

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 4.9 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.

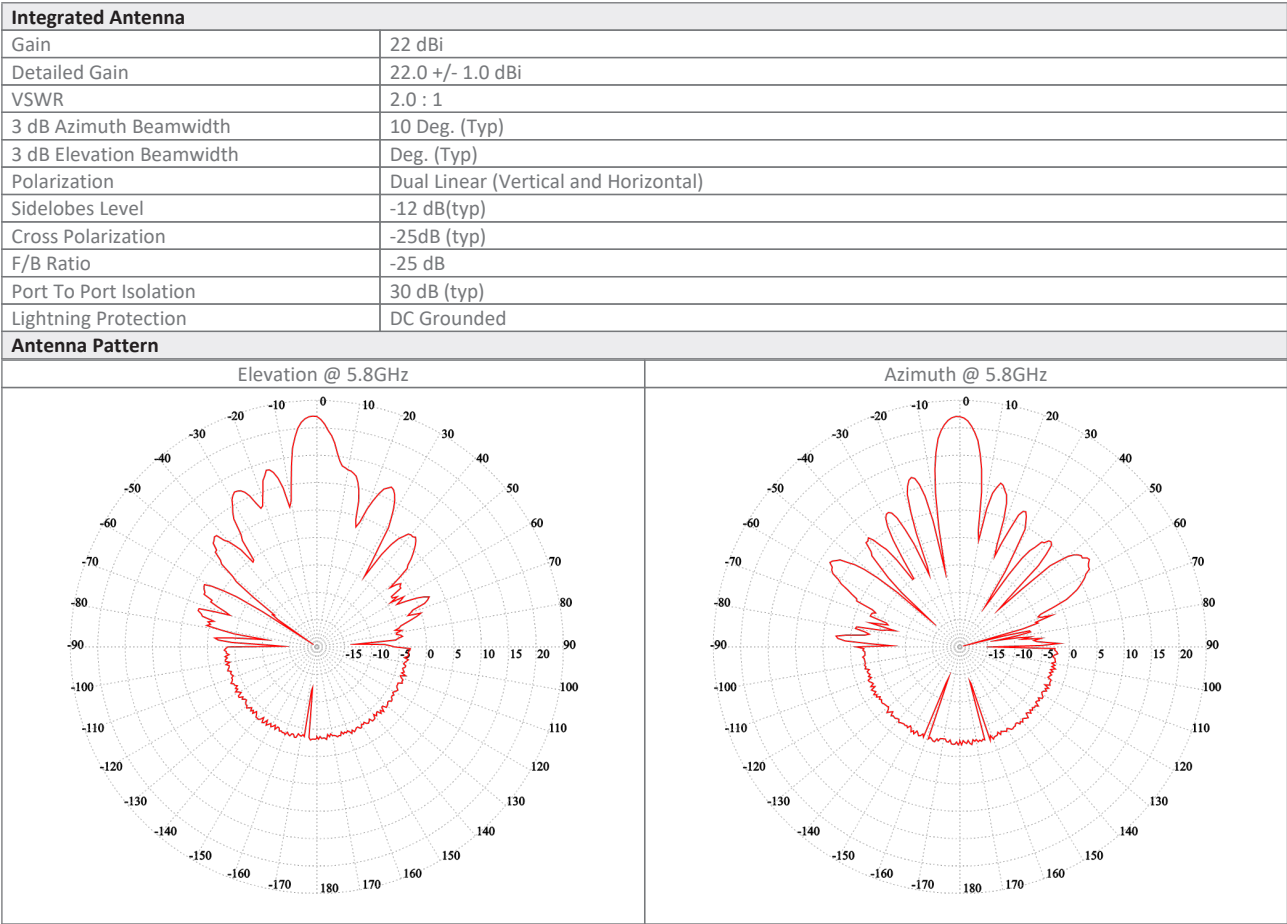
The unit includes an integrated antenna.

Product Highlights

- Up to 500 Mbps net aggregated throughput
- Telco-grade, extremely robust in harsh conditions
- 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
- 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 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
4.9 GHz FCC/IC	4.940-4.990	4.940-4.990	4.940-4.990	-	FCC 47CFR Part 90 Subpart Y; ISSED RSS-111
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
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
5.8 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; ISSED RSS-247
Mechanical					
ODU Dimensions	32.5(w) x 32.5(h) x 6.7(d) cm				
ODU Weight	2 kg / 4.41 lbs				
Mounting Kit	Included				
Power					
Power Feeding	Power provided over ODU-IDU cable				
Power Consumption	<13W				
Network Device					
AC POE	RW-9921-400x				
DC POE	RW-9921-2069				
Package Content					
Package	Radio unit with integrated antenna, pole/wall mounting kit, IP67 gland for POE port				
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 62368-1:2014, 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