

## RADWIN 2000 A 50M Series

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



RW-2024-A150

#### Product Description

RW-2024-A150 is a carrier-class radio that belongs to the RADWIN 2000 A 50M Series and supports 2.3 to 2.4 GHz frequency range.

The Radio complies with FCC/IC & Universal regulations with a factory default of 2.4 GHz FCC/IC.

RW-2024-A150 delivers up to 50 Mbps throughput and up to 8xE1s/T1s over an extended range.

The radio comes with an integrated antenna.

#### Product Highlights

- 50 Mbps Ethernet net throughput and 8xE1s/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 – 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 and 75m for 1000BaseT				
Radio					
Max Capacity	50 Mbps net aggregate throughput (up to 8xE1s/T1s plus Ethernet)				
Range	Up to 40 km / 25 miles				
Channel Bandwidth	Configurable: 5, 10, 20 MHz (for the default band)				
Modulation	2x2 MIMO-OFDM (BPSK/QPSK/16QAM/64QAM)				
Adaptive Modulation & Coding	Supported				
Automatic Channel Selection	Supported				
DFS	Not Supported (for the default band)				
Diversity	Supported				
Spectrum Viewer	Supported				
Max Tx Power	26 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	Channel BW 5MHz [GHz]	Channel BW 10MHz [GHz]	Channel BW 20MHz [GHz]	Channel BW 40MHz [GHz]	Radio Compliance
2.4 GHz FCC/IC (default)	2.4095-2.4645	2.407-2.467	2.402-2.472	-	FCC 47CFR Part 15.247; IC RSS-210
2.4 GHz Universal	2.3045-2.4745	2.302-2.477	2.297-2.482	-	Universal
Mechanical					
ODU Dimensions	24(w) x 20(h) x 8(d) cm				
ODU Weight	1.5 kg / 3.31 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				

<b>Integrated Antenna</b>	
Gain	13 dBi
VSWR	2.0 : 1 (max)
3 dB Azimuth Beamwidth	21 Deg. (typ)
Polarization	Dual Linear (Vertical and Horizontal)
Sidelobes Level	ETSI EN 302 326-3 V 1.3.1 DN4
Cross Polarization	ETSI EN 302 326-3 V 1.3.1 DN4
F/B Ratio	ETSI EN 302 326-3 V 1.3.1 DN4
Port To Port Isolation	25 dB (min)
Lightning Protection	DC Grounded
<b>Antenna Pattern</b>	

**Ordering Info**

**Part Number:** RW-2024-A150

**Description:** RADWIN 2000 A 50M ODU, with an integrated antenna, supporting multi frequency bands at 2.x GHz, factory default 2.4 GHz FCC/IC.