RADWIN 2000 Alpha Series

Point-to-Point Radio - Data Sheet (RW2000/ODU/Alpha/F54/UNI/INT/50M)



RW-2954-6H50

Product Description

RW-2954-6H50 is a carrier-class radio that belongs to the RADWIN 2000 Alpha Series and supports 4.9 to 6 GHz frequency range.

The Radio complies with Universal bands with a factory default of 5.4 GHz Universal.

RW-2954-6H50 delivers up to 50 Mbps throughput and up to 200Mbps upgradeable by license key.

The unit includes an integrated 22dBi antenna.

Product Highlights

- Up to 50 Mbps net aggregated throughput (upgradeable to 200Mbps by license key)
- Telco-grade, extremely robust in harsh conditions
- Supports intra-site synchronization to maximize capacity (via future SW upgrade)
- Configurable asymmetric throughput
- Advanced OFDM & MIMO technologies for operation in nLOS/NLOS and dense radio environments
- Integrated 22dBi antenna.

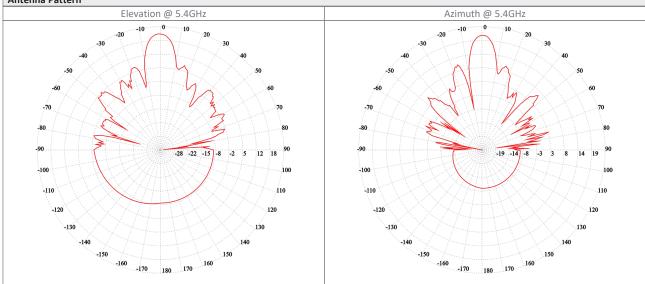


Product Specifications:

