RADWIN HPMP NEO Model

Sector Base Station - Data Sheet (RW5000/HBS/5AG5/F54/ETSI/NEO/INT)

RW-5AG5-2854

Product Description

RW-5AG5-2854 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-5AG5-2854 includes separate smart beamforming antenna with embedded GPS unit.
RW-5AG5-2854 supports 5.4 to 5.8 GHz.

Product Highlights

- Smart beamforming antenna
- 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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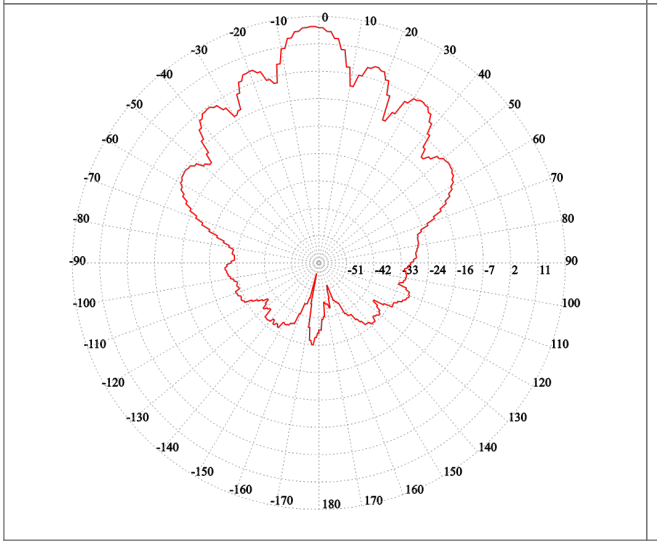
Product Specifications:

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: 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 (ETSI)			
Diversity	Supported			
Max Tx Power	25 dBm per chain; 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			
Supported Indoor units	RADWIN PoE devices (RW-9921-400X)			
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 built-in GPS receiver			
TDD Inter Site Synchronization	Supported via built-in GPS receiver			
ODU Management	IPv4/IPv6 dual-stack; SNMPv1, SNMPv3; HTTP/HTTPS using web browser			
Supported Bands				
Band	**CBW 20MHz [GHz]**	**CBW 40MHz [GHz]**	**CBW 80MHz [GHz]**	**Radio Compliance**
5.4 GHz ETSI (default)	5.470-5.710	5.490-5.690	5.490-5.650	ETSI EN 301 893
5.8 GHz ETSI	5.735-5.865	-	-	ETSI EN 302 502
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			

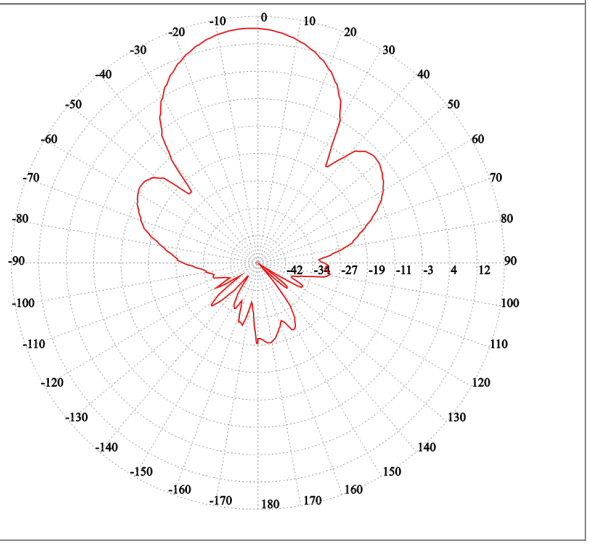
Integrated Antenna	
Gain	16 dBi
VSWR	2.0 : 1
3 dB Azimuth Beamwidth	90 Deg. (typ)
Polarization	Dual Linear (Vertical and Horizontal)
Sidelobes Level	-20 dB(typ)
Cross Polarization	-25 dB (typ)
F/B Ratio	-25 dB
Port To Port Isolation	35 dB (typ)
Lightning Protection	DC Grounded

Antenna Pattern

Elevation @ 5.6GHz



Azimuth @ 5.6GHz



Ordering Info

Part Number: RW-5AG5-2854

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

* May be limited by regulation in the specific band being used

Datasheet information can be changed by manufacturer without prior notice

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