

RADWIN 5000 – HPMP

Sector Base Station RW-5050-9154 – Data Sheet

HBS 5050 SERIES



Sector Base Station - RW-5050-9154

RADWIN RW-5050-9154 is a Sector Base Station Radio unit, providing up to 50Mbps net aggregate throughput and delivering access connectivity up to 32 Subscriber Units (HSUs).

RW-5050-9154 supports 5.X GHz and complies with FCC, IC, ETSI and universal regulations.

RW-5050-9154 includes integrated antenna of 90 degree and 14dBi gain.

Product Highlights

- High Capacity sector Base Station
- Up to 50 Mbps net aggregate throughput
- Guaranteed Service level Agreement (SLA) per SU
- Outstanding short and constant latency
- Support up to 32 HSUs
- Long range – up to 40 km/25 miles
- Single radio supporting multiple bands
- Advanced MIMO, OFDM and Diversity technologies
- Excellent operation in nLOS and NLOS scenarios
- Ease of operation and maintenance

RW-5050-9154 - Product Specifications

CONFIGURATION	
Architecture	Outdoor Unit with Integrated Antenna
PoE to ODU Interface	Outdoor CAT-5e; Maximum cable length: 100m for 10/100BaseT and 75m for 1000BaseT
RADIO	
Capacity	50 Mbps net aggregate throughput @ 10MHz Channel BW
Subscriber Units (HSUs) support	Up to 32 HSUs
Range	Up to 40 km / 25 miles
Channel Bandwidth	Configurable: 5 and 10 MHz
Modulation	2x2 MIMO-OFDM (BPSK/QPSK/16QAM/64QAM)
Adaptive Modulation & Coding	Supported
Bandwidth allocation	Symmetric and Asymmetric
DFS	Supported
End to End Latency	Typical: 3.5msec @ 2 HSUs; 20msec @ 32 HSUs
Diversity	Supported
Spectrum Viewer	Supported
Max Tx Power	25 dBm (*)
Duplex Technology	TDD
Error Correction	FEC k = 1/2, 2/3, 3/4, 5/6
Encryption	AES 128
Ethernet Interface	10/100BaseT, 1000BaseT (supported via RW-9921 Series)
Layer 2	Bridging learning of 5K MAC addresses
QoS	Supported, Packet classification to 4 queues according to 802.1p and Diffserv
VLAN	Supported, 802.1Q, 8021.P, QinQ
TDD Intra Site Synchronization	Supported
TDD Inter Site Synchronization	Supported through common GPS receiver per site

SUPPORTED BANDS		
5.4 GHz Universal*	5.465 - 5.730 GHz	Universal
6.0 GHz Universal	5.690 - 6.060 GHz	Universal
5.9 GHz Universal	5.730 - 5.960 GHz	Universal
5.3 GHz Universal	5.140 - 5.345 GHz	Universal
4.9 GHz Universal	4.890 - 5.010 GHz	Universal
5.8 GHz FCC/IC	5.725 - 5.850 GHz	FCC 47CFR, Part 15, Subpart C and IC RSS-210
4.9 GHz FCC/IC	4.940 - 4.990 GHz	FCC 47CFR, Part 90, Subpart Y and IC RSS-111
5.8 GHz ETSI	5.725 - 5.875 GHz	ETSI EN 302 502
5.4 GHz ETSI	5.475 - 5.720 GHz	ETSI EN 301 893
5.3 GHz ETSI	5.150 - 5.350 GHz	ETSI EN 301 893
*Default Band		
MECHANICAL		
ODU Dimensions	20(w) x 50(h) x 12.0(d) cm	
ODU Weight	3.3 kg / 7.2 lbs	
POWER		
Power Feeding	Power provided over ODU-IDU cable using PoE	
Power Consumption	<25W	
ENVIRONMENTAL		
Operating Temperatures	-35°C to 60°C / -31°F to 140°F	
Humidity	100% condensing, IP67 (totally protected against dust and against immersion up to 1m)	
SAFETY		
FCC/IC (cTUVus)	UL 60950-1, UL 60950-22, CAN/CSA C22.2 60950-1, CAN/CSA C22.2 60950-22	
ETSI	EN/IEC 60950-1, EN/IEC 60950-22	
EMC		
FCC	47 CFR Class B, Part15, Subpart B	
ETSI	EN 300 386, EN 301 489-1, EN 301 489-4	
CAN/CSA-CEI/IEC	CISPR 22-04 Class B	
AS/NZS	CISPR 22-2004 Class B	

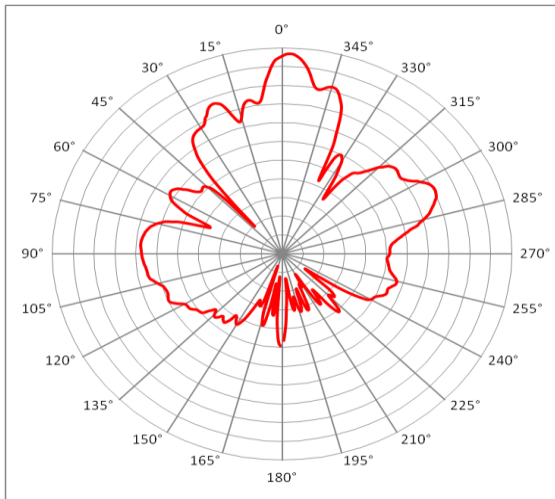
Note (*) –Subject to regulation in each country

Integrated Antenna

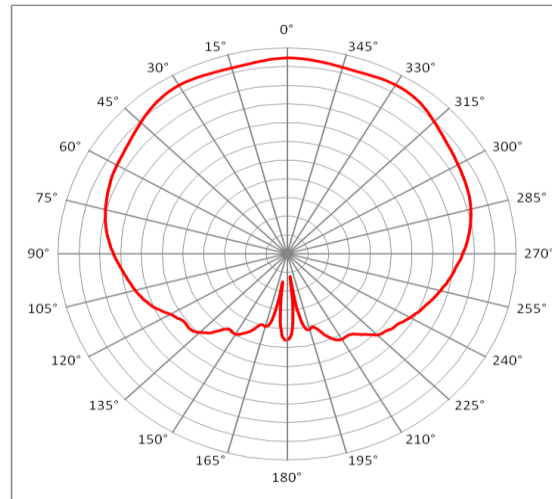
Gain	14 dBi
VSWR	1.7 : 1 (typ)
3 dB Az. Beamwidth	90° (typ)
3 dB El. Beamwidth	8° (typ)
Polarization	Dual Linear (Vertical and Horizontal)
Sidelobes Level	-10 dB (typ)
Cross Polarization	-25 dB (typ)
F/B Ratio	-25 dB (typ)
Port To Port Isolation	30 dB (min)
Lightning Protection	DC grounded

Antenna Pattern

Elevation @ 5.8GHz



Azimuth @ 5.8GHz

**Ordering Info****Part Number:** RW-5050-9154**Description:** RADWIN HBS 5050 Series, Base Station Radio with a 90 degree integrated antenna, supporting multi frequency bands at 5.x GHz, factory default 5.4 GHz Universal**Corporate Headquarters,** T. +972.3.766.2900, E. sales@radwin.com, www.radwin.com

The RADWIN name is a registered trademark of RADWIN Ltd.

© All rights reserved, May 2012 DS RW-5050-9154/05.12, Software Release 3.3

RADWIN