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	50 Mbps net aggregate throughput. Upgradable to 200 Mbps with license key					
Range	Up to 40 km / 25 miles					
Channel Bandwidth	Configurable: 10, 20, 40, 80 MHz (for the default band)					
Modulation	MIMO-OFDM (BPSK/QPSK/16QAM/64QAM/256QAM)					
Adaptive Modulation & Coding	Supported					
Automatic Channel Selection	Supported upon power up					
DFS	Not Supported					
Diversity	Supported					
Spectrum Viewer	Supported					
Max Tx Power	26 dBm					
Duplex Technology						
Error Correction	FEC k = 1/2, 2/3, 3/4, 5/6					
Encryption						
Support Indoor units	AES 128					
Uplink / Downlink Allocation		RADWIN PoE devices (9921-102X) Configurable: Symmetric or Asymmetric				
QoS		, ,		a to 902 10 or Diff		
VLAN Support	Packet classification to 4 priority queues according to 802.1P or Diffserv					
	802.1Q, QinQ, 4094 VLANs Future support by software upgrade					
TDD Intra Site Synchronization		/ 10		/ F	· · · · () · · · · · · · · · · · · · · ·	
TDD Inter Site Synchronization	Supported thro	ugn common GP:	s receiver per site	(Future support i	by software upgrade)	
Supported Bands						
Band	CBW 10MHz [GHz]	CBW 20MHz [GHz]	CBW 40MHz [GHz]	CBW 80MHz [GHz]	Radio Compliance	
5.4 GHz Universal (default)	5.470-5.725	5.465-5.730	5.455-5.740	5.455-5.760	Universal	
4.9 GHz Universal	4.900-4.995	4.900-4.995	4.900-4.995	4.900-4.995	Universal	
6.0 GHz Universal	5.695-6.055	5.690-6.060	5.680-6.070	5.680-6.090	Universal	
5.9 GHz Universal	5.725-5.955	5.720-5.960	5.710-5.970	5.710-5.990	Universal	
5.9 GHz Universal	5.725-5.850	5.725-5.850	5.725-5.850	5.725-5.850	Universal	
					oniversar	
5.1 GHz Universal	5.145-5.340	5.140-5.345	5.130-5.355	5.130-5.375	Universal	
5.1 GHz Universal Mechanical	5.145-5.340	5.140-5.345	5.130-5.355			
	5.145-5.340 32.5(w) x 32.5(5.130-5.355			
Mechanical			5.130-5.355			
Mechanical ODU Dimensions	32.5(w) x 32.5(5.130-5.355			
Mechanical ODU Dimensions ODU Weight	32.5(w) x 32.5(l 2 kg / 4.41 lbs					
Mechanical ODU Dimensions ODU Weight Power	32.5(w) x 32.5(l 2 kg / 4.41 lbs	h) x 6.4(d) cm				
Mechanical ODU Dimensions ODU Weight Power Power Feeding	32.5(w) x 32.5(l) 2 kg / 4.41 lbs Power provided	h) x 6.4(d) cm				
Mechanical ODU Dimensions ODU Weight Power Power Feeding Power Consumption Environmental	32.5(w) x 32.5(2 kg / 4.41 lbs Power provided <13W	h) x 6.4(d) cm d over ODU-IDU c				
Mechanical ODU Dimensions ODU Weight Power Power Feeding Power Consumption Environmental Operating Temperatures	32.5(w) x 32.5(2 kg / 4.41 lbs Power provided <13W -35°C to 60°C /	h) x 6.4(d) cm d over ODU-IDU c -31°F to 140°F	able	5.130-5.375	Universal	
Mechanical ODU Dimensions ODU Weight Power Power Feeding Power Consumption Environmental Operating Temperatures Humidity	32.5(w) x 32.5(2 kg / 4.41 lbs Power provided <13W -35°C to 60°C /	h) x 6.4(d) cm d over ODU-IDU c -31°F to 140°F	able	5.130-5.375		
Mechanical ODU Dimensions ODU Weight Power Power Feeding Power Consumption Environmental Operating Temperatures Humidity Safety	32.5(w) x 32.5(2 kg / 4.41 lbs Power provided <13W -35°C to 60°C / 100% condensi	h) x 6.4(d) cm d over ODU-IDU c -31°F to 140°F ng, IP67 (totally p	able protected against	5.130-5.375	Universal mmersion in water up to 1m)	
Mechanical ODU Dimensions ODU Weight Power Power Feeding Power Consumption Environmental Operating Temperatures Humidity Safety US/CAN (cTUVus)	32.5(w) x 32.5(2 kg / 4.41 lbs Power provided <13W -35°C to 60°C / 100% condensi	h) x 6.4(d) cm d over ODU-IDU c -31°F to 140°F ng, IP67 (totally p 60950-22, CAN/(able protected against	5.130-5.375	Universal mmersion in water up to 1m)	
Mechanical ODU Dimensions ODU Weight Power Power Feeding Power Consumption Environmental Operating Temperatures Humidity Safety US/CAN (cTUVus) CE/IEC	32.5(w) x 32.5(2 kg / 4.41 lbs Power provided <13W -35°C to 60°C / 100% condensi	h) x 6.4(d) cm d over ODU-IDU c -31°F to 140°F ng, IP67 (totally p	able protected against	5.130-5.375	Universal mmersion in water up to 1m)	
Mechanical ODU Dimensions ODU Weight Power Power Feeding Power Consumption Environmental Operating Temperatures Humidity Safety US/CAN (cTUVus) CE/IEC EMC	32.5(w) x 32.5(2 kg / 4.41 lbs Power provided <13W -35°C to 60°C / 100% condensi UL 60950-1, UL EN/IEC 60950-1	h) x 6.4(d) cm d over ODU-IDU c -31°F to 140°F ng, IP67 (totally p 60950-22, CAN/(., EN/IEC 60950-2	able protected against CSA C22.2 60950- 2	5.130-5.375	Universal mmersion in water up to 1m)	
Mechanical ODU Dimensions ODU Weight Power Power Feeding Power Consumption Environmental Operating Temperatures Humidity Safety US/CAN (cTUVus) CE/IEC EMC FCC	32.5(w) x 32.5(2 kg / 4.41 lbs Power provided <13W -35°C to 60°C / 100% condensi UL 60950-1, UL EN/IEC 60950-1 47 CFR, Part15,	h) x 6.4(d) cm d over ODU-IDU c -31°F to 140°F ng, IP67 (totally p 60950-22, CAN/(, EN/IEC 60950-2 Subpart B, Class	able protected against CSA C22.2 60950- 2 B	5.130-5.375	Universal mmersion in water up to 1m)	
Mechanical ODU Dimensions ODU Weight Power Power Feeding Power Consumption Environmental Operating Temperatures Humidity Safety US/CAN (cTUVus) CE/IEC EMC	32.5(w) x 32.5(2 kg / 4.41 lbs Power provided <13W -35°C to 60°C / 100% condensi UL 60950-1, UL EN/IEC 60950-1 47 CFR, Part15,	h) x 6.4(d) cm d over ODU-IDU c -31°F to 140°F ng, IP67 (totally p 60950-22, CAN/(, EN/IEC 60950-2 Subpart B, Class EN 301 489-4, EN	able protected against CSA C22.2 60950- 2 B	5.130-5.375	Universal mmersion in water up to 1m)	



Integrated Antenna		
Gain	21 dBi	
VSWR	2.0:1	
3 dB Azimuth Beamwidth	10 Deg. (typ)	
Polarization	Dual Linear (Vertical and Horizontal)	
Sidelobes Level	-12 dB(typ)	
Cross Polarization	-25dB (typ)	
F/B Ratio	-25 dB	
Port To Port Isolation	30 dB (typ)	
Lightning Protection	DC Grounded	
Antenna Pattern		



Ordering Info

Part Number: RW-2954-6H50

Description: RADWIN 2000 Alpha ODU, with an integrated antenna, supporting multi frequency bands at 5.x GHz, factory default 5.4 GHz Universal.

Datasheet information can be changed by manufacturer without prior notice

