

RADWIN HPMP 5000L Model

Sector Base Station - Data Sheet (RW5000/HBS-Pro/5LB5/F54/ETSI/INT)



RW-5LB5-2154

Product Description

RW-5LB5-2154 is a sector Base Station radio unit (HBS) that provides up to 250 Mbps net aggregate throughput while delivering access connectivity for up to 16 Subscriber Units (HSU).

RW-5LB5-2154 supports 5.4 to 5.8 GHz and complies with ETSI regulations.

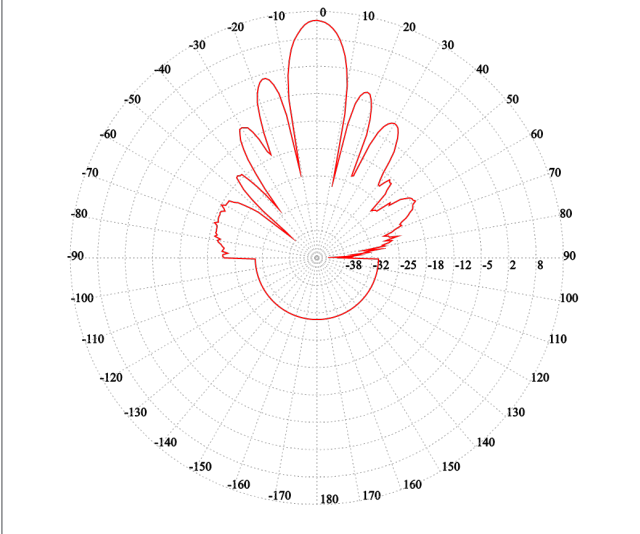
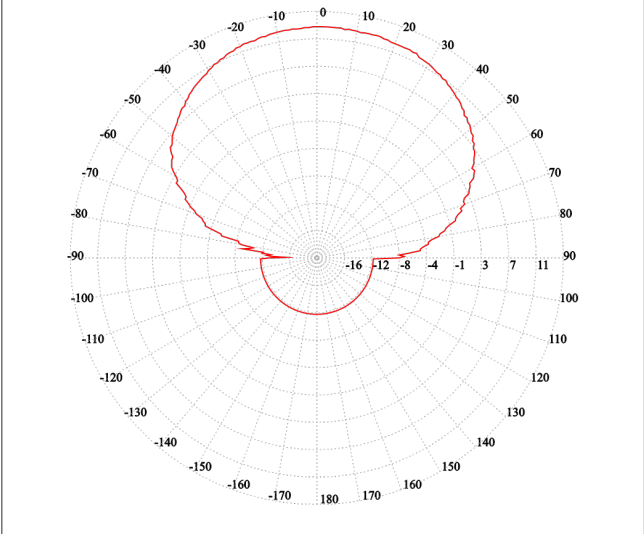
The radio comes with an integrated antenna.

Product Highlights

- Up to 250 Mbps net aggregated throughput
- Long range - Up to 40 km / 25 miles
- Built-in GPS for intra and inter site TDD synchronization
- Supports up to 16 HSUs
- Guaranteed Service Level Agreement (SLA) per HSU
- Exceptional short and constant latency
- Single radio supporting multiple bands
- 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

Product Specifications:

Configuration				
Architecture	Outdoor Unit with an integrated antenna			
PoE to ODU Interface	Outdoor CAT-5e; Maximum cable length: 100m for 10/100BaseT and 75m for 1000BaseT			
Radio				
Max Capacity	250 Mbps net aggregate throughput			
Subscriber Units support	Up to 16 subscriber units			
Range	Up to 40 km / 25 miles *			
Channel Bandwidth	Configurable: 10, 20, 40 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	26 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; FIPS 197; AES 256 optional (via Software License Key)			
Uplink / Downlink Allocation	Configurable: Symmetric or Asymmetric			
End to End Latency	Typical: 3.5msec @ 2 SUs; 20msec @ 16 HSUs			
Layer 2	Bridging learning of 5K 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; SNMP v1 and v3; HTTP using web browser			
Dying gasp	**Supported (PoE voltage must be >= 55v)			
Supported Bands				
Band	CBW 10MHz [GHz]	CBW 20MHz [GHz]	CBW 40MHz [GHz]	Radio Compliance
5.4 GHz ETSI (default)	5.475-5.705	5.470-5.710	5.490-5.690	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 6.7(d) cm			
ODU Weight	1.9 kg / 4.19 lbs			
Mounting Kit	Included			
Power				
Power Feeding	Power provided over ODU-IDU cable			
Power Consumption	<13W			
Network Device				
AC POE	RW-9921-400x			
DC POE	RW-9921-2069			
Package Content				
Package	Radio unit with integrated antenna, pole/wall mounting kit, IP67 gland for POE port			
Environmental				
Operating Temperatures	-40°C to 60°C / -40°F to 140°F			
Humidity	100% condensing, IP67 (totally protected against dust and against immersion in water up to 1m)			
MTBF	4,075,000 hours (Telcordia SR332 @25°C)			
Wind Resistance operational	180Km/h			
Safety				
US/CAN (cTUVus)	UL 62368-1:2014, UL 60950-22:2017, CAN/CSA-C22.2 NO. 62368-1-14, CAN/CSA-C22.2 No. 60950-22:17			
EU/Intl	IEC 62368-1:2014, EN 62368-1:2014/A11:2017, IEC 60950-22:2016, EN 60950-22:2017			
EMC				
FCC	47 CFR, Part15, Subpart B, Class B			
ETSI	EN 300 386, EN 301 489-1, EN 301 489-4			
Canada	CISPR 22-2010 Class B			

Integrated Antenna	
Gain	12 dBi
Detailed Gain	4.900 - 5.100GHz: 12.0dBi 5.150 - 5.250GHz: 12.0dBi 5.300 - 5.950GHz: 13.0dBi 6.000GHz: 12.0dBi
VSWR	2.0 : 1
3 dB Azimuth Beamwidth	90 Deg. (Typ)
3 dB Elevation Beamwidth	12 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 @ 5.6GHz	Azimuth @ 5.6GHz
	

Ordering Info
Part Number: RW-5LB5-2154
Description: RADWIN 5000L 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