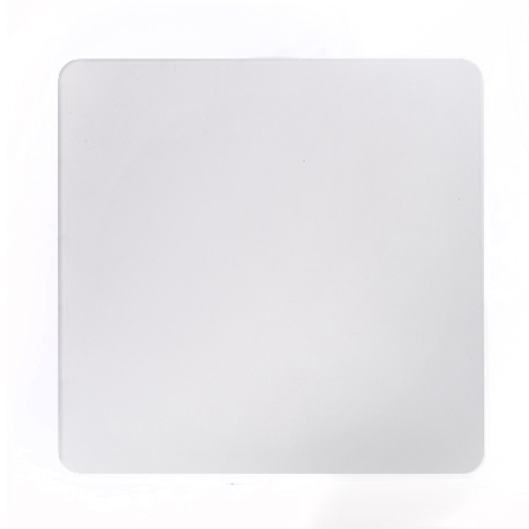


## RADWIN 2000 A 10M Series

### Point-to-Point Radio - Data Sheet



RW-2050-AH10

#### Product Description

RW-2050-AH10 is a carrier-class radio that belongs to the RADWIN 2000 A 10M Series and supports 4.9 to 5.8 GHz frequency range.

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

RW-2050-AH10 delivers up to 10 Mbps throughput and up to 2xE1s/T1s over an extended range.

The radio comes with an integrated antenna.

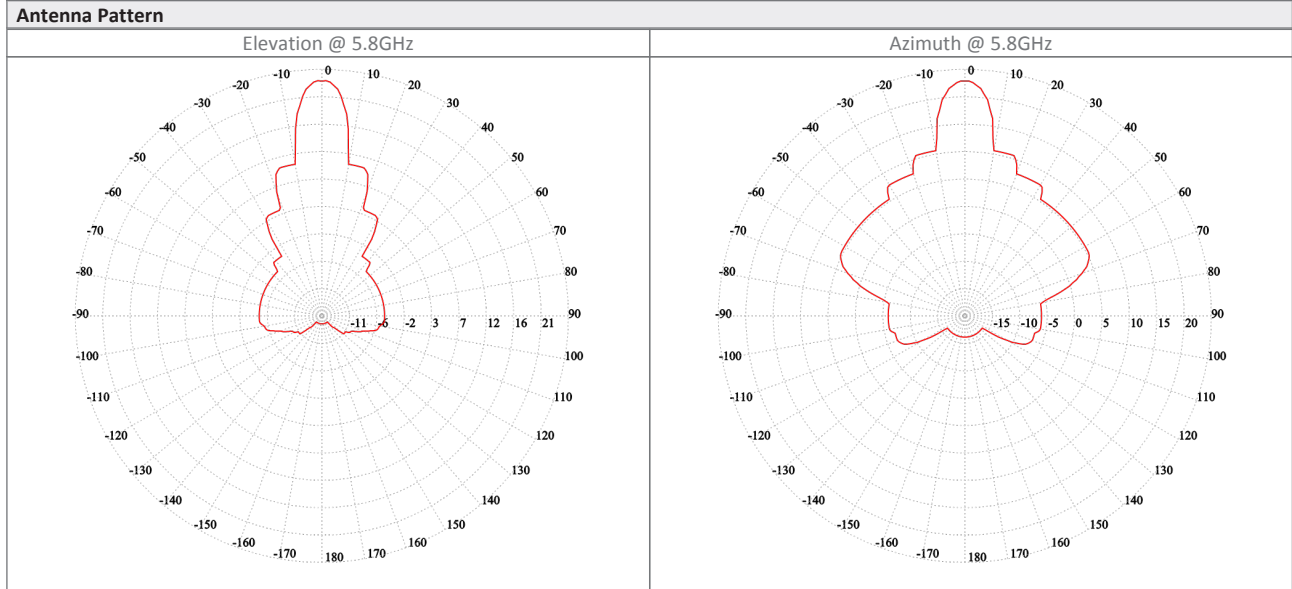
#### Product Highlights

- 10 Mbps Ethernet net throughput and 2xE1s/T1s Native TDM interfaces
- Long range - Up to 40 km / 25 miles
- Telco-grade, extremely robust in harsh conditions
- Supports intra-site and inter-site synchronization to maximize capacity
- Adaptive asymmetric throughput û dynamic allocation between uplink and downlink
- Advanced OFDM & MIMO technologies for operation in nLOS/NLOS and dense radio environments

