RADWIN Alpha Model

Point-to-Point Radio - Data Sheet (RW2000/ODU/Alpha/F54/UNI/EXT/500M)

RW-2954-62C5

Product Description

RW-2954-62C5 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, UBR, ETSI, ETSI/GER & FCC/IC bands with a factory default of 5.4 GHz Universal.

RW-2954-62C5 delivers up to 500 Mbps throughput.

The radio is connectorized for external antenna (2 x N-Type).

Product Highlights

- Up to 500 Mbps net aggregated throughput
- Telco-grade, extremely robust in harsh conditions
- Built-in GPS for intra and inter site TDD synchronization
- Configurable asymmetric throughput
- Advanced OFDM & MIMO technologies for operation in nLOS/NLOS and dense radio environments
- IP-67
- Can operate as SU PRO
- Support AES 256 encryption over the air (from release 5.1.30)

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Product Specifications:

Configuration	
Architecture	Outdoor Unit connectorized for external antenna (2 x N-Type)
PoE to ODU Interface	Outdoor CAT-5e; Maximum cable length: 100m for 10/100BaseT and 75m for 1000BaseT

Radio	
Max Capacity	500 Mbps net aggregate throughput (up to 250 Mbps per direction)
Range	Up to 120 km / 75 miles *
Channel Bandwidth	Configurable: 10, 20, 40, 80 MHz (for the default band); Dynamic Channel BW selection (20/40/80 MHz)
Modulation	MIMO-OFDM (BPSK/QPSK/16QAM/64QAM/256QAM)
Adaptive Modulation & Coding	Supported
Automatic Channel Selection	Supported upon power up
DFS	Supported (ETSI, ETSI/GER)
Diversity	Supported
Spectrum Viewer	Supported
Max Tx Power	26 dBm per chain
Duplex Technology	TDD
Error Correction	FEC k = 1/2, 2/3, 3/4, 5/6
Encryption	AES 256
Uplink / Downlink Allocation	Configurable: Symmetric or Asymmetric
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; SNMPv1, SNMPv3; HTTP/HTTPS using web browser
Option 82	Supported
RADIUS Authorization	Supported
RADIUS User authentication	Supported
Syslog	Supported
Dying gasp	**Supported (PoE voltage must be >= 55v)

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
5.8 GHz Universal	5.725-5.850	5.725-5.850	5.725-5.850	5.725-5.850	Universal
5.1 GHz Universal	5.145-5.340	5.140-5.345	5.130-5.355	5.130-5.375	Universal
5.1 GHz UBR	5.125-5.880	5.125-5.880	5.125-5.880	5.125-5.880	Universal
5.4 GHz ETSI	5.475-5.705	5.470-5.710	5.490-5.690	5.490-5.650	ETSI EN 301 893
5.8 GHz ETSI	-	5.735-5.865	-	-	ETSI EN 302 502
5.7 GHz ETSI/GER	-	5.735-5.865	5.735-5.865	5.735-5.865	ETSI EN 302 502; ECC Recommendation (06)04
5.8 GHz FCC/IC	5.730-5.845	5.730-5.845	5.730-5.845	5.730-5.845	FCC 47CFR Part 15.407; ISED RSS-247

Mechanical	
ODU Dimensions	19.5(w) x 12.5(h) x 4.0(d) cm
ODU Weight	0.5 kg / 1.10 lbs

Power	
Power Feeding	Power provided over ODU-IDU cable
Power Consumption	<13W
Network Device	
AC POE	RW-9921-400x
DC POE	RW-9921-2059

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)
MTBF	4,075,000 hours (Telcordia SR332 @25°C)
Wind Resistance operational	180Km/h

Safety	
EU/Intl	EN/IEC 62368-1, EN/IEC 60950-22
USA	cTUVus: UL 60950-1, UL 60950-22

EMC	
FCC	FCC 47 CFR, Part15, Subpart B, Class B
ETSI	ETSI EN 301 489-1, ETSI EN 301 489-4, ETSI 301 489-17
Canada	ICES-003, CISPR 32, Class B
AS/NZS	CISPR 32, Class B

Ordering Info
Part Number: RW-2954-62C5

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Description: RADWIN Alpha ODU, connectorized for external antenna (2 x N-type), supporting multi frequency bands at 5.x GHz, factory default 5.4 GHz Universal.

* May be limited by regulation in the specific band being used

Datasheet information can be changed by manufacturer without prior notice

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