

RADWIN JET-DUO Series

Dual Carrier 5.x GHz Base Station

PRELIMINARY

RW-5PG5-9655



Product Description

RW-5PG5-9655 is a sector Base Station unit (HBS) that includes two radios at 5.x GHz band in a single unit. The unit provides up to 1.5 Gbps (2 x 750 Mbps) net aggregate throughput per carrier.

RW-5PG5-9655 includes separate smart beamforming antenna for each carrier. It also includes an embedded GPS unit.

RW-5PG5-9655 supports 5.x GHz Universal and FCC bands.

Product Highlights

- Dual carriers base station radio with 90° smart beamforming antennas supporting 5.x GHz bands.
- Up to 1.5 Gbps (2 x 750 Mbps) net aggregated throughput
- Long range - Up to 40 km / 25 miles
- CIR or Best-Effort per SU
- Built-in GPS
- WAN connectively over SFP or PoE
- Advanced MIMO, OFDM and Diversity technologies
- Dynamic Channel Bandwidth Selection
- Robust and reliable operation in harsh environments
- Ease of operation

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Product Specifications:

Configuration		
Architecture	Outdoor unit with two smart beamforming integrated antennas	
PoE to ODU Interface	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 General		
Max capacity	1.5 Gbps (2 x 750 Mbps) net aggregate throughput	
Subscriber Units support	Up to 64 (roadmap for 128 SU support)	
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	
Dynamic Channel Bandwidth	20/40/80MHz	
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 per carrier	Typical: 3.5msec @ 2 SUs; 20msec @ 64 SUs	
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/HTTPS using web browser	
RADIO		
Channel Bandwidth	Configurable: 10, 20, 40 ,80 MHz (for the default band)	
Dynamic Channel BW	20/40/80 MHz	
Max EIRP	Max EIRP 44dBm	
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 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	

Integrated Antennas 5GHz	
Gain	20 dBi
VSWR	2.0:1
3 dB Azimuth Beam width	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-5PG5-9655

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