## Product Specifications:

Configuration				
Architecture	Outdoor Unit with an integrated antenna			
PoE to ODU Interface	Outdoor CAT-5e; Maximum cable length: 100m for 10/100BaseT			
Radio				
Max Capacity	10 Mbps net aggregate throughput (up to 2xE1s/T1s plus Ethernet)			
Range	Up to 40 km / 25 miles			
Channel Bandwidth	Configurable: 5, 10, 20 MHz (for the default band)			
Modulation	MIMO-OFDM (BPSK/QPSK/16QAM/64QAM)			
Adaptive Modulation & Coding	Supported			
Automatic Channel Selection	Supported			
DFS	Supported (FCC/IC)			
Diversity	Supported			
Spectrum Viewer	Supported			
Max Tx Power	25 dBm			
Duplex Technology	TDD			
Error Correction	FEC k = 1/2, 2/3, 3/4, 5/6			
Encryption	AES 128; FIPS 197			
Support Indoor units	IDUs: RW-7100-2000, RW-7102-2000, RW-7216-2000, RW-7208-2000, RW-7204-2000, RW-7200-2000, RADWIN PoE devices (RW-9921-101X)			
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			
Ethernet Ring Protection	Supported, including Ethernet 1+1			
TDD Intra Site Synchronization	Supported			
TDD Inter Site Synchronization	Supported through common GPS receiver per site			
Monitored Hot Standby	1+1 with RADWIN 2000 link			
Supported Bands				
Band	CBW 5MHz [GHz]	CBW 10MHz [GHz]	CBW 20MHz [GHz]	Radio Compliance
4.9 GHz FCC/IC	4.9425-4.9875	4.940-4.990	4.940-4.990	FCC 47CFR Part 90 Subpart Y; IC RSS-111
5.2 GHz FCC/IC	5.2525-5.3475	5.255-5.340	5.255-5.340	FCC 47CFR Part 15.407; IC RSS-210
5.4 GHz FCC/IC	5.4775-5.7175	5.480-5.715	5.480-5.715	FCC 47CFR Part 15.407; IC RSS-210
5.8 GHz FCC/IC (default)	5.7275-5.8475	5.725-5.850	5.725-5.850	FCC 47CFR Part 15.247; IC RSS-210
5.160-5.245 GHz FCC	5.1575-5.2475	5.160-5.245	5.160-5.245	FCC 47CFR Part 15.407
Mechanical				
ODU Dimensions	30(w) x 30(h) x 8.5(d) cm			
ODU Weight	3.1 kg / 6.83 lbs			
Power				
Power Feeding	Power provided over ODU-IDU cable			
Power Consumption	<12W			
Environmental				
Operating Temperatures	-35°C to 60°C / -31°F to 140°F			
Humidity	100% condensing, IP67 (totally protected against dust and against immersion up to 1m)			
Safety				
FCC/IC (cTUVus)	UL 60950-1, UL 60950-22, CAN/CSA C22.2 60950-1, CAN/CSA C22.2 60950-22			
ETSI	EN/IEC 60950-1, EN/IEC 60950-22			
EMC				
FCC	47 CFR Class B, Part15, Subpart B			
ETSI	EN 300 386, EN 301 489-1, EN 301 489-4			
CAN/CSA-CEI/IEC	CISPR 22-04 Class B			

Integrated Antenna	
Gain	23 dBi
VSWR	1.5 :1 (typ)
3 dB Azimuth Beamwidth	10 Deg. (typ)
Polarization	Dual Linear (Vertical and Horizontal)
Sidelobes Level	ESTI EN 302 326-3 V1.1.2 DN3
Cross Polarization	ESTI EN 302 326-3 V1.1.2 DN3
F/B Ratio	-30 dB
Port To Port Isolation	30 dB (max)
Lightning Protection	DC Grounded



**Ordering Info**

Part Number: RW-2050-AH10

Description: RADWIN 2000 A 10M ODU, with an integrated antenna, supporting multi frequency bands at 5.x GHz, factory default 5.8 GHz FCC/IC.