RADWIN MultiSector, MS Conn. Model

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

RW-5BG5-2454

Product Description

RADWIN MultiSector dual carrier base station delivers up to 1.5Gbps via up to 4 external antennas.

The self-contained base station includes a built-in layer-2 Switch that aggregates the dual carrier traffic into a single Ethernet port or a Point to Point self backhaul. An integrated GPS receiver for TDD sync significantly reduces mutual interference between adjacent sites.

The MultiSector base station can cover up to 4 sectors with only 2 frequencies. Carrier resources are shared between 2 antennas using a high performance TDD mechanism.

One of the MultiSector antennas output can be configured as self-backhaul carrying the traffic from all other antennas to hub site, eliminating the need for Point-to-Point (PtP) radio.

The unit is fed through a single PoE port and features an SFP slot for direct fiber connection.

RW-5BG5-2454 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 external antennas
- Optional self-backhaul
- Supports up to 128 SUs
- Best-Effort or CIR service level per SU
- Fixed and Nomadic SU supported
- 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

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Product Specifications:

Configuration					
Architecture	Outdoor unit for up to 4 external MIMO antennas (8x N-Type connectors)				
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 128 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 (DBA)	Supported				
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 device (9921-008X), outdoor DC PoE device (9921-0110)				
Uplink / Downlink Allocation	Configurable: Symmetric or Asymmetric				
End to End Latency	Typical: 3.5msec @ 2 SUs				
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; SNMPv1, SNMPv3; HTTP/HTTPS using web browser				
Supported Bands					
Band	**CBW 10MHz [GHz]**	**CBW 20MHz [GHz]**	**CBW 40MHz [GHz]**	**CBW 80MHz [GHz]**	**Radio Compliance**
5.4 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					
ODU Dimensions	27.73(w) x 23.5(h) x 4.05(d) cm				
ODU Weight	2.4 kg / 5.29 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				

Ordering Info
Part Number: RW-5BG5-2454
Description: RADWIN MS Conn. ODU, connectorized for external antenna (8 x N-type), 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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