

RADWIN JET-DUO Series

Dual band 3.x & 5.x GHz Base Station

RW-5PG5-9635



Product Description

RW-5PG5-9635 is a sector Base Station unit (HBS) that includes two radios (3.x GHz and 5.x GHz) in a single unit. The unit provides up to 750 Mbps net aggregate throughput per band (the operational band is user configurable).

The unit will be able to provide up to 2x750 Mbps simultaneously from both bands through future software upgrade.

RW-5PG5-9635 includes one smart beamforming antenna for each band. It also includes an embedded GPS unit.

RW-5PG5-9635 supports 3.x GHz and 5.x GHz Universal and FCC bands.

Product Highlights

- Dual band base station radio with smart beamforming antennas supporting 3.x GHz and 5.x GHz band.
- Up to 750 Mbps net aggregated throughput
- Configurable operating band: 3.X GHz or 5.X GHz
- Long range - Up to 40 km / 25 miles
- Supports up to 64 HSUs
- CIR or Best-Effort per HSU/SU
- Built-in GPS
- Advanced MIMO, OFDM and Diversity technologies
- Robust and reliable operation in harsh environments
- Ease of operation

Product Specifications:

Configuration		
Architecture	Outdoor unit with a smart beamforming integrated antenna	
PoE to ODU Interface	Outdoor CAT-5e; Maximum cable length: 75m for 1000BaseT	
Data Interfaces	1000BaseT (over PoE) or SFP (1GbE, supports single and multi-mode)	
Radio General		
Max capacity	750 Mbps net aggregate throughput	
Subscriber Units support	Up to 64	
Range	Up to 40 km / 25 miles	
Modulation	MIMO-OFDM (BPSK/QPSK/16QAM/64QAM/256QAM)	
Adaptive Modulation & Coding	Supported	
Smart Bandwidth Management (DBA)	Supported	
Diversity	Dynamic selection between MIMO and Diversity	
Duplex Technology	TDD	
Error Correction	FEC k = 1/2, 2/3, 3/4, 5/6	
Encryption	AES 128;	
Support Indoor units	RADWIN PoE devices (RW-9921-104x)	
Uplink / Downlink Allocation	Configurable: Symmetric or Asymmetric	
End to End Latency	Typical: 3.5msec @ 2 HSUs; 20msec @ 64 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	
TDD Inter Site Synchronization	Supported through built-in GPS receiver	
ODU Management	IPv4/IPv6 dual-stack; SNMP v1 and v3; HTTP using web browser	
3.5GHz RADIO		
Channel Bandwidth	Configurable: 10, 20, 40, 80 MHz	
Max EIRP	Max EIRP 44 dBm	
Supported band		
Supported Bands	Band	Radio Compliance
3.5 GHz	3.400 – 3.800GHz	Universal
5GHz RADIO		
Channel Bandwidth	Configurable: 10, 20, 40 ,80 MHz (for the default band)	
DFS	NA	
Max EIRP	Max EIRP 44dBm	
Supported 5GHz Bands		
Supported Bands	Band	Radio Compliance
4.9 GHz Universal	4.900-4.990 GHz Universal	Universal
5.1 GHz Universal	5.150-5.335 GHz Universal	Universal
5.4 GHz Universal (default)	5.475-5.720 GHz Universal	Universal
5.8 GHz Universal	5.730-5.845 GHz Universal	Universal
5.8 GHz FCC/IC	5.730-5.845 GHz FCC/IC	FCC 47CFR Part 15.247
5.9 GHz Universal	5.730-5.950 GHz Universal	Universal
Mechanical –		
ODU Dimensions	35.6(w) x 37.1(h) x 9.5(d) cm	
ODU Weight	4.5Kg / 9.92 lbs	
Power		
Power Feeding	Power provided over ODU-IDU-POE cable	
Power Consumption	<55W	
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 60950-1, UL 60950-22, CAN/CSA C22.2 60950-1, CAN/CSA C22.2 60950-22	
CE/IEC	EN/IEC 60950-1, EN/IEC 60950-22	
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	CISPR 22-2010 Class B	

Integrated Antenna 3.5GHz	
Gain	16 dBi
VSWR	2.0 : 1
3 dB Azimuth Beamwidth	90 Deg.(typ)
Polarization	Dual Linear (Vertical and Horizontal)
Sidelobes Level	-10dB(typ)
Cross Polarization	-25dB(typ)
F/B Ratio	-25dB
Port To Port Isolation	35dB(typ)
Lightning Protection	DC Grounded

Integrated Antenna 5GHz	
Gain	19 dBi
VSWR	2.0:1
3 dB Azimuth Beamwidth	90 Deg.(typ)
Polarization	Dual Linear vertical and Horizontal
Sidelobes Level	-20dB(typ)
Cross Polarization	-30dB(typ)
F/B Ratio	-25dB
Port To Port Isolation	35dB(typ)
Lightning Protection	DC grounded

Ordering Info

Part Number: RW-5PG5-9635

Description: RADWIN Dual band 3.x & 5.xGHz Base Station ODU, with a smart beamforming integrated antennas and built in GPS.