

## RADWIN HPMP MultiSector Series

Sector Base Station - Data Sheet (RW5000/HBS-MS/5PG5/F54/UNI/INT)



RW-5PG5-9154

### Product Description

RADWIN MultiSector base station is a compact 5.x GHz dual-carrier base station that can support up to 4 antennas: two integrated, and two external.

Each carrier feeds one integrated and one external antenna and boosts them with up to 750Mbps net throughput. The integrated 90° antennas together cover 180°.

The external antennas are connected to the base station over TNC connectors, either as a self-backhaul or as sector antennas, extending the coverage up to 360°.

The MultiSector base station includes a built in GPS receiver and antenna for TDD synchronization. It is connected to the WAN over single PoE or SFP.

RW-5PG5-9154 supports 4.9 to 6 GHz.

### Product Highlights

- Dual-carrier base station
- Up to 1500 Mbps (2 x 750 Mbps) net aggregated throughput
- Supports up to 4 antennas:
  - 2x integrated sector antennas
  - 2x external antennas (TNC connectors)
- Optional self-backhaul
- Supports up to 128 SUs
- Best-Effort or CIR service level per SU
- Short range applications
- RADWIN unique air interface
- Auto MIMO 2x2/Diversity per SU
- Robust and reliable operation in harsh conditions and extreme temperatures
- IP-67 compliant
- Exceptionally compact and easy installation
- Compatible with RADWIN installed base \*

\*Applicable for SUs and HSUs that can be upgraded to software version 4.9.35 and above

## Product Specifications:

Configuration					
Architecture	Outdoor unit with 2 integrated MIMO antennas and additional connectors for 2 external MIMO antennas (4 x TNC)				
PoE to ODU Interface MS	Outdoor CAT-5e; Maximum cable length: 75m for 1000BaseT				
Data Interfaces	1000BaseT (over PoE) or SFP (1GbE Full Duplex , supports single and multi-mode)				
Radio					
Max Capacity	1500 Mbps net aggregate throughput				
Subscriber Units (HSUs) support	Up to 128 HSUs				
Range	Up to 40 km / 25 miles				
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)	Supported				
DFS	Not Supported				
Diversity	Supported				
Max Tx Power	23 dBm				
ATPC	Supported (uplink)				
Duplex Technology	TDD				
Error Correction	FEC k = 1/2, 2/3, 3/4, 5/6				
Encryption	AES 128				
Support Indoor units	RADWIN AC PoE devices (9921-104X, 9921-101X), DC PoE device (9921-2059), IDU-S (7401-6006), IDU-H (7301-2006)				
Uplink / Downlink Allocation	Configurable: Symmetric or Asymmetric				
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 GPS receiver				
TDD Inter Site Synchronization	Supported via GPS receiver				
ODU Management	IPv4/IPv6 dual-stack; SNMP v1, SNMPv3; HTTP/HTTPS using web browser				
Supported Bands					
Band	CBW 10MHz [GHz]	CBW 20MHz [GHz]	CBW 40MHz [GHz]	CBW 80MHz [GHz]	Radio Compliance
5.4 GHz Universal (default)	5.470-5.725	5.465-5.730	5.455-5.740	5.455-5.760	Universal
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; ISED RSS-247
5.1 GHz Universal	5.145-5.340	5.140-5.345	5.130-5.355	5.130-5.375	Universal
5.9 GHz Universal	5.725-5.850	5.725-5.850	5.725-5.850	5.725-5.850	Universal
5.9 GHz Universal	5.725-5.955	5.720-5.960	5.710-5.970	5.710-5.990	Universal
6.0 GHz Universal	5.695-6.055	5.690-6.060	5.680-6.070	5.680-6.090	Universal
4.9 GHz Universal	4.900-4.995	4.900-4.995	4.900-4.995	4.900-4.995	Universal
4.9 GHz Universal	4.895-6.005	4.890-6.010	4.880-6.020	4.860-6.040	Universal
Mechanical					
ODU Dimensions	24.0(w) x 34.0(h) x 24.0(d) cm				
ODU Weight	4.0 kg / 8.82 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 62368-1 2nd edition, IEC/EN/UL/CSA 60950-22:2017				
CE/IEC	IEC/EN 62368-1:14+A11:17				
EMC					
FCC	47 CFR, Part15, Subpart B, Class B				
ETSI	EN 301 489-1, EN 301 489-4, 301 489-17				
CAN/CSA-CEI/IEC	ICES-003				
AS/NZS	CISPR 32:2015 Class B				

<b>Integrated Antenna parameters (default band)</b>	
Gain	12 dBi
VSWR	2.0 : 1
3 dB Azimuth Beamwidth	180 Deg. (Typ)
Polarization	Dual Linear (Vertical and Horizontal)
Sidelobes Level	-25 dB(typ)
Cross Polarization	-27dB (typ)
F/B Ratio	-30 dB
Port To Port Isolation	40 dB (typ)
Lightning Protection	DC Grounded
<b>Antenna Pattern</b>	

**Ordering Info**

**Part Number:** RW-5PG5-9154

**Description:** RADWIN MultiSector ODU, with an integrated antenna, supporting multi frequency bands at 5.x GHz, factory default 5.4 GHz Universal.

Datasheet information can be changed by manufacturer without prior notice