

## RADWIN 2000 Alpha Series

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 200Mbps upgradeable by license key.

The unit includes an integrated 22dBi antenna.

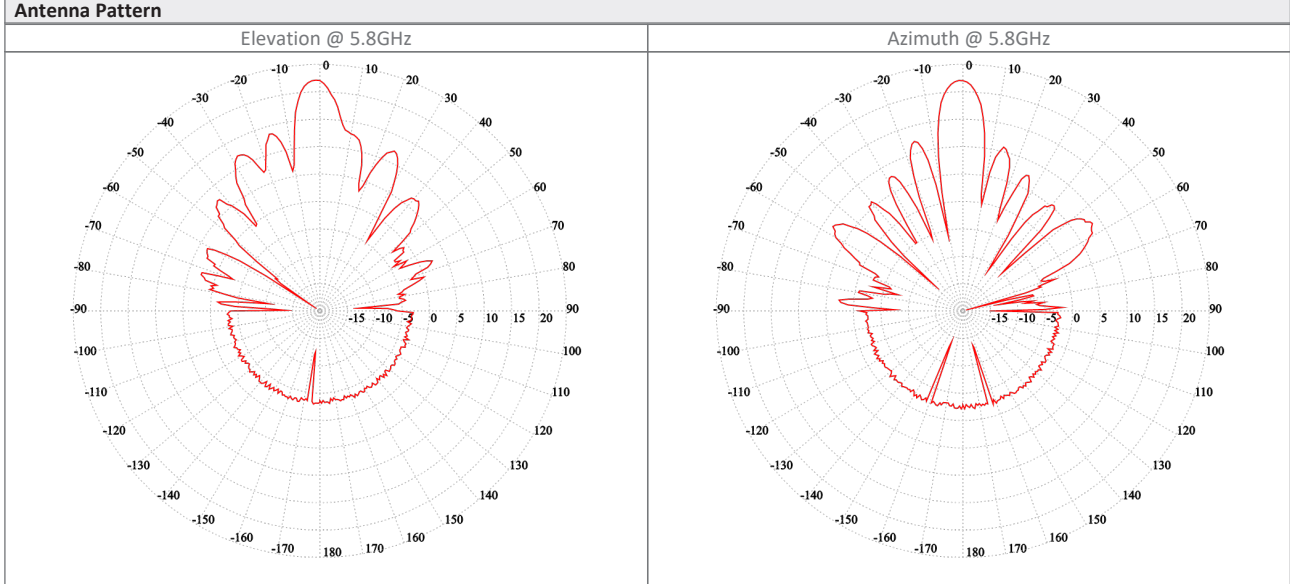
### Product Highlights

- Up to 50 Mbps net aggregated throughput (upgradeable to 200Mbps by license key)
- Telco-grade, extremely robust in harsh conditions
- Supports intra-site synchronization to maximize capacity (via future SW upgrade)
- Configurable asymmetric throughput
- Advanced OFDM & MIMO technologies for operation in nLOS/NLOS and dense radio environments
- Integrated 22dBi antenna.

## 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 200 Mbps with license key				
Range	Up to 40 km / 25 miles				
Channel Bandwidth	Configurable: 10, 20, 40, 80 MHz (for the default band)				
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	21 dBm				
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	Future support by software upgrade				
TDD Inter Site Synchronization	Supported through common GPS receiver per site (Future support by software upgrade)				
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; ISSED 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	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				

Integrated Antenna	
Gain	22 dBi
VSWR	2.0 : 1
3 dB Azimuth Beamwidth	10 Deg. (typ)
Polarization	Dual Linear (Vertical and Horizontal)
Sidelobes Level	-12 dB(typ)
Cross Polarization	-25dB (typ)
F/B Ratio	-25 dB
Port To Port Isolation	30 dB (typ)
Lightning Protection	DC Grounded



**Ordering Info**

Part Number: RW-2050-6H50

Description: RADWIN 2000 Alpha ODU, with an integrated antenna, 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