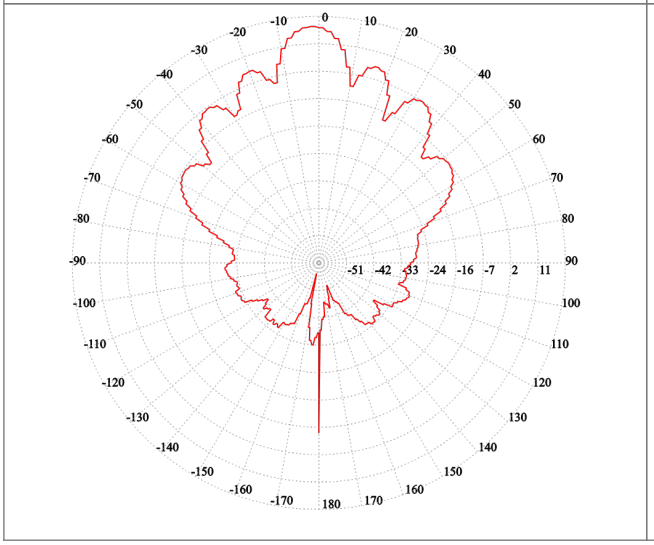
Product Specifications:

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	750 Mbps net aggregate throughput				
Subscriber Units support	Up to 64 subscriber units				
Channel Bandwidth	Configurable: 10, 20, 40, 80 MHz (for the default band); Dynamic Channel BW selection (20/40/80 MHz)				
Modulation	MIMO-OFDM (BPSK/QPSK/16QAM/64QAM/256QAM)				
Adaptive Modulation & Coding	Supported				
Smart Bandwidth Management (DBA)	Best Effort Service				
DFS	Supported (FCC)				
Diversity	Supported				
Max Tx Power	25 dBm; max EIRP 36 dBm (for the default band)				
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 8K 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 integrated GPS receiver				
TDD Inter Site Synchronization	Supported via integrated GPS receiver				
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**
5.8 GHz FCC/IC (default)	5.730-5.845	5.730-5.845	5.730-5.845	5.730-5.845	FCC 47CFR Part 15.407; ISED RSS-247
5.1 GHz FCC	5.170-5.250	5.170-5.250	5.170-5.250	5.170-5.250	FCC 47CFR Part 15.407
5.4 GHz FCC	-	5.480-5.715	5.480-5.715	5.485-5.715	FCC 47CFR Part 15.407
Mechanical					
ODU Dimensions	32.5(w) x 32.5(h) x 9(d) cm				
ODU Weight	3.35 kg / 7.39 lbs				
Power					
Power Feeding	Power provided over ODU-IDU cable				
Power Consumption	<25W				
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				

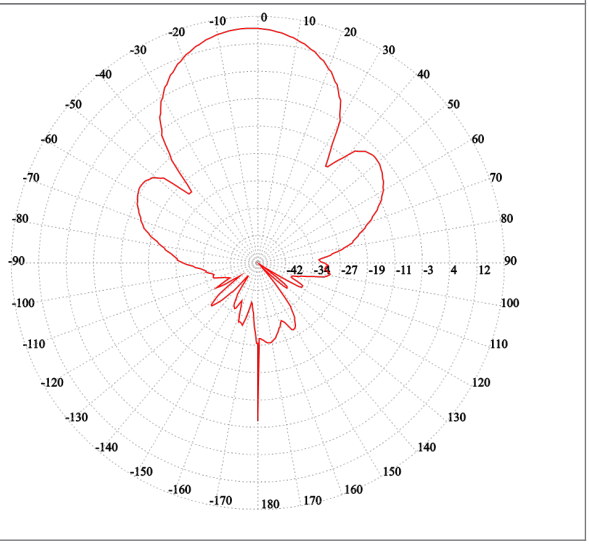
Integrated Antenna	
Gain	17 dBi
VSWR	2.0 : 1
3 dB Azimuth Beamwidth	90 Deg. (typ)
Polarization	Dual Linear (Vertical and Horizontal)
Sidelobes Level	-20 dB(typ)
Cross Polarization	-25 dB (typ)
F/B Ratio	-25 dB
Port To Port Isolation	35 dB (typ)
Lightning Protection	DC Grounded

Antenna Pattern

Elevation @ 5.6GHz



Azimuth @ 5.6GHz



Ordering Info

Part Number: RW-5AG5-0850

Description: RADWIN NEO ODU, with a smart beamforming integrated antenna with embedded GPS, supporting multi frequency bands at 5.x GHz, factory default 5.8 GHz FCC/IC.

Datasheet information can be changed by manufacturer without prior notice