

RADWIN Alpha Model

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



RW-2050-6HC5

Product Description

RW-2050-6HC5 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-2050-6HC5 delivers up to 500 Mbps throughput.

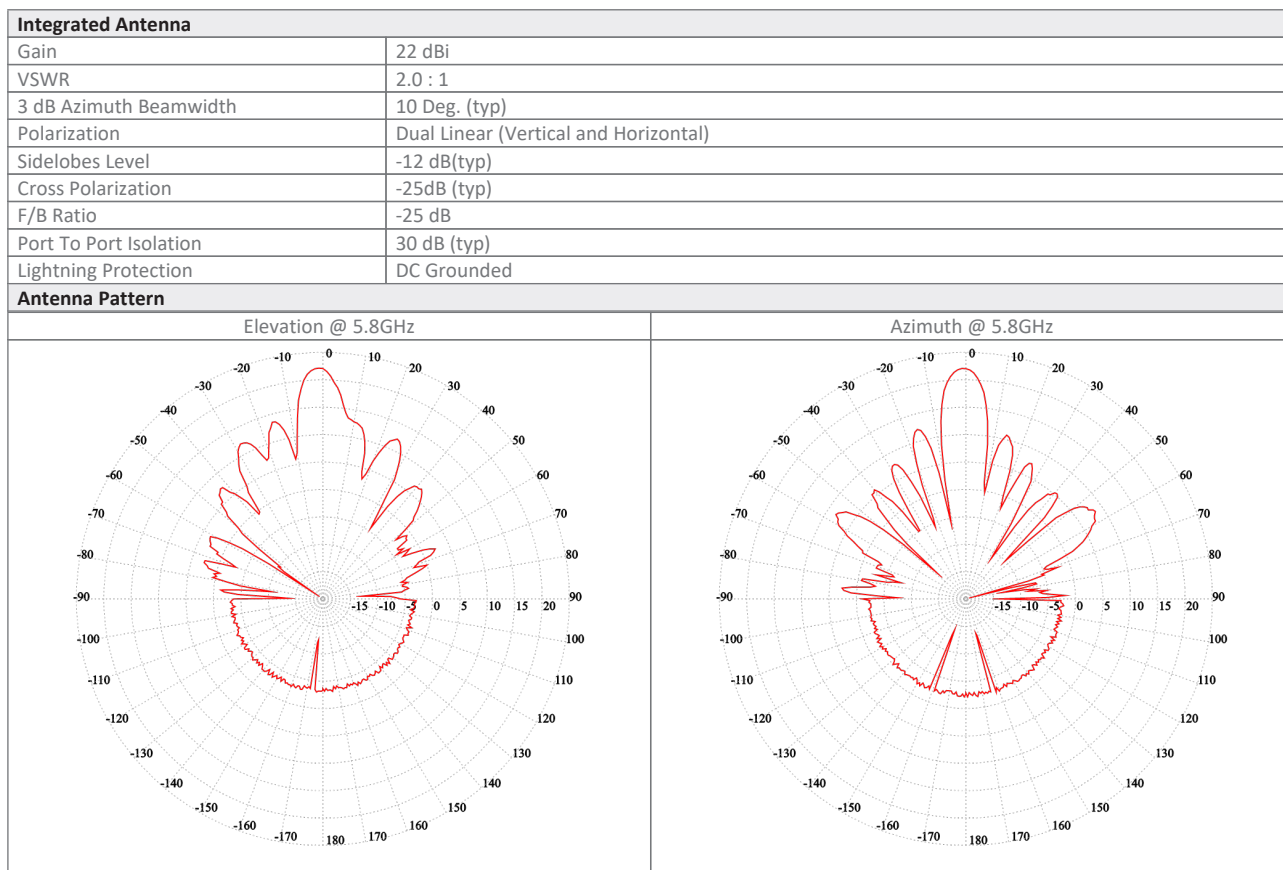
The unit includes an integrated antenna.

Product Highlights

- Up to 500 Mbps net aggregated throughput
- Telco-grade, extremely robust in harsh conditions
- Supports intra-site synchronization to maximize capacity
- Configurable asymmetric throughput
- Advanced OFDM & MIMO technologies for operation in nLOS/NLOS and dense radio environments
- Integrated 22dBi antenna
- IP-67
- Can operate as SU PRO
- Support AES 256 encryption over the air (from release 5.1.30)

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	500 Mbps net aggregate throughput (up to 250 Mbps per direction)			
Range	Up to 40 km / 25 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/IC, FCC)			
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 128			
Support Indoor units	RADWIN PoE devices (9921-400X)			
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 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	FCC 47CFR Part 15.407; ISSED RSS-247
5.1 GHz FCC	5.170-5.250	5.170-5.250	5.170-5.250	FCC 47CFR Part 15.407
5.2 GHz FCC/IC	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	FCC 47CFR Part 15.407
Mechanical				
ODU Dimensions	32.5(w) x 32.5(h) x 6.4(d) cm			
ODU Weight	2 kg / 4.41 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				
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-2050-6HC5
Description: RADWIN Alpha ODU, with an integrated antenna, supporting multi frequency bands at 5.x GHz, factory default 5.8 GHz FCC/IC.

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

Datasheet information can be changed by manufacturer without prior notice