RADWIN MultiSector, MS Int. Model

Sector Base Station - Data Sheet (RW5000/HBS-MS-PRO/5BG5/F54/ETSI/16/INT)



RW-5BG5-2154

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-5BG5-2154 supports 5.4 to 5.8 GHz.

Product Highlights

- Dual-carrier base station
- Up to 1.5Gbps (2x750Mbps) net aggregated throughput
- Supports up to 4 antennas: 2x integrated sector antennas - 2x external antennas (TNC connectors)
- Optional self-backhaul
- Supports up to 16 SUs
- Best-Effort or CIR service level per SU
- Short range applications
- RADWIN class-leading 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 *
 *Supports SUs and HSUs with software
 version 4.9.35 and above



Product Specifications:

Configuration						
Architecture	Outdoor unit w	ith 2 integrated N	MIMO antennas a	nd additional con	nectors 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)					
Radio						
Max Capacity	1.5 Gbps net aggregate throughput					
Subscriber Units support	Up to 16 subscriber units					
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	Supported					
(DBA)						
DFS	Supported (ETSI)					
Diversity	Supported					
Max Tx Power	23 dBm per chain; max EIRP 30 dBm (for the default band)					
ATPC	Supported (uplink)					
Duplex Technology	TDD					
Error Correction	FEC k = 1/2, 2/3, 3/4, 5/6					
Encryption	AES 128					
Supported Indoor units	RADWIN IDU-S (7401-6006), IDU-H (7301-2006)					
Supported POE units	RADWIN Indoor AC PoE devices (9921-104X, 9921-101X), Indoor DC PoE device (9921-2059), outdoor AC PoE					
supported FOE units	device (9921-008X), outdoor DC PoE device (9921-101X), indoor DC PoE device (9921-2039), outdoor AC PoE device (9921-0110)					
Uplink / Downlink Allocation	Configurable: Symmetric or Asymmetric					
End to End Latency	Typical: 3.5msec @ 2 SUs					
Layer 2	77					
	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 Supported via built-in GPS receiver					
TDD Inter Site Synchronization	+ -:-			TDC -1 I-I		
ODU Management	IPV4/IPV6 dual-	IPv4/IPv6 dual-stack; SNMPv1, SNMPv3; HTTP/HTTPS using web browser				
Supported Bands		00111000011			5 1: 6 1:	
Band	CBW 10MHz [GHz]	CBW 20MHz [GHz]	CBW 40MHz [GHz]	CBW 80MHz [GHz]	Radio Compliance	
5.4 GHz ETSI (default)	5.475-5.705	5.470-5.710	5.490-5.690	5.490-5.650	ETSI EN 301 893	
5.8 GHz ETSI	5.735-5.865	5.735-5.865	-	-	ETSI EN 302 502	
Mechanical	'	'	<u>'</u>	<u>'</u>	<u>'</u>	
ODU Dimensions	24.0(w) x 34.0(h) x 24.0(d) cm					
ODU Weight	4.0 kg / 8.82 lbs					
Power	7 07 -					
Power Feeding	Power provided over ODU-IDU cable					
Power Consumption	Tower provided over obound cable <30W					
Environmental	13011					
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		, (totally p				
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	1.20/ 2.14 02308-1					
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	IN 301 403-4, 30.	1 403-17			
	CISPR 32:2015 Class B					
AS/NZS	CIDEN 32.2013 CIDSS B					



Integrated Antenna					
Gain	12 dBi				
VSWR	2.0:1				
3 dB Azimuth Beamwidth	90 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				
Antenna Pattern					
Elevation @ 5.60	GHz	Azimuth @ 5.6GHz			
-30 -20 -10 0 10 20 30 40 -50 -50 -60 -70 -70 -80 -100 -110 -120 -130 -140 -150 -160 -170 180 170 160 150 -160 -170 180 170 160		-10 0 10 20 30 40 -50 -50 -60 -60 -70 -70 -80 -166 -12] -8 4 -1 3 7 11 90 -100 -110 -120 -130 -140 -150 -166 -170 180 170 160 150			

Ordering Info

Part Number: RW-5BG5-2154

Description: RADWIN MS Int. ODU, with an integrated antenna, 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

