RADWIN Alpha Model

Point-to-Point Radio - Data Sheet (RW2000/ODU/Alpha/F58/FCC/EXT/500M)

RW-2050-62C5

Product Description

RW-2050-62C5 is a carrier-class radio that belongs to the RADWIN 2000 Alpha Series and supports 5.1 to 5.8 GHz frequency range.

The Radio complies with FCC/IC & FCC bands with a factory default of 5.8 GHz FCC/IC.

RW-2050-62C5 delivers up to 500 Mbps throughput.

The unit includes an embedded antenna and connectors (2 x SMA) for the high gain slide-on TurboGain antenna. The connectors can be used for 3rd party external antenna.

Product Highlights

- 500 Mbps Ethernet net throughput
- Long range - Up to 120 km / 75 miles
- Telco-grade, extremely robust in harsh conditions
- Supports intra-site and inter-site synchronization to maximize capacity
- Configurable asymmetric throughput
- Advanced OFDM & MIMO technologies for operation in nLOS/NLOS and dense radio environments

RADWIN

Product Specifications:

Configuration	
Architecture	Outdoor Unit with an embedded antenna and connectors for external antenna (2 x SMA)
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 (FCC)
Diversity	Supported
Spectrum Viewer	Supported
Max Tx Power	26 dBm; max EIRP 48 dBm (for the default band)
Duplex Technology	TDD
Error Correction	FEC k = 1/2, 2/3, 3/4, 5/6
Encryption	AES 128
Support Indoor units	RADWIN PoE devices (9921-102X)
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
TDD Inter Site Synchronization	Supported through common GPS receiver per site
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

Supported Bands					
Band	**CBW 10MHz [GHz]**	**CBW 20MHz [GHz]**	**CBW 40MHz [GHz]**	**CBW 80MHz [GHz]**	**Radio Compliance**
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
5.2 GHz FCC	-	5.255-5.340	5.255-5.340	5.250-5.340	FCC 47CFR Part 15.407
5.4 GHz FCC	-	5.480-5.715	5.480-5.715	5.485-5.715	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	19.5(w) x 12.5(h) x 4.0(d) cm
ODU Weight	TBD kg / NaN lbs

Power	
Power Feeding	Power provided over ODU-IDU cable
Power Consumption	<13W

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, EN 301 489-17
CAN/CSA-CEI/IEC	CISPR 22-2010 Class B

Ordering Info
Part Number: RW-2050-62C5
Description: RADWIN Alpha ODU, connectorized for external antenna (2 x N-type), 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

RADWIN