RADWIN JET-DUO 1500 Series

Sector Base Station - Data Sheet (RW5000/HBS/5PG5/F5F5/FCC/JET-DUO/INT)



RW-5PG5-0655

Product Description

RW-5PG5-0655 is a sector Base Station radio unit (HBS) that includes two radios at 5 GHz band in a single unit. The unit provides up to 1500 Mbps net aggregate throughput. RW-5PG5-0655 includes separate smart beamforming antenna for each carrier. It also includes an embedded GPS unit. RW-5PG5-0655 supports 5.1 to 5.8 GHz.

Product Highlights

- Dual carriers base station radio with smart beamforming antennas supporting 5 GHz bands
- Up to 1500 Mbps (2 x 750 Mbps) net aggregated throughput
- Long range Up to 40 km / 25 miles
- CIR or Best-Effort per SU
- Built-in GPS
- Gigabit WAN connectivity (SFP / PoE)
- Advanced MIMO, OFDM and Diversity technologies
- Dynamic Channel Bandwidth Selection
- Robust and reliable operation in harsh environments
- Ease of operation



Product Specifications:

Configuration							
Architecture	Outdoor Unit v	ith a smart hoam	forming intograte	ed antenna with e	mhoddod CDS		
PoE to ODU Interface					nd 75m for 1000BaseT		
	+	,		i 10/100Basei ar	id 75m for 1000Baser		
Data Interfaces	10/100/1000 N	10/100/1000 Mbps RJ45 PoE or 1Gbps SFP					
Radio	4500 Mhrs (2 : 750 Mhrs) act approach the control of the control o						
Max Capacity	1500 Mbps (2 x 750 Mbps) net aggregate throughput.						
Subscriber Units (HSUs) support	+ ' '	HW ready for 2 x 6	64 SUs)				
Range	Up to 40 km / 2						
Channel Bandwidth	+				hannel BW selection (20/40/80 MHz)		
Modulation	 	MIMO-OFDM (BPSK/QPSK/16QAM/64QAM/256QAM)					
Adaptive Modulation & Coding	+	Supported					
Smart Bandwidth Management	Supported	Supported					
(DBA)							
DFS	Not Supported						
Diversity	Supported						
Max Tx Power	25 dBm; max EIRP 36 dBm (for the default band)						
Duplex Technology	TDD	TDD					
Error Correction	FEC k = 1/2, 2/3, 3/4, 5/6						
Encryption	AES 128						
Support Indoor units	RADWIN AC Po	E devices (9921-1	.04X), DC PoE dev	ice (9921-1049)			
Uplink / Downlink Allocation	Configurable: S	ymmetric or Asyr	nmetric				
End to End Latency	Typical: 3.5mse	Typical: 3.5msec @ 2 HSUs; 20msec @ 64 HSUs					
Layer 2	Bridging learning	Bridging learning of 5K MAC addresses					
QoS	Packet classific	ation to 4 priority	queues according	g to 802.1P or Dif	fserv		
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; SNMP v1, SNMPv3; HTTP/HTTPS using web browser						
802.1x	 	Support in future releases					
Option 82	Support in future releases Support in future releases						
Non PPPoE filtering	Support in future releases						
DHCP Filter	Support in future releases Support in future releases						
IGMP snooping	Support in future releases Support in future releases						
Nomadic subscribers	Supported						
RADIUS Authorization	Supported Support in future releases						
RADIUS User authentication	Support in future releases Support in future releases						
Syslog	Support in future releases Support in future releases						
Supported Bands	Support III lutu	ie reieases					
Band	CBW 10MHz	CBW 20MHz	CBW 40MHz	CBW 80MHz	Radio Compliance		
Dallu	[GHz]	[GHz]	[GHz]	[GHz]	Radio Compilance		
5.8 GHz FCC/IC (default)	5.730-5.845	5.730-5.845	5.730-5.845	5.730-5.845	FCC 47CFR Part 15.407; ISED RSS-247		
5.1 GHz FCC	5.170-5.250	5.170-5.250	5.170-5.250	5.170-5.250	FCC 47CFR Part 15.407		
5.1 GHz FCC	5.170-5.845	5.170-5.845	5.170-5.845	5.170-5.845	FCC 47CFR Part 15.407		
Mechanical							
ODU Dimensions	35.6(w) x 37.1(h) x 11.0(d) cm						
ODU Weight	4.89 kg / 10.78 lbs						
Power							
"	Power provided over ODU-IDU cable						
Power Feeding	<50W						
	'						
Power Consumption	'						
Power Consumption Environmental	<50W	-31°F to 140°F					
Power Consumption Environmental Operating Temperatures	<50W -35°C to 60°C /		rotected against o	dust and against i	mmersion in water up to 1m1		
Power Consumption Environmental Operating Temperatures Humidity	<50W -35°C to 60°C /		rotected against (dust and against i	mmersion in water up to 1m)		
Power Consumption Environmental Operating Temperatures Humidity Safety	<50W -35°C to 60°C / 100% condensi	ng, IP67 (totally p		<u> </u>	mmersion in water up to 1m)		
Power Consumption Environmental Operating Temperatures Humidity Safety US/CAN (cTUVus)	<50W -35°C to 60°C / 100% condensi	ng, IP67 (totally p	orotected against of UL/CSA 60950-22	<u> </u>	mmersion in water up to 1m)		
Power Consumption Environmental Operating Temperatures Humidity Safety US/CAN (cTUVus) CE/IEC	<50W -35°C to 60°C / 100% condensi	ng, IP67 (totally p		<u> </u>	mmersion in water up to 1m)		
Power Consumption Environmental Operating Temperatures Humidity Safety US/CAN (cTUVus) CE/IEC EMC	<50W -35°C to 60°C / 100% condensi UL 62368-1 2nd IEC/EN 62368-2	ng, IP67 (totally p d edition, IEC/EN/ l:14+A11:17	UL/CSA 60950-22	<u> </u>	mmersion in water up to 1m)		
Power Consumption Environmental Operating Temperatures Humidity Safety US/CAN (cTUVus) CE/IEC EMC FCC	-35°C to 60°C / 100% condensi UL 62368-1 2nd IEC/EN 62368-1 47 CFR, Part15,	ng, IP67 (totally p d edition, IEC/EN/ L:14+A11:17 Subpart B, Class	UL/CSA 60950-22 B	<u> </u>	mmersion in water up to 1m)		
Power Consumption Environmental Operating Temperatures Humidity Safety US/CAN (cTUVus) CE/IEC EMC FCC ETSI	-35°C to 60°C / 100% condensi UL 62368-1 2nd IEC/EN 62368-1 47 CFR, Part15, EN 301 489-1,	ng, IP67 (totally p d edition, IEC/EN/ l:14+A11:17	UL/CSA 60950-22 B	<u> </u>	mmersion in water up to 1m)		
Power Consumption Environmental Operating Temperatures Humidity Safety US/CAN (cTUVus) CE/IEC EMC FCC	-35°C to 60°C / 100% condensi UL 62368-1 2nd IEC/EN 62368-1 47 CFR, Part15,	ng, IP67 (totally p d edition, IEC/EN/ l:14+A11:17 Subpart B, Class EN 301 489-4, 301	UL/CSA 60950-22 B	<u> </u>	mmersion in water up to 1m)		



Integrated Antenna					
Gain	19 dBi				
VSWR	2.0:1				
3 dB Azimuth Beamwidth	90 Deg. (typ)				
Polarization	Dual Linear (Vertical and Horizontal)				
Sidelobes Level	-10 dB(typ)				
Cross Polarization	-25dB (typ)				
F/B Ratio	-25 dB				
Port To Port Isolation	35 dB (typ)				
Lightning Protection	DC Grounded				
Antenna Pattern					
Elevation @ 5.8	GHz	Azimuth @ 5.8GHz			
-20 -10 0 10 20 30 40 -50 -50 -50 -60 -70 -70 -80 -100 -110 -120 -130 -140 -150 -160 -170 180 170 160		-10			

Ordering Info

Part Number: RW-5PG5-0655

Description: RADWIN JET-DUO 1500 ODU, with a smart beamforming integrated antenna with embedded GPS, supporting multi frequency bands at 5.x GHz, factory default 5.8 GHz FCC/IC.

Datasheet information can be changed by manufacturer without prior notice

