

## **RADWIN Alpha Model**

Point-to-Point Radio - Data Sheet (RW2000/ODU/Alpha/F58/FCC/INT/50M)



**RW-2050-6H50**

### **Product Description**

RW-2050-6H50 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-2050-6H50 delivers up to 50 Mbps throughput and up to 250Mbps upgradeable by license key.

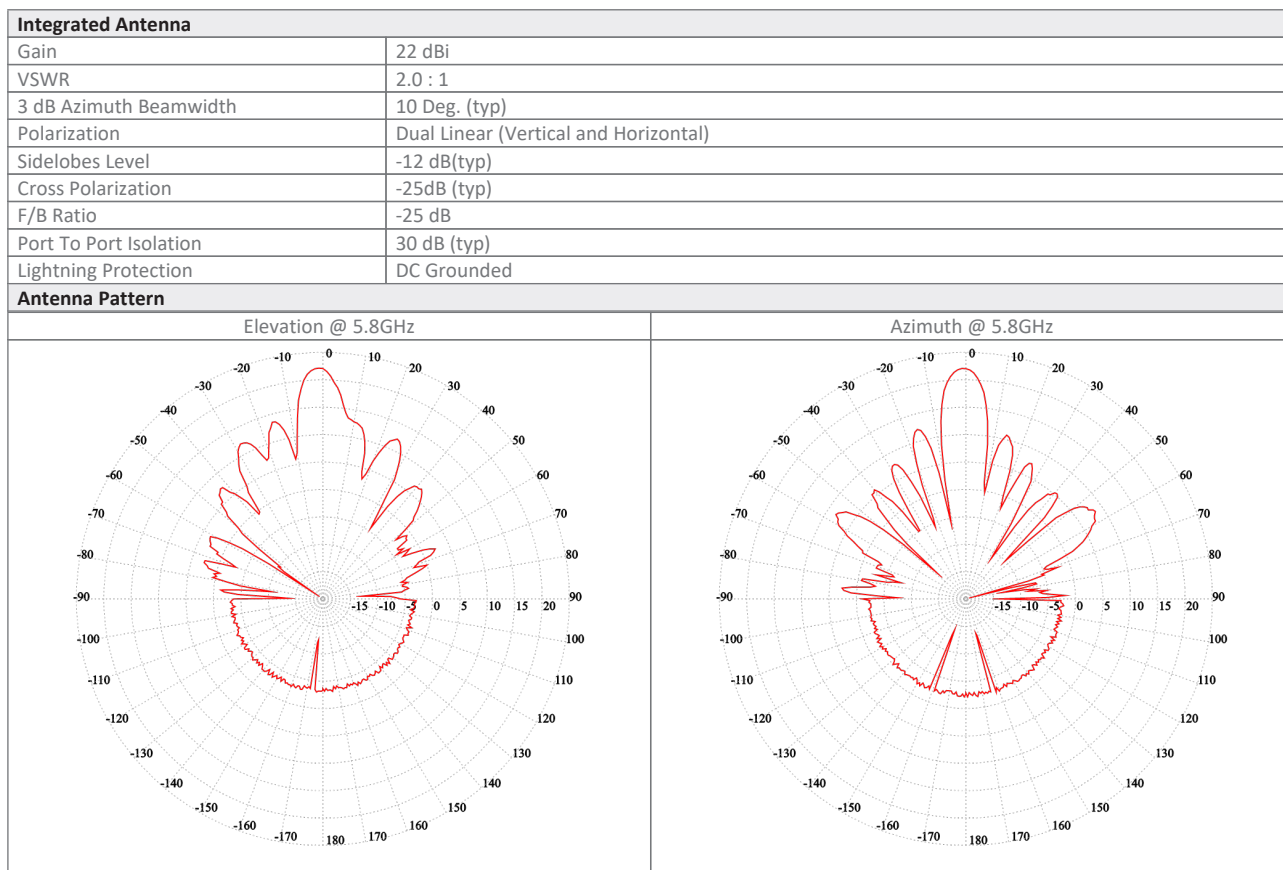
The unit includes an integrated antenna.

### **Product Highlights**

- Up to 50 Mbps net aggregated throughput (upgradeable to 250Mbps by license key)
- 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	50 Mbps net aggregate throughput. Upgradable to 250 Mbps with license key			
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				
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	AS/NZS, CISPR 32 2015 Class B			



#### Ordering Info

**Part Number:** RW-2050-6H50

